

Young People and XXX: An exploratory survey exploring the consumption of and attitudes to pornography using and comparing self-report and unmatched count techniques for the collection of sensitive data.

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DECLARATION

I, Ryan Rudolph Du Toit declare that this research is a result of my own work, except where otherwise stated. I have given the full acknowledgement of the sources referred to in the text. This study has not been submitted before for any degree or examination at any university.

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ABSTRACT

This study was concerned with investigating young people's consumption, interactions and attitudes towards pornography. However, obtaining valid answers to sensitive questions is an old and persistent problem in survey research (Coutts & Jann, 2011). Therefore, a second objective of this study was to assess the methodological efficacy of the Unmatched-Count Technique (UCT). The UCT is a survey protocol that provides greater levels of anonymity in the attempt to elicit more truthful responses than conventional survey techniques regarding sensitive issues/behaviours. In this study the base rates of UCT were compared to those obtained by an online self-report questionnaire (SRQ). One hundred and forty five students ages 18-24 from the University of KwaZulu-Natal, Pietermaritzburg campus, completed an online questionnaire. Participants were either assigned to the UCT or the SRQ. The results revealed that the majority (93.75%) of the sample had been exposed to pornography, more males (76.00%) than females (23.07%) consumed pornography, and that male participants tended to express a more positive-accepting attitude towards pornography than the female participants. A Two-Sample Z-Test was used to compare the base rates of the UCT and the SRQ. The results suggest that the SRQ underestimates base-rates in comparison to the UCT. The results illustrate that young people are interacting and consuming pornography within the South African context and as such future research should be aimed at further exploring this genre of sexual media. Furthermore, this study adds to the empirical work which employs the UCT and highlights the efficacy and potential of the technique.

Keywords: attitudes, pornography, South Africa, unmatched-count technique, young people

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CHAPTER 1

INTRODUCTION

1.1 Background to the study

Adolescence and early adulthood is a crucial period in sexual socialization. It is a time marked by exploration and discovery of one's sexuality, both alone and with others (including the media) (Wallmyr & Welin, 2006). Technological advancements have led to an increasing availability of pornography/sexually explicit media (SEM) which exposes young people to a panorama of sexual activities and arguably portrays a distorted view of human sexuality (Wallmyr & Welin, 2006). Such distorted views of human sexuality have the potential to feed into young people's sexual identity, whether on a conscious or subconscious level, (Mkhwanazi, Stern & Mashale, 2011) and shape their gender (sex) roles. This can reinforce, according to radical feminists, notions of patriarchy and dominance over women.

South Africa is a country that has been subjected to many years of strict censorship under the Apartheid regime (Posel, 2004). The demise of Apartheid enabled South Africans to join in the global consumption of sexual media. Pornographic content soon entered South African society through legitimized channels such as local stores (e.g. news agencies and convenient stores located at petrol stations), sex shops that opened up in major cities, and the internet for those who could afford or had access to it. After a period of time soft-core pornography slowly seeped its way into South African public television with the broadcasting of the erotic/soft-core porn series *Emmanuelle* on the television station E.TV. As of April 2013 the Independent Communications Authority of South Africa granted Top Television the go-ahead to air three pornographic channels which are available to the public for a separate fee. In light of the above, it is clear that pornography has established a foothold in South Africa and has the potential to become as pervasive as it is in other countries.

In relation to access and consumption studies reveal that within South Africa young school going people (Chetty & Basson, 2006) as well as young men (Du Toit, 2011; Mkhawanazi et al., 2011) are accessing and consuming pornography. This is not unique to South Africa but is reported elsewhere particularly in developed countries, such as; The United States of America (Ybarra & Mitchell, 2005), Australia (Goldman, 2010; McKee, 2007a), Sweden (Wallmyr & Welin, 2006), Netherlands (Peter & Valkenburg, 2006), China

(Lam & Chan, 2007) and Taiwan (Lo & Wei, 2007). These countries have conducted a plethora of research investigating young people's interactions, experiences and what attitudes they have towards such sexually explicit material. The same cannot be said for developing countries.

South Africa is a country which has only conducted a handful of research concerning pornography. It was therefore decided to explore this genre of sexual media through the use of an online self-report questionnaire (SRQ), by focusing particularly on participant's interactions with pornography, which included the exposure, viewing frequency, sources watched, as well as the motivations for accessing and consuming pornography. In addition, participant's attitudes towards pornography were also investigated.

It is critical to acknowledge that answering questions directly relating to pornography and the behaviours associated with pornography (e.g. consumption of porn, masturbating to porn) would, for many individuals, be considered highly sensitive and could result in some type of response bias (e.g. social desirability). Response biases, such as social desirability, result in participants providing responses that do not accurately mirror their actual behaviours and opinions, and thus directly impacts on the validity of the data. In response to this, an alternative method of data collection known as the unmatched-count technique (UCT) was employed to gather information regarding participant's interactions/behaviours with pornography and other aspects of their sexuality. The UCT and SRQ were compared and assessed to see which method of data collection yielded higher base rates.

This exploratory study proved not only insightful in understanding what role pornography plays in the lives of South African university going youth, but also brought to light the effectiveness and potential that the UCT has to offer as a methodology that can be used to gather data concerning sensitive behaviour.

1.2 Problem statement

Pornography can be accessed in South Africa and research reveals that South Africans do consume pornography (Du Toit, 2011, Chetty & Basson, 2006; Mkhwanazi et al., 2011). A review of the literature indicates that pornography, as a form of sexual media, has not received much attention within the South African research context and as such there is very little knowledge and research regarding young peoples' interaction with and attitudes towards pornography.

Further to concluding it is also important to acknowledge that researching sensitive behaviours is plagued with validity issues, as participants may provide a response which does

not accurately express their personal experience or opinion in order to enhance their social desirability (Booth-Kewley, Larson & Miyoshi, 2007). The UCT is an alternative method that has been developed in an attempt to acquire more accurate/valid data when asking questions of a sensitive nature. As such, its methodological efficacy needs to be assessed further to conclude whether it is a suitable technique that can be used in future research which investigates sensitive issues.

1.3 Relevance of the study

In order to understand pornography it is first imperative to understand how people interact with it and what sort of attitudes they express towards it. Therefore, this study hopes to provide much needed contextualized information pertaining to young people's interactions with and attitudes towards pornography within the South African context. Not only will such information aid in better understanding pornography but it may also prove useful in stimulating future (exploratory) research, both quantitative and qualitative, concerning pornography in South Africa.

This study will also provide evidence to assess whether the UCT as an alternative protocol is more effective in eliciting responses from participants regarding the sensitive behaviours relating to pornography consumption and sexuality than the conventional online SRQ. If the UCT is found to be more successful than the online questionnaire then attention should be focused on utilizing such an effective method in future research, not only to investigate pornography but also other sensitive behaviours.

1.4 Purpose of the study

This study had two particular aims. The first was of an exploratory nature, which was concerned with investigating young people's interaction, behaviour and attitudes pertaining to pornography. This was investigated through the use of a conventional online SRQ. Focus was specifically placed on young people (teenagers and young adults) as this is the period when many are exposed to and/or consuming pornography.

The second aim was concerned with investigating the methodological efficacy of the UCT, which is a method that was created and designed in such a way as to improve the reliable collection of data related to sensitive issues/behaviours (Walsh & Braithwaite, 2008). As such it was necessary to compare the responses received using the two different questionnaires (SRQ and UCT). The results obtained were used to make inferences about the UCT's ability to elicit more truthful/valid responses from participants concerning sensitive issues than the conventional SRQ.

1.5 Research questions

In order to aid in the investigation of the two primary objectives of the study the following research questions and sub-questions were proposed;

- 1) How do young people interact with pornography?
 - a. How many young people have been exposed to pornography?
 - b. How often do young people consume pornography?
 - c. Through what sources do young people access pornography?
 - d. What are people's motivations for accessing pornography?
- 2) What attitudes do young people have towards pornography?
- 3) Does the UCT as an alternative data collection method, elicit more truthful responses from participants than the self-report questionnaire?

1.6 Statement of Hypotheses

Inherent to all the research questions and sub-questions in this study are specific variables that will be investigated. Sometimes, and especially in exploratory research, it is necessary to investigate the relationships between variables, as this allows for a greater inferential understanding of the topic under investigation (Durrheim, 2006). This can be achieved by postulating hypotheses, which are essentially formal statements that predict the nature of the relationship between two or more variables. The following hypotheses are proposed in this study;

1.6.1 The null and alternative hypothesis for young people's attitudes towards pornography

- 1a) Null hypothesis: There is no significant difference in attitude scores between males and females.
- 1b) Alternate hypothesis: Males will obtain significantly higher attitude scores than females.
- 2a) Null hypothesis: There is no significant difference in attitude scores between participants of different races.
- 2b) Alternate hypothesis: There is a significant difference in attitude scores between participants of different races.

3a) Null hypothesis: There is no significant difference in attitude scores between participants of different ages.

3b) Alternate hypothesis: There is a significant difference in attitude scores between participants of different ages.

4a) Null hypothesis: There is no significant difference in attitude scores between participants of different viewing frequencies of pornography.

4b) Alternate hypothesis: There is a significant difference in attitude scores between participants of different viewing frequencies of pornography.

1.6.2 The null and alternate hypothesis for the UCT and SRQ:

5a) Null hypothesis: There is no significant difference in base rate estimates between the UCT and SRQ regarding pornography.

5b) Alternate hypothesis: There are significantly higher base rate estimates for the UCT than the SRQ regarding pornography.

6a) Null hypothesis: There is no significant difference in the social desirability scores between the UCT and SRQ.

6b) Alternate hypothesis: There will be significantly higher social desirability scores produced by the SQR than the UCT.

CHAPTER 2

LITERATURE REVIEW

In an increasingly digital world the spread and presence of the media has become an accepted constitutive part of human life, an omnipresent force that influences people in a multitude of ways. Within the broad scope of what constitutes media, exists a particular genre of sexual media that has enjoyed (global) industry success, but simultaneously has faced strong resistance and distaste from many social activists, feminists, lawyers, religious leaders, politicians and the everyday citizen. This sexual media is known as pornography.

This literature review is comprised of five sections. The first section provides a working definition of pornography, a brief description of the categories/tags found in pornography, and is followed by a general overview of the history and accessibility of pornography today. The second section provides a synopsis of the research literature concerning pornography, with specific focus on the consumption/interaction of pornography, the attitudes people have towards pornography, and finally the gendered component associated with pornography. The third section explores some of the concerns pertaining to the consumption of pornography and what effects it may possibly have. Here arguments are presented relating to emotional disturbance, objectification, and sexual information, and are discussed in detail. The fourth section narrows the focus by looking at pornography research within the South African context. In this section, recent studies, both quantitative and qualitative, are reported, discussed and recommendations suggested which influenced the conceptualization of this study. The final section involves an acknowledgement of the issues (e.g. social desirability) associated with investigating sexual behaviour. In response to this, an alternative methodology, known as the Unmatched Count Technique, is discussed in terms of its efficacy to collect reliable data concerning sensitive behaviours.

2.1 What is Pornography?

To this day there is still much disagreement (Flood, 2007) and debate regarding what a definition of pornography should include. Definitions exist and serve particular pragmatic purposes depending on where they are located. For example, a legal definition of pornography would be used to decide whether particular sexual content is indeed

pornographic and/or illegal, such as child pornography¹. Such legal definitions are generally lengthy, formulaic (so that it can be applied to various legal cases), and in some instances somewhat conceptually vague. In other words, a legal definition of pornography is not pragmatically appropriate for social science research.

Rea (2001), in his paper *What is Pornography?* critiques many current definitions of pornography as falling into six particular categories, which define pornography as:

(1) the sale of sex for profit, (2) a form of bad art, (3) portraying men or women as only sexual beings or sexual objects, (4) a form of obscenity, (5) a form of oppression, and (6) material that is intended to produce or has the effect of producing sexual arousal (Rea, 2001, p. 123).

Rea (2001) puts forward a stipulative definition of pornography that takes into consideration the communicative technology in which pornography can be presented and consumed, the individual's desire and intention to attend to such sexual content, as well as acknowledging the social interpretation of the sexual content. Rea (2001) provides a two part definition of pornography:

Part 1: something (x) is treated or used as pornography when: (i) x is a token of some sort of communicative material (picture, paragraph, phone call, performance, etc.); (ii) a person desires to be sexually aroused or gratified by the communicative content of x ; (iii) if a person believes that the communicative content of x is intended to foster intimacy between the person and the subject(s) of x , that belief is not among the persons' reasons for attending to x 's content; and (iv) if a person's desire to be sexually aroused or gratified by the communicative content of x were no longer among the persons' reasons for attending to that content, the person would have at most a weak desire to attend to x 's content.

Part 2: it is reasonable to believe that x will be used or treated as pornography by most of the audience for which it was produced. (p. 17).

Rea's (2001) definition of pornography is comprehensive and does have its conceptual merits (i.e. it addresses the intra/inter-socio dimensions of human interaction with pornography); however, it is lengthy and relatively formulaic. For the purpose of this

¹ Pornographic material involving actors below the ages of 18. Child pornography is illegal in South Africa.

literature review, when the word pornography is used it refers to “sexually explicit material that is primarily intended to sexually arouse the audience” (Malamuth, 2001, p. 11817). This definition is favoured over Rea’s due to its conceptual simplicity.

2.1.1 The content of pornography.

The majority of mainstream pornography is sexually explicit and often shows the genitals of the actors/ people being photographed in unconcealed ways (Peter & Valkenburg, 2006). Other than being sexually explicit, pornography in magazines, movies and on the internet appears to be highly diverse, catering for a wide range of sexual activities that consumers may have or are curious about exploring/viewing. These particular sexual activities, which are found on some of the most popular pornographic websites, provide consumers with a wide selection of categories/tags that consumers can select, redirecting them to a movie clip or picture of that particular category/tag.

Most of the categories/tags can be divided into three conceptual groupings: (1) sub-genre, (2) sexual acts, and (3) characteristics of the performer. In relation to genre, pornography has over the years, developed an exhaustive set of overlapping sub-genres. These include soft-core/female-friendly, lesbian/gay, hard-core/rough sex, reality, point of view (POV), bondage, cartoon, amateur², etc. Within each genre of pornography are incorporated sexual practices such as: oral sex, mutual masturbation, penile-vaginal sex, anal sex, ‘threesome’, etc. These sexual acts are performed by sexual actors that possess different demographic and physical characteristics. Some of the most common are: race (Asian, Japanese, Ebony), age (teenage and mature), celebrities/porn stars, amateurs, inter-racial, big dick, big ‘tits’ [sic]. For example, if one was to watch an amateur heterosexual (genre) pornographic movie they would more than likely view penile-vaginal sex (sexual practice) between two actors of a specific race and age (characteristics of the pornographic actor). In the following section pornography as an established industry is discussed in relation to its commercial evolution and accessibility.

2.1.2 Industry and Accessibility.

Pornography, as an industry and specific film genre has contemporized itself with modern technology and thus has changed remarkably since its first widespread distribution in the United States of America and Europe during the 1950s. Pornography as an industry has proven to be so receptive to technological and societal change on a global level that it is now

² Amateur can be considered both a genre (filmed by amateurs) and specific type of pornographic actor- one that has little experience and is new to filming pornography.

found in a wide variety of media, such as magazines, television, mobile devices (including tablets and cell phones), the internet³, and DVDs.

Historically, in western countries pornographic material was first largely accessed and consumed through print such as men's magazines which emerged commercially during the 1950s-1970s. These included *Playboy*, *Penthouse* and *Hustler*, which showed pictures of nude and semi-nude women, and today still enjoy relative success in the saturated pornographic industry. After some technological advancement the pornographic industry soon found its way into film, starting off in black-and-white (such as stag films), progressing into colour films (that were made available in VCR format and later in DVD format), High Definition (DVD and Blue-Ray), and most recently being filmed in 3D⁴ (Woo, 2011).

The advent of the personal computer and the internet have provided technological devices and cyberspaces which are ideal for the consumption, selling, marketing and sharing of sexually explicit material. Cooper (1998) refers to the internet as the triple A-engine, as surfing the internet is anonymous, affordable (in mainly developed countries) and easily accessible.

In relation to anonymity, the internet is a domain where identity can be easily concealed which is of particular benefit to consumers of pornography. Accessing and consuming pornography anonymously removes the psychological inhibition (Joinson, 2003) and the social stigma that is associated with purchasing pornographic material in public spaces. Online pornography essentially cuts off all social elements that are associated with accessing pornography as viewers can access and consume pornography anonymously and in the privacy of their own home, effectively leading to greater privatization of pornographic consumption. This notion is supported by Joinson (2003) who states, "...as different technologies have adapted, so the consumption of pornography has become increasingly a private affair." (p. 111).

In many countries, specifically developed countries, computer technology and access to the internet is relatively inexpensive. Once online, all one needs to do is search for pornography on a search engine and soon they are inundated with millions of free and pay-to-view websites that host a variety of sexual content in different forms such as pictures, GIFs⁵, short clips of movies, full movies and live video streaming. Consumers have the choice either

³ Pornography that is accessed over the internet is often referred to as cyber pornography. Pornographic material on the internet provides a digital version of physical pornography. For example, a pornographic picture may appear in a magazine (physical form) and it may also appear on a website (cyber/digital form).

⁴ The first 3D pornographic movie; *Sex & Zen; Extreme Ecstasy*, was filmed in 2011.

⁵ Graphic Interchange Format (GIFs) is an animated picture lasting a few seconds.

to purchase pornography online or simply consume pornographic material that is free. However, the pervasiveness of free pornography means, in most cases, that consumers have no need to pay for pornography. One estimate, although somewhat outdated, identifies that about 70-80% of sexually explicit material is found on free sites (Rosoff, 1999 as cited in Flood, 2007).

Online pornography for consumers may indeed be anonymous, faster and easier to access (Flood, 2007) than more traditional sources of pornography, such as magazines purchasable from news agencies or pornographic videos from a local sex shop. However, not all consumers, and in particular young (potential) consumers, have the financial resources to access pornography over the internet, especially within the South African context where computers and the cost of the internet still remain relatively expensive. Nevertheless, young people can gain access to the internet at their friend's house, through mobile devices, school/university internet, and/or other public spaces such as libraries (Chetty & Basson, 2006).

2.2 Existing research concerning pornography

The amount of literature and research concerning pornography today is indeed vast and continues to grow, especially in developed countries. As new technological advancements are now a constant within modern society, this is creating new ways for individuals to access and consume pornography. However, the majority of research concerning pornography is still disproportionately being carried out in primarily developed countries. In addition, much of the research concerned with pornography has been conducted with adults (Malamuth, Addison & Koss, 2000), which at first may appear understandable considering the ethical issues and legalities faced when exposing under 18s to potentially harmful material (Ybarra & Mitchell, 2005). However, there is an increasing amount of research which indicates that many young people are being exposed to pornography either intentionally or unintentionally, and in other cases young people below the age of 18 are actively seeking out and consuming pornography for various reasons (Wallmyr & Welin, 2006; Ybarra & Mitchell, 2005).

There have been number of studies and papers published concerning pornography. These range from investigations into people's attitudes concerning pornography (Du Toit, 2011; Jelen, 1986; Træen, Spitznogle & Beverfjord, 2004; Wallmyr & Welin, 2006), exposure and consumption of pornography (Flood, 2009; Hald, 2006; Ybarra & Mitchell, 2005), people using pornography as a source of sexual information (Tjaden, 1988; Wallmyr

& Welin, 2006) and the role pornography plays in adolescent's sexual socialization (Štulhofer, Busko & Landripet, 2008; Ward, 2003). Much research has also focused on studying whether pornography has any social effects on society, such as rape myth⁶ acceptance (Allen, D'Alessio, Emmers & Gebhardt, 1996; Barak, Fisher, Belfry & Lashambe, 1999), prevalence and intensity of sexist attitudes, degradation and objectification of women (McKee, 2005), as well as micro- and macro-dynamics of sexual violence (Fisher & Barak, 2001).

2.2.1 Consumption/exposure and interaction with pornography.

The exposure and consumption of pornography has been an area of great interest for researchers (Attwood, 2003) hailing from a multitude of academic disciplines such as; psychology, sociology, gender studies, philosophy, journalism/media studies and communication studies. Much research has been conducted with the purpose of providing information regarding people's consumption, use, and interaction with pornography, especially in developing countries. Such research helps to better understand pornography and what function it may be serving in modern society.

It is important at this stage to explain that viewing pornography can be a conscious effort by the viewer, or it may simply occur by mistake. Deliberate/intentional consuming of pornography is where the observer/consumer actively seeks the pornographic material out for various reasons (Flood, 2007). In contrast, an individual may be exposed to pornography involuntary/unintentionally (Flood, 2007). This is likely to occur whilst on the internet, such as receiving e-mails or by accidentally stumbling across a family member's collection of pornographic magazines. Although, for many individuals, initial exposure to pornography is involuntary/unintentional, as soon as they begin to continually access pornography, for whatever reason (e.g. curiosity, to gain sexual information, sexual release), they can then be classified as consumers of pornography.

An exploratory study in Sweden conducted by Wallmyr and Welin (2006) investigated the uses of pornography amongst 876 young people between the ages of 15 and 25. The main reasons why young people accessed and consumed pornography included: 'because everyone does it', 'curiosity', 'to get aroused and masturbate', 'to get sexually excited before sexual activity', 'to learn about sexuality', and 'to vary sex life'. The most common reason why the majority of young females (54.6%) accessed pornography was due

⁶ Rape myths are false beliefs about sexual activity, such as 'Rape is sex' and 'Women entice men to rape' (<http://www.d.umn.edu/cla/faculty/jhamlin/3925/myths.html>).

to 'curiosity'; in comparison the most common reason young males (48.8%) accessed pornography was 'to get aroused and masturbate' followed by 'curiosity'.

Similarly Hald (2006) investigated the gender difference among young heterosexual Danish people through the use of a survey. The results indicated that men had a higher viewing frequency of pornography than women, and tended to spend more hours per week viewing it (80 minutes for men in comparison to 21 minutes for women). In addition to this, the data also suggested gender differences in sexual content preferences. Men preferred to watch more pornography that involved anal intercourse, oral sex, group sex, lesbian sex and amateur sex. In contrast, women preferred to watch scenes involving soft-core sexual intercourse and group sex.

2.2.2 Attitudes

Exploring attitudes towards pornography is a task that can reveal insightful information regarding what people think and feel about pornography, and is imperative to investigate in order to better understand the phenomena of pornography within a particular context. An attitude can be defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Eagly & Chaiken, 1993, p. 1). Attitudes can be explored using both qualitative and quantitative methods and each approach reveals particularly different yet important elements of participants' attitudes. Examples of qualitative and quantitative studies investigating pornography are provided below.

A study conducted by Häggström-Nordin, Sanberg, Hanson and Tydén (2006) investigated young Swedish peoples' thoughts and reflections concerning pornography. They conducted in-depth interviews with 10 women and eight men between the ages of 16 and 23. The results revealed that participants displayed a wide variety of attitudes towards pornography, where the five most commonly identified were:

- (1) Liberal: Participants believed it was an individual's right to produce and consume. They also believed that pornography should be legal except for child pornography.
- (2) Normalization: Informants felt as though pornography was a normal and integrated part of their sexual life.
- (3) Distance: Having a distance strategy meant that participants could make a distinction between reality and fiction. These participants considered pornography to be fiction which differed from actual sexual encounters in real life.

- (4) Feminist: Participants who displayed a feminist attitude located pornography within a social and political context, and viewed it as a consequence of living in a capitalist society.
- (5) Conservative: A conservative attitude was characterised by participants considering pornography and its separation of love and intimacy to be wrong. They also believed that sex should be done within the confines of marriage or a loving relationship.

Although the data from the study is bound within the Swedish context and among young people, it does shed light on the possible attitudes that could exist in other research contexts/countries. In addition, the study, because of its qualitative approach, allowed participants to freely express their personal experiences with, and opinions towards pornography. This enabled the researchers to analyse, draw on, and include such reported experiences in their investigation, allowing for a deeper and insightful understanding of participants attitudes towards pornography.

Attitudes can also be assessed through the use of a scale. Scales are constructed, piloted and used to measure a number of constructs such as knowledge, attitudes, beliefs etc. (Durrheim & Painter, 2006). Attitude scales are commonly made up of a series of items that are usually presented in the form of a statement which require participants to respond to each statement according to their feelings, experiences and preferences (Kanjee, 2006). In most cases scales are presented in a Likert format with varying response steps (e.g. 1 to 5, 1 to 10). For example the Likert scale below ranges from: strongly disagree to strongly agree.

Statement: Watching pornography can be a healthy source of sexual information.

Strongly disagree 1 2 3 4 5 Strongly agree

Each possible response is assigned a particular value (e.g. 1 = -2, 2 = -1, 3 = 0, 4 = +1, 5 = +2) that is used to score each item for analytical purposes. It is also common practice to incorporate negatively-worded statements to ensure that participants are not merely yea-saying, which is a response bias whereby respondents have the tendency to agree with many of the statements (Loewenthal, 2001). In such instances, the scoring of that particular negatively worded item would be reverse scored.

Træen et al. (2004) investigated the attitudes towards pornography of 1004 people between the ages of 15 and 91 in Norway. The researchers developed an attitude scale that consisted of 15 items. The results indicated that the majority of the participants expressed some degree of a positive attitude towards pornography, with men generally expressing a

more positive attitude. In terms of description, more women than men described pornography as dull (42.1% vs. 24.0%), repulsive (24.2% vs. 9.0%), not entertaining (62.1% vs. 32.9%) and not exciting (49.4% vs. 31.7%).

Two critical points need to be acknowledged when discussing peoples' attitudes towards pornography, the first of which relates to the research context. As is mentioned previously, the majority of research concerning pornography is conducted in developed countries (e.g. Norway, Sweden, Denmark, Australia, and the United States of America). In such countries the easy and anonymous accessibility and availability of pornography on the internet (Hald, 2006) as well as other sexualized media may aid in producing more sexually liberal attitudes amongst viewers of such content (Flood, 2007). In addition to this, young people interacting with pornography frequently within a social setting, characterised by collective viewership and discussion, may in fact normalize the sexual acts depicted in pornography as well as pornography itself (Weinberg, Williams, Kleiner & Irizarry, 2010).

The second critical point concerns the gender difference in attitudes towards pornography between males and females. Studies investigating peoples' attitudes towards pornography generally reveal that men express a more positive attitude towards pornography than females. There may be many reasons for this but a good starting point would be to explore how each gender sexually socializes with pornography. This point is discussed below in reference to the gendered consumption of pornography.

2.2.3 A Gendered Component.

Studies indicate that the majority of viewers that access and consume pornography are adolescent males and young men (Flood 2007; Flood & Hamilton, 2003; Wallmyr & Welin, 2006; Ybarra & Mitchell, 2005). One way to understand this is to look at the sexual socialization of each gender. Lerner and Spanier (1980) describe sexual socialization as “the process of becoming sexual, of taking on a gender identity, learning sex roles, understanding sexual behaviour, and generally acquiring the knowledge, skills and dispositions that allow a person to function in a given culture” (p. 289). Sexual socialization, much like socialization is a lifelong developmental process that starts in childhood and continues into old age. For adolescents, sexual socialization is the life stage where conscious and unconscious attitudes form, which influence not only their sexual behaviour but sexual identity as well (Lerner & Spanier, 1980).

Viewing and experimenting with pornography provides the opportunity for many adolescent males and females to explore their sexuality and may play an influential role in

how they perceive certain sexual behaviours (i.e. as normal or deviant), and other aspects of their sexuality. In many socio-cultural environments, primarily western, it is considered relatively normative gender-role behaviour for young boys to access and consume pornography (Flood, 2007). Boys may in fact be rewarded socially for consuming and owning pornography. For example, owning, sharing and collective viewership of pornography can be considered as a rite of passage (McKee, 2007a) and a means of gaining group acceptance (Wallmyr & Welin, 2006). Such social arrangements (e.g. collective viewing of pornography) enable boys with a greater opportunity to interact and use pornography (Fisher, 1983). It is this socially sanctioned interaction with pornography that can lead to its normalization amongst males, and indicates that pornography may play a more influential role in boy's sexual socialization than previously thought.

In contrast, there are little if any, social rewards afforded to girls who consume pornography (Fisher, 1983). Girls are likely to monitor their behaviour to ensure that they are acting within the expected confines of their socio-cultural gender norms. This means that girls are not afforded the same personal and social arrangements as boys that would allow them to interact with pornography and normalize it. Of course, this does not necessarily assume that girls do not consume pornography; it merely suggests that they are less likely to do so nor as openly as boys.

In relation to the difference in gendered consumption of pornography, Malamuth (1996) offers an understanding through the proposition of a conceptual model based on an evolutionary perspective. From this perspective he argues that:

The consumption of sexually explicit media is in part the result of inherent differences in evolved sexuality mechanisms interacting with environmental forces, and not the exclusive by-product of differences in other evolved mechanisms or differences in environmental input (e.g socialization) or both (Malamuth, 1996, p. 15).

From this perspective the type of sexually explicit media (SEM) that is accessed by males and females is reflective of their sexual strategies. Malamuth (1996) argues that for men, the primary sexual strategy is relatively short-term and so they will seek SEM that portrays this sexual strategy. This short-term sexual strategy is highly prevalent and a common theme amongst many pornographic movies, as in most cases only the sexual intercourse is shown with very little contextualization of the sexual setting.

In contrast, this evolutionary perspective suggests that the female sexual strategy is relatively long-term and intersects with a mating strategy (Malamuth, 1996). However, as

stated above, the majority of pornography reflects a short-term sexual strategy, distinctively different from a long-term sexual strategy. It is for this particular reason (i.e. absence of sexual strategy in SEM) that women may find pornography less appealing than men, and therefore are likely to consume it less often.

2.3. Exposure and consumption of pornography- what can it offer?

Within the literature concerning pornography there is an evident perspective taken by many authors/researchers that focuses exclusively on the negative aspects of pornography, including its sexually explicit content and the ‘potential’ harm it may be inducing within society, amongst its consumers and indirectly their sexual partners. Focusing purely on the negative aspects of pornography is biased and blinded towards its other possible functions. Below pornography is discussed in relation to: (1) emotional disturbance it may cause young viewers, (2) sexual objectification, and (3) pornography as a source of sexual knowledge.

2.3.1 Emotional disturbance.

A study conducted by the Kaiser Family Foundation (2001) investigated how and why young people in the United States of America, use the internet. Telephone interviews were conducted with 1209 randomly selected young people between the ages of 15 and 24. The results indicated that 45% of the participants who had been exposed to pornography said they were upset by viewing it, with 19% reporting being very upset and 26% somewhat. More than half (55%) reported they were not “too” (30%) or “not at all” (25%) upset. In addition to this, female participants (35%) were more likely than male participants (6%) to say they were “very upset”.

The findings suggest that girls are more likely than boys to experience emotional or psychological distress when watching pornography. This distress may be further exacerbated when it is in direct contrast to what is socially acceptable and prescribed for a particular individual within a particular socio-cultural context (Flood, 2009). For example, (young) people may experience emotional and/or psychological distress when viewing sexual acts that are frowned upon and considered unacceptable for them and by the law, such as gay pornography⁷ and/or child pornography. It is also important to note that some young people who are accidentally/unintentionally exposed to pornography may not actually be upset by the sexual content of pornography itself, but instead are fearful of their parents/guardians

⁷ Pornography involving gay men. However, these actors may not necessarily self-identify as being gay themselves, but merely participate in sexual activities for monetary purposes, commonly referred to in the pornographic industry as ‘gay-for-pay’.

finding out they have watched pornography (Thornburg & Lin as cited in Flood, 2009).

McKee (2010) asserts that in many cases there is a failure to make a distinction between exposure of pornography between pre-pubescent and post-pubescent young people. According to Flood (2009) age is but one variable that mediates an individual's response to pornography, because with age comes a whole dynamic composition of personal life and educational experiences. McKee (2007a) conducted a study in Australia with 46 young people where he investigated young people's exposure to pornography and whether they found it educational or not. Participants who had been exposed to pornography pre-pubescent described it as meaningless or as funny (McKee, 2007a), which according to McKee (2010) suggests that pornography is an area that many pre-pubescent individuals are unable to cognitively process and/or relate back to personal/educational experiences.

In contrast, participants who had been exposed to pornography post-pubescent/early teens were more interested in the sexual content found in pornography. This may be attributed to the fact that puberty marks the bodies', not necessarily the persons' ability to reproduce through sexual activity and pornography is but one way of gaining (visual) education of sexual activity. Participants in the study described post-pubescent use of pornography as a (1) rite of passage (perhaps more so for males than females), (2) often consumed as a group, and (3) with an element of who had the most of it (McKee, 2007a).

2.3.2 Objectification.

Sexual objectification is the reduction of an individual "...to their bodies, body parts, or body functions that exist for the use and pleasure of others" (Lustig, 2012, p. 7). Radical feminists, such as Andrea Dworkin and Catherine Mackinnon, believe that pornography is a social force which silences, subordinates and constructs women as (sexual) objects (McGowan, 2005). This is achieved in pornography, according to radical feminists, by viewing and treating female performers as a series of holes to be penetrated (Long, 2012). The sexual scripts that are followed in the majority of mainstream heterosexual pornographic films construct men as the subjects of the sexual act and females merely as the sexual objects that exist purely for the mans'/viewers' sexual satisfactions.

It is important to note that objectification takes place in almost every domain of communicative media, from fashion catalogues, magazines, day-time television, and even English literature (Long, 2012). However, according to Long (2012) "nowhere is the

reduction of women to object status more direct and unequivocal than within pornography” (p.76).

Mainstream heterosexual pornography tends to present and ‘use’ actors that are physically attractive. Young people interviewed for a documentary entitled *Love and sex in an age of pornography* that was filmed in Australia described the female actors as Barbie-like⁸ (Goldman, 2010). By doing this, pornography conveys messages to viewers that define and reinforce a particular ‘type’ of beauty (e.g. big boobs, curvy body, shaved pubic region). The issue here is that women “... are constantly at risk of internalising [an] object status, negotiating a devastating paradox in which social approval is won at the expense of the full human status” (Long, 2012, p. 78).

Wendy McElroy who self-identifies as a pro-sex feminist⁹ provides a response to the anti-porn feminists’ take on objectification. Her perspective is based on questioning what is actually wrong with reducing pornographic actors/sexual partners to physical objects. She asserts “... Women are as much their bodies as they are their minds and souls. No one gets upset if you present women as “brains” or as spiritual beings” (McElroy, 1997).

Following from McElroy’s perspective, sexuality (including performed sexual activities) is a highly subjective, interpersonal and intrapersonal experience. From an ethics of care perspective if two consenting partners are willing to engage in whatever sexual practices they wish, then they should be entitled to do so, provided there is equal sexual communication between partners and it [the sexual activity] does not violate any laws. Anti-porn feminists would argue that the danger is not in the objectifying act itself but rather in what objectification can produce, exacerbate and reinforce (e.g. male sexual superiority, female subordination/passiveness, and negative attitudes towards women). However, there is little evidence to suggest that consuming pornography (i.e. being exposed to objectification) and imitating the sexual acts causes negative attitudes towards women. In fact a study by Barak et al. (1999) revealed that there was no detectable relationship between men’s attitude towards women, acceptance of women as managers, ... , or rape myth acceptance” (p. 88). Similarly McKee (2007b) found that consuming pornography was not a significant factor in the generation of negative attitudes towards women, and suggests that future research should explore other possible avenues rather than making the assumption that pornography is responsible for such attitudes.

⁸ Barbie is a fashion doll toy. One of the mostly commonly shared criticisms of the doll is that it presents an unrealistic body image (e.g. tall, skinny, medium breast size, pretty) for young girls.

⁹ Pro-sex feminism is a movement that supports a women’s right to sexual freedom. Many Pro-sex feminists “have defended a women’s choice to participant in and to consume pornography” (McElroy, 2006, p. 3).

2.3.3 Pornography as a source of sexual information.

The concern that pornography may be accessed and used as a source of sexual information is not new. McKee (2010) discusses the educational potential of pornography and what it has to offer young people wanting to learn about human sexuality. He asserts that there are certain aspects of sexuality that pornography teaches particularly well and other aspects where it is clearly deficient (McKee, 2010).

Pornography teaches (young) people that sexual activity can be pleasurable and desirable for all sexual partners involved irrespective of race, gender and ethnicity. However, this display of pleasure and desire (in certain, but not all sub-genres of pornography) is gendered and reinforces sexual messages/scripts that, for men and women, sexual pleasure is primarily a physical experience. It is true that for many individuals sexual pleasure may be a purely physical experience, but it nonetheless excludes the possibility that it can also be an emotional experience as well.

The pornography industry challenges hetero-sexism by producing gay and lesbian pornography (Flood, 2009). Pornography can prove useful in the sense that it shows the sexual mechanics and possibilities for all different types of sexual orientations. Sexual mechanics are essentially concerned with where and what the sexual organs do during sexual activities, and how they can be stimulated for sexual enjoyment. In other words, pornography provides “a panoramic view of the world’s sexual possibilities” (McElroy, 1997, p. 2). This is particularly useful because this sort of sexual knowledge is not inherent to humans and it is seldom discussed in sexuality education programmes and, when it is, it is often discussed from a hetero-normative perspective. It must therefore be learnt from alternative sources (e.g. sexual media such as pornography, peer discussion, communication with a sexual partner, parents, etc.). Pornography, being such a source not only shows how sexual activities can be done, but also the types of verbal and physical cues, although arguably distorted, to expect during such sexual activities.

Pornography presents a particular version of sexual reality. A version where sexual intercourse primarily takes place outside the context of a relationship and where ethical negotiation/interpersonal sexual communication is not often shown (McKee, 2010). Firstly, although sexual activity outside of a relationship can be considered ‘wrong’ depending on one’s values, for many people “casual sex is as normal and healthy as sex within a relationship” (McKee, 2010, p. 14). Secondly, it is true that a lot of pornography, but not all, neglects to show interpersonal sexual communication amongst sexual actors. Interpersonal communication between the performers may in fact not occur at all as the director of the

pornographic movie may simply provide instructions during the filming of what they want to see performed by each actor - this is often not seen by the viewer. In other cases, sexual communication may occur but is simply invisible to the consumer as it occurs during pre-production (McKee, 2010).

Pornography fails to address the reproductive and safe sex dimensions of sexual intercourse (McKee, 2010). This is substantiated by a comprehensive study conducted by Bridges, Wosnitzer, Scharrer, Sun and Liberman (2010) who content analysed 304 scenes from top selling pornographic movies. The findings reveal that only 0.3% of the scenes discussed pregnancy concerns and that condoms were only used in 10.9% of the scenes. The danger here lies in the possibility that young people watching pornography may internalize and put into practice what they see. If this is the case, many young people may be engaging in unprotected sex, putting both themselves at risk of contracting HIV/AIDs and STD's, and in the case of heterosexual intercourse, pregnancy as well.

Just recently in August of 2013 a pornographic actor working under the stage name of Cameron Bay tested positive for HIV ("Revealed: The porn star who ...", 2013) and soon after a gay performer¹⁰, Rod Daily, made it public that he too had tested positive for HIV ("Following industry shutdown, gay porn star ...", 2013). However, there was no definite way of determining whether the infection was industry related, as even pornographic actors have their own sexual lives and relationships outside of the industry. As of August 17th, a United States district Judge Dean Pregerson passed a ruling of measure B which requires pornographic performers to use condoms for all vaginal and anal scenes ("Judge oks condoms-in-porn mandate ...", 2013). It is expected that pornography producers will immediately appeal the court's ruling as they believe it infringes upon their and the pornographic actors' freedom of speech (Urbanski, 2013).

Another concern is the effect that pornography can have on young people's sexual behaviour. The concern is that viewers of pornography will attempt to imitate the sexual activities that they see. This is the premise of Social Learning Theory which predicts "that people will imitate behaviours of others in the media when those actors/models are rewarded or not punished for their behaviour" (Brown, 2002, p. 44). In pornography actors are seldom punished or not rewarded for their (non-normative) sexual behaviours, in most cases actors will express pleasure even when participating in aggressive sexual acts (Bridges et al., 2010),

¹⁰ Being a gay performer in the pornography industry does not necessarily mean that one is homosexual. In fact it is actually common practice for actors that self-identify as heterosexual to perform in homosexual pornographic films- this is referred to in the industry as 'gay-for-pay'.

which may lead viewers of pornography to experiment with the sexual acts viewed, especially if it is evaluated as being potentially pleasurable. The issue here is that consumers of pornography may attempt to imitate the aggression and the violence that is often associated in mainstream pornography.

A study conducted by Rogala and Tydén (2003) investigated pornography's influence on the sexual behaviours of women (median age = 22) in Sweden. The findings revealed that there is some link between consuming pornography and engaging in anal sex. The results from the study indicated that 47% of the women had engaged in anal sex and self-graded the experience as negative, which is not the way it would be evaluated from watching porn. Although the findings suggest a link between the consumption of pornography and the practice of anal sex, it is still uncertain how pornography influences human sexual behaviour (Zillman, 2000). Furthermore, sexual practices and trends change with time, and although this may be attributed to the easy accessibility of pornography in modern society, it is nonetheless people and societies who have the overarching power to legitimize and normalize particular sexual practices (e.g. anal sex and oral sex).

Comprehensive sexuality education is almost an unrealistic ideal to strive towards, especially through the utilization of one source (e.g. sexuality education programmes in schools, discussions with parents). Many young people may be accessing pornography, simply to supplement their sexual knowledge on topics which they are genuinely interested in. If this is the case one shouldn't deny the educational potential of pornography, but rather, as McKee (2010) suggests, begin to teach and promote [critical] media literacy. This will enable (young) people to critically evaluate the messages that are expressed by different types of media, including pornography, and unpack them in such a way as to make sense of them contextually and their applicability in real life circumstances.

2.4 Pornography within South Africa

Research regarding pornography is slowly gaining momentum within the South African academic arena (both qualitatively and quantitatively) with some results reflecting similar findings to studies conducted in other countries. For example, a qualitative research study conducted by Du Toit (2011) revealed that male participants, between the ages of 18 and 24, accessed pornography in order to educate themselves about how to perform certain sexual activities, similar to studies conducted elsewhere (see Li & Davey, 1996; Wallmyr & Welin, 2006). In the same study, masturbating with the aid of pornography was also considered an alternative option to actually engaging in sexual intercourse/activities,

especially if the consumer possessed strong religious beliefs (i.e. considers premarital sex as sinful) and/or had fears of contracting HIV through sexual intercourse – an issue which is of major concern for many (young) people in South Africa.

Another qualitative study concerning pornography was conducted by Mkhwanazi et al. (2011) which explored the experiences six young men had with pornography growing up. For these young men and their peers, the media, and in particular pornography, did play a sex educational role, and for some of them it was the most important (Mkhwanzi et al., 2011). The authors mention that watching pornography did not prepare the participants for their first coital encounter. This may be due to the fact that pornography presents a certain idea of how sex 'should' be conducted and that the boys soon realised, through having sexual intercourse for the first time, that there is an apparent mismatch between personal expectation (formed by watching pornography) and the actual experience of having sex. The authors from the study also comment on how collective peer conversation combined with pornography creates a powerful fuel that is used to reinforce and construct a certain male identity. A male identity that is essentially constructed on the basis of sexual behaviour/performance and perpetuates particular sexual messages, such as males should be the initiators of sexual activities.

A quantitative study conducted by Chetty and Basson (2006) which investigated internet usage and the exposure to pornography of learners (aged 13-17 years) in South African schools. The results revealed that 64% of the learners had been exposed to pornographic images on the internet and that 81% reported their friends possessing pornographic images on their phones. Of the learners that had been exposed to pornography online, 70% reported coming across it accidentally/unintentionally. The study also included a five item attitude towards pornography scale, which from the results one would conclude that the majority of participants expressed a negative attitude towards pornography. However, the researchers failed to describe how they developed the attitude scale, the reliability of the scale, as well as what underlying dimensions/constructs the scale was measuring. Furthermore, the attitude scale was constructed for participants younger than 17 years old, and as such makes use of simple language and ignores the investigation of issues that could inform one's attitude towards pornography (e.g. sexual objectification, pornography as a source of sexual information, the consequences of consuming pornography, etc). With this in mind it was decided to develop an attitude towards pornography scale that included such issues and that could be used to measure the attitudes of young people (over the age of 18) and adults within the South African context.

Today cell phones mirror many of the functions that were once only manageable

through a computer with internet connectivity. Cell phones have become remarkably cheaper both in terms of price of the actual device as well as the cost of internet browsing¹¹, making them a convenient [in terms of mobility] and cheaper source from which pornography can be accessed. This notion is supported by research conducted by Du Toit (2011), where participants acknowledged both the convenience and the cheapness associated with accessing pornography via their cell phones. Furthermore, one may suspect that for young (potential) consumers of pornography with limited financial resources, for example those living in rural areas, cell phone internet browsing may be one of the few means of gaining access to pornographic material.

Adolescence is a period characterised by changes in the sexual reproductive organs that lead to the experiencing of first time sexual urges and desires. Young people may be accessing pornography and using it as a source of sexual education in order to understand and make sense of their own sexuality (Wallmyr & Welin, 2006).

In the South African context sexuality education programmes have become the educational response to the HIV pandemic (Francis, 2010), and according to Giami et al. (as cited in Francis, 2010) have tended to focus on biology and negative issues such as teen pregnancy. Although this information is important, young people also “want more detailed information regarding the logistics of sexual activity, desire and pleasure” (Francis, 2010, p. 315). These topics of discussion and information relating to them have been actively avoided in sexuality education programmes, and have created a lacuna of sexual information that is required for young people to safely and responsibly negotiate their sexual lives. Young people curious and thirsty for this information may seek it elsewhere, primarily from secondary sources, such as family, friends, and the media (including pornography) (Department of Health, 2009). If this is the case, and particularly in reference to pornography, every attempt must be made to understand what type of sexual messages and information are being extracted from pornography. However, before this can be investigated it is necessary to explore the extent to which young people in South Africa access and consume pornography, through what sources, their motivations for accessing sexually explicit material as well as the kinds of attitudes they have towards pornography.

It would also prove insightful to explore, within the South African context, why young people access and consume pornography, as well as the kinds of attitudes they have towards pornography. However, research of this sort is highly sensitive and is faced with

¹¹ Cell C, a service provider in South Africa offers customers data bundles costing R0.15c a megabyte. (At the time of writing this literature review).

many challenges, one of which being the elicitation of accurate responses from participants. This issue is discussed below.

2.5 Issues facing research investigating sexual behaviour

2.5.1 Social desirability

Research concerning human sexuality inherently asks sensitive questions which, according to Coutts and Jann (2011) are “questions pertaining to private, socially frowned upon, or illegal behaviours” (p. 170). These types of questions, for example; Have you ever had unprotected sex, are often associated with negative societal evaluations (e.g. it is careless and dangerous to have unprotected sex) and often lead to participants providing socially desirable answers (e.g. Nope, I always use protection).

Social desirability can be considered the extent to which participants provide socially acceptable responses to particular sensitive questions (Tourangeau, Rips & Rasinski, 2000). It is a type of response bias that has direct implications on the validity of the data collected, as participants either over-report or under-report socially desirable behaviours (Coutts & Jann, 2011; Randall & Fernandes, 1991). Furthermore, social desirability, as a response bias, occurs in both qualitative and quantitative research.

Research that seeks to explore aspects of sexuality using interviews as a method of data collection are characterised by a situational social relationship between the interviewer and interviewee. During the interview process there are a multitude of co-existing factors that can influence the way in which a participant provides their responses (Catania, 1999). These range from the particular socio-structural context, the research context, the sensitivity of the questions being asked, as well as the interviewer and respondents’ personal characteristics (Catania, 1999). All of these factors are played out in a dynamic way in the interview context and can all, in some way or another, be responsible for inducing the response bias of social desirability. For example, gender differences may influence how a young heterosexual male responds to questions about sexual activity that are asked by a female interviewer (Catania et al., 1996). He may provide responses in an attempt to construct himself, from his perspective, as sexually desirable (e.g. “Oh ... I have had many sexual partners”) or he may become embarrassed and inhibited by the fact that a women is asking sexual questions and simply may under-report (e.g. I have had only one sexual partner in the last year).

Self-report methods of data collection appear to circumvent the situational social relationship of the interview context, and have been relied on heavily in studies investigating sexual behaviour (LaBrie & Earleywine, 2000). Self-report methods seek to minimize and in

some instances eliminate the presence of the researcher (e.g. online questionnaires), which can encourage participants to provide responses that best reflect their personal experience and/or opinion. However, survey researchers suggest that socially desirable responses may actually be caused by the sensitive questions themselves, and that providing a socially desirable answer is a response strategy that reflects how sensitive the question is for that respondent (Tourangeau & Yan, 2007).

Researchers have attempted to combat social desirability in a variety of ways (Coutts & Jann, 2011). Two particular ways include altering (1) the question format and (2) the data collection method used, which has led to the development of various new methods. These methods seek to provide respondents with a greater sense of perceived confidentiality in an attempt to increase honest self-disclosure. Some of these methods include the following: Randomized Response Technique (RRT); Informal Confidential Voting Interview (ICVI); Audio Computer Assisted Self-Interview (ACASI); and the Unmatched-Count Technique (UCT). The UCT is described in detail below.

2.5.2 The Unmatched Count technique.

The UCT is a procedure that was developed “to improve the reliable collection of sensitive behaviours” (Dalton, Wimbush & Daily, 1994, p. 818). It is an alternative methodology which seeks to reduce socially desirable responses by providing a greater degree of anonymity in comparison to other conventional data collection methods, such as the face-to-face interview or self-report surveys (Walsh & Braithwaite, 2008). This greater degree of anonymity is created and embodied by the design of the UCT and is discussed below.

The simplified UCT consists of randomly assigning participants into two independent groups, the control and treatment group. It is suggested by Dalton et al. (1994) that each group should have between 40 and 50 participants. Once the participants have been allocated (usually randomly) into either the treatment or control group they are provided with a UCT questionnaire. The control group is given a questionnaire which consists of a set of innocuous statements. For example:

Set1

- a) I enjoy watching television
- b) I own a pet
- c) I play sports
- d) I was born in South Africa

In contrast, the treatment group receives exactly the same instructions and set of innocuous statements with the addition of one sensitive statement which seeks to investigate a particular sensitive issue/topic, for example;

e) I watch pornography.

All that is required from the participants is to record how many of the above statements are true for him/her. Participants do this by simply recording the number in a response box provided, and not by circling or checking any of the statements. By responding in this way participants are not directly reporting any of the sensitive behaviours, as a participant may record that three of the statements are true for him/her. This essentially ensures a very high level of anonymity because even if the participant's name or other personal information were on the questionnaire, it would be impossible to ascertain exactly which three of the items were selected by the participant (LaBrie & Earlywine, 2000).

In terms of analysis, the means of the scores from each group, on each item, are calculated and the differences in means are statistically compared. This is done to determine the base rate of the sensitive behaviour, which is achieved by using the following equation proposed by Dalton et al. (1994):

$$\text{Estimate } (p) = \text{mean}_b - \text{mean}_a$$

p = the proportion of subjects involved in the sensitive behaviour

Mean_b = the mean number of statements indicated by the subjects with the sensitive statement

Mean_a = the mean number of statements indicated by the subjects without the sensitive statement.

The UCT is an alternative technique that can be used to investigate sensitive behaviours, and as such its methodological efficacy must be assessed. According to Dalton et al (1994) "the typical criterion for assessing the efficacy of a UCT, is to determine whether it results in higher rates of admission (base rate) of some sensitive behaviour than is achieved through other means of data collection" (p. 824).

There have been a number of studies that have focused on assessing the methodological efficacy of the UCT by comparing it to data obtained through self-report questionnaires (SRQ) (see Dalton et al., 1994; LaBrie & Earlywine, 2000; Rayburn, Earlywine & Davison, 2003; Walsh & Braithwaite, 2008;). In such comparisons the UCT's proportion is calculated using the equation discussed above, whereas the SRQ's proportion is

calculated simply by taking all the affirmative responses to a sensitive question and then dividing it by the total number of participants that answered the question. For example if 43 participants out of a sample of 100 indicated that they watch pornography (sensitive behaviour) the proportion would be 43%. Once the proportions from each method are known they can be statistically compared using the Z test of proportions (Walsh & Braithwaite, 2008), which assess whether the differences in the percentages for the UCT and SRQ are statistically significant.

A number of studies have sought to investigate how the UCT compares to SRQ when asking questions concerning sensitive behaviours. For example Walsh and Braithwaite (2008) assessed the results from a UCT and a SRQ where the sensitive behaviours under investigation involved alcohol consumption and sexual behaviour. The results indicated that the UCT was a more effective method in obtaining affirmative responses to the sensitive questions. Similarly, Labrie (2000) also compared the UCT and SRQ in regards to sexual risk behaviour and alcohol consumption. The findings from the study mirrored that of Walsh and Braithwaite (2008), as the UCT revealed significantly higher base rates than the SRQ. Moving away from the areas of sexual behaviour and alcohol consumption, Rayburn, Earleywine & Davison (2003) used the UCT and SRQ to investigate anti-gay hate crimes amongst college students. The findings from the study showed that the UCT revealed higher base rates on two out of the four sensitive behaviours. The researchers considered the two items which the UCT scored higher base rate scores to be the more 'serious' of the sensitive items, as they referred to physical fights and the damaging of property, whereas the other two items were concerned with doing graffiti about gay people and verbally threatening them. In light of the above studies it would seem that the UCT is an effective alternative methodology that can be used to investigate sensitive behaviours, particularly when compared to the SRQs.

It must be noted that the UCT is not without its limitations. One such limitation is that the base-rates calculated yield estimations only and not exact percentages (Dalton et al., 1994). In addition to this, the UCT does not allow for the researcher to "associate a specific response to an individual respondent", therefore making micro-level analysis impossible (Walsh & Braithwaite, 2008, p.66). However, micro-level analytical problems seems a bit spurious as the UCT was not developed to investigate individual-level behaviour but rather to indicate (how many)/what percentage of participants admit to particular sensitive behaviours.

Eliciting truthful responses from participants involving sexuality has for a long time been an issue of concern for many researchers. However, as has been discussed above, the

UCT offers an alternative approach to investigating sensitive behaviours/topics. Thus, for this research study young peoples' interactions with and attitudes towards pornography will be explored both through SRQs and a UCT. This essentially means that the study will take on a dual approach, which allows for methodological triangulation but also provides an indication of how effective the UCT, as a form of data collection and methodology, is when used to inquire about sensitive sexual behaviours/topics.

CHAPTER 3

METHODOLOGY

3.1 Research design

This research study made use of quantitative methodology in the form of a quasi-experimental cross-sectional survey design, and thus was inherently positivist. This type of design is considered congruent with the research questions as it allows for the exploration of participants' interactions with, consumption of, and attitudes towards pornography as well as for assessing the methodological effectiveness of the UCT.

According to Myers and Hansen (2011) quasi-experiments “can be seen as real experiments, but they lack one or more of its essential elements, such as manipulation of antecedents or random assignment to treatment conditions” (p. 147). This study was an experiment in the sense that two groups were compared- where one group completed the self-report questionnaire (SRQ) and the other group completed the two UCT questionnaires. The SRQ and the UCT were the two methods that were used to investigate the sensitive topic (pornography consumption and sexual activity) and are considered as the independent variables for the experiment. These two groups violated the criteria for an experimental design as the two groups were not equivalent - they differed in the number of participants in each group as well as on multiple demographic variables, such as race, gender and age.

3.2 Sampling

3.2.1 The study setting.

The study was conducted at the University of KwaZulu-Natal, Pietermaritzburg campus, which is located in the KwaZulu-Natal province in South Africa. The University of KwaZulu-Natal is one of the largest and diverse (in terms of race, gender and qualifications offered) universities in South Africa. One estimate reports that the Pietermaritzburg campus had 11485 registered students for the 2012 academic year (Institutional Intelligence, 2013).

3.2.2 Sampling procedure

Taking into consideration the study setting and the purposes of the study it was decided to adopt a dual sampling strategy for this research study. This essentially involved using both convenience and purposive sampling as sampling strategies. These two sampling

strategies, in relation to this study, are not seen as distinctly different but rather as complementary. Each will be discussed below.

Purposive sampling was one sampling strategy used in this study. Babbie (2001) states that sometimes it is appropriate to select participants based on “your [the researchers] judgement and the purpose of the study” (p.166). This includes specifying particular criteria/characteristics that participants should possess in order to be viable for inclusion in the study; these criteria are often determined by the purpose(s) of the study. In line with the research questions the following criteria were required for participants to participate in the study;

- **Student at the University of KwaZulu- Natal, Pietermaritzburg campus:** All participants were required to be currently registered students at the University of KwaZulu-Natal. As registered students participants have access to computers with the internet at various LANs¹² across campus. Therefore by being a student, participants could easily gain access to the online-questionnaire and online UCT.
- **Age:** Participants were required to be between the ages of 18 and 24 as the research study focuses particularly on young people. Although the concept of “youth” is often debated in terms of assigning a particular age range, for conceptual clarity it was decided to have particular cut-off ages and the minimum age of 18 years is a legal requirement for informed consent to participate in research.

The criteria described above to a large extent provided the justification for using, the second sampling strategy, namely; convenience sampling. Convenience sampling involves recruiting participants who are near and readily available (Welman, Kruger & Mitchell, 2005). This sampling strategy had three particular benefits. Firstly, participants were recruited from the University of KwaZulu-Natal. Universities are ideal social environments for recruiting research participants, as they are the culmination point for where many diverse individuals of different races, ages, genders, beliefs, and cultures gather to later. Secondly, the researcher was also a student at the University and thus possessed ‘student knowledge’ regarding the organizational workings and the available resources the university provided. Thirdly, drawing a student sample from the University of KwaZulu-Natal also aided the data collection process. It ensured that each participant had access to the internet and thus was able to go online and fill out the questionnaire.

¹² LANs are essentially computer rooms that university students use.

3.2.3 Participant Recruitment

Initially the strategy to recruit participants involved advertising. Pamphlets with information regarding the study were placed on notice boards at key locations all across the university (See appendix A). Permission from Risk Management Services was obtained for the adverts to be placed on campus. This recruiting strategy seemed relatively successful at first, as slowly participants began to access and complete the online questionnaire. However, after some time it appeared that the sample was not increasing. In an attempt to address this, an alternative sampling strategy was initialised. It was essentially a face-to-face recruitment strategy which involved the researcher going to the LANs across the campus and asking participants to participate in the study. Each potential participant in the LANs was approached by the researcher, provided with a small piece of paper that had information regarding how they could access the online questionnaire - as a thank you, each potential participant was also given either a sucker or small chocolate bar.

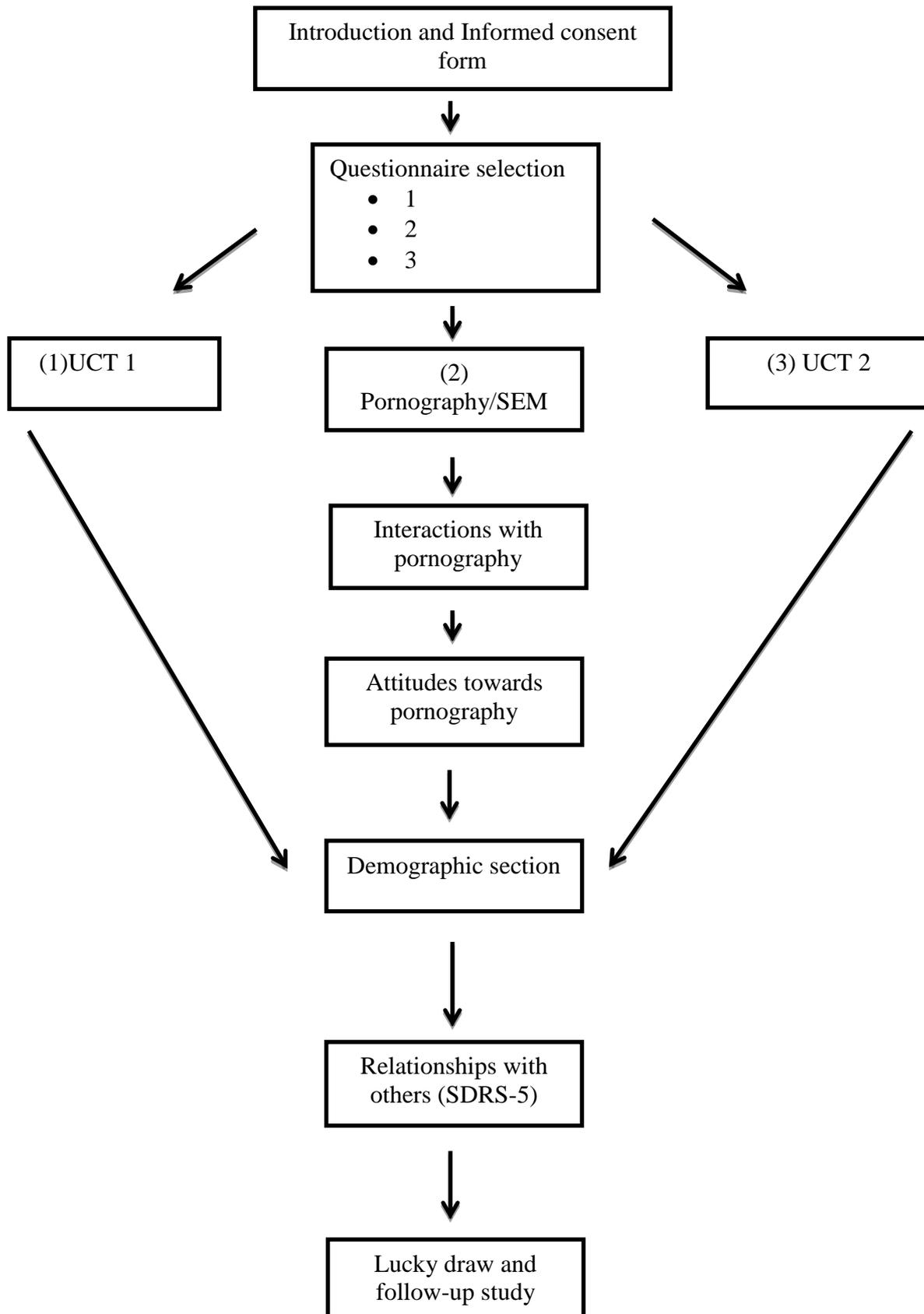
The face-to-face recruitment method, described above, proved less successful than the initial advertising method. This may be due to the fact that many potential participants were busy doing university work in the LANs and easily forgot to do the online questionnaire at a later time, or they simply did not want to complete the questionnaire in an environment where others could possibly view their responses.

At this particular stage of data collection there were (still) very few participants who had completed the UCT sections of the questionnaire. As an alternative recruitment strategy the researcher was able to acquire some funding which was used as an incentive for participants who completed the UCT section of the questionnaire. This strategy involved the researcher walking about university campus and asking participants to complete the online UCT. Participants were explained what the nature of the research and then directed to the Psychology Lab where they could access and complete the UCT questionnaire. The researcher was present at the Psychology Lab whilst participants completed the UCT questionnaire and provided assistance to participants that required it. After participants had completed the UCT section of the online questionnaire they received R20 as an incentive. This recruitment strategy proved the most successful and soon the number of completed responses for the UCT amounted to 99, which as the literature suggests, is sufficient for analysis purposes. This alternative recruitment strategy was approved by Research Ethics Committee.

3.3 Instruments

The primary instrument used in this study was an electronic questionnaire that was made available online. The online questionnaire was developed and made available through the use of LimeSurvey, which is an open source survey application. The online questionnaire was essentially a combination of three questionnaires, which were labelled as followed; 1) Pornography/SEM, 2) UCT1 and 3) UCT 2. Each questionnaire was constructed in such a way as to investigate particular research questions. Below (see figure 1) is a visual representation of how the online questionnaire functioned online followed by a brief description.

Figure 1. Layout of the Combined Online Questionnaire



When participants accessed the online questionnaire they were greeted by a page which provided a description of the questionnaire, the informed consent section as well as the researcher's and project supervisor's contact details. Once participants indicated their agreement to fill out the questionnaire they were directed to a "questionnaire" selection question. Here participants had to choose one number, ranging from one to three - and depending on their response they would be directed to a specific questionnaire. This pseudo-random selection between the three questionnaires was used as the researcher was not aware of any other randomizing paths that could have been used on Limesurvey. If participants selected "1" they were directed to the UCT 1 questionnaire, if they selected "2" they were directed to the pornography/SEM questionnaire, and if they selected "3" they would be directed to the UCT 2 questionnaire. This question was included to ensure some degree of randomization of participants across the different methods (SRQ and UCT).

The pornography/SEM and the UCT questionnaires were constructed to investigate different research objectives and thus differ in format and content (to some extent). However, as can be seen in the visual representation above all the questionnaires share three response sections, namely the (1) the demographics section, (2) the relationships with others (social desirability scale) section, and (3) the lucky draw section. Once participants had completed their questionnaire specific questions they would be directed to the shared response sections. Below the construction and sourcing of items for each questionnaire is described. The three shared response sections are discussed last.

3.3.1 Pornography/SEM questionnaire

The Pornography/SEM questionnaire consisted of items which came in a yes/no, multiple choice and Likert format (see appendix B). It was constructed in such a way as to elicit valuable descriptive data concerning participants' interactions with pornography and their attitudes towards pornography. Therefore there were four different response sections; 1) Interactions with pornography, 2) Attitudes towards pornography, 3) Relationships with others (Social desirability scale), and 4) Demographics, each of which will be discussed below.

3.3.1.1 Interactions with pornography.

The interactions with pornography response section consisted of items that investigated participants' interactions with pornography, and thus items were incorporated that provided information regarding participants exposure, consumption, viewing frequency, and motivation for accessing sexually explicit material. However, it was first necessary to establish operational definitions for each of the above dependant variables. These variables were defined as:

Exposure: Exposure refers to whether a participant, in their personal opinion and recollection, has viewed pornographic (in any form) before. Exposure can be either intentional or unintentional.

Consumption: Consumption involves **actively** accessing pornography for a specific purpose. For example, one may access pornography to use as an aid for sexual release/masturbation.

Motivation: Motivation refers to the reasoning behind the consumption of pornographic material. For example, One may access pornography out of curiosity or one may access it learn more about certain sexual activities.

Viewing frequency: Viewing frequency refers to how often a person views/comes into contact with pornography. The actual viewing of pornography can be intentional or unintentional.

It is also worth noting that certain questions were only given to participants if they provided a particular response. For example, if a participant indicated that they have been exposed to pornography, then the proceeding question would be: On what medium(s) did you view it?

3.3.1.2 Attitude towards pornography scale and its construction

An attitude scale was incorporated into the pornography/SEM questionnaire in order to measure participants' attitudes towards pornography. The initial steps in its construction included scouring the literature in search of any pre-existing scales, and in particular attitudes towards pornography scales that had been tested and used within the South African context. After intensive literature searching the researcher concluded that no such scale existed that had been tested and used within the South African context. However, the researcher was able to locate and download two particular attitudes towards pornography scales that were conducted in developed countries, both of which were constructed in Likert format. Kaplan and Saccuzzo (2009) discuss the use of the Likert format within the area of measuring

attitudes and assert that the “Likert scale format is especially popular in measurements of attitudes” (p. 162).

The first scale was obtained online and consisted of 66 items¹³. However, the scale had very little identifying information- it had no information regarding: reliability, who the creators were, where it was constructed, or how to score the scale. It was merely available online in a PDF version, and as such was read and treated with scepticism. The second sourced attitude scale consisted of 15 items and was found in a published study conducted by Træen et al. (2004) entitled *Attitudes and Use of Pornography in the Norwegian Population 2002*.

Both these attitude scales in conjunction with the literature were used as sources of potential items. Many of the items in both studies were taken into consideration and were reworded and contextualized (e.g. Pornography should be illegal in South Africa) in such a way as to not violate copyright restrictions. In addition to reviewing these two scales Lowenthal (2001) suggests that conducting open-ended qualitative interviews can prove useful in sourcing items based on what people say. In reference to this, the researcher conducted an honours level research project which explored young men’s’ attitudes towards pornography. The interview data from the study was listened to (again) for potential sources of items.

After much consideration, and using Tareen et al.’s (2002) scale as a useful guideline, the researcher decided to construct statements about pornography that were related to sexual life (e.g. Pornography can enhance a viewer’s sex life), possible consequences/effects of pornography (e.g. Pornography can cause relationship problems), and personal relationship with pornography (e.g. I enjoy talking about pornography). The preliminary attitude scale consisted of 16 statements (see appendix C). Although it is generally suggested that more items are initially generated/sourced for the preliminary scale the researcher felt that 16 items were sufficient as there appeared to be commonality between the two reviewed attitude scales regarding the type of items it included.

Participants were required to indicate how much they agreed or disagreed with each statement on a five- point Likert scale, where;

1	2	3	4	5
Strongly agree	Agree	Neutral	Disagree	Strongly Disagree

¹³ Attitude scale was downloaded from http://mypages.valdosta.edu/mwhatley/3900/atp/atp_revised.pdf

Nine of the statements were positively worded (statements 1,2,4,8,10,11,12, 14 and 15,) and the other seven negatively worded (statements 3,5,6,7,9,13 and 16). It was decided to include some negatively worded statements as to ensure that participants “read each item and do not use a response set in which they consistently mark only one side of the scale” (Finchilescu, 2002, p. 209).

Positively worded items:

Watching Pornography can be a healthy source of sexual information

Accessing and watching pornography can be fun and exciting

Pornography is okay if watched in private

Pornography is a great way to release sexual tension

Pornography is not as bad as people think it is

Pornography can enhance the viewer’s sex life

Pornography is simply just another genre of film

Watching pornography makes one sexually aggressive

I can talk openly about pornography with my friends

Negatively worded items:

Pornographic material is degrading towards women

Pornography is wrong and is bad for society at large

Pornography can cause problems in a relationship

It is ok for porn to be broadcasted on local television, provided it is at an appropriate time

Pornography degrades men

Pornography should be illegal in South Africa.

After the questions had been constructed and compiled it was necessary to assess their validity. Validity refers to the

“Degree to which a measure does what it is intended to do. This includes both the fact the measure should provide a good degree of fit between the conceptual and operational definitions of the construct, and that the instrument should be usable for the particular purposes for which it was designed” (Carmines & Ziller as cited in Terre Blanche, Durrheim & Kelly, 2006, p. 561).

Content validity refers to the appearance and content of the items, and whether the items in the measure are about what the research is trying to investigate (Lowenthal, 2001). From this standpoint the researcher looked at each item to ensure that there was a clear congruent link between the content of the item and the particular objectives of the study. For example, this study was interested in how many young people had been exposed to pornography, therefore the question “have you ever been exposed to pornography?” would be considered valid as it directly relates to what is being investigated.

3.3.2 UCT 1 and 2 questionnaires

The construction of the UCT questionnaires was a relatively straightforward process. The researcher followed the formatting and design used by Dalton et al (1994). This meant that two UCT questionnaires (UCT1 and UCT2) were constructed and consisted of five items that were each made up of a set of statements (see appendix D and E). In line with Dalton et al.’s (1994) method all of the UCT sets consisted of innocuous statements, however certain sets also included one sensitive statement. In relation to answering the UCTs, all participants had to do was indicate how many of the statements are true for them in the space provided.

The innocuous statements were constructed by reviewing studies that had used the UCT to collect data. According to Tourangeau and Yan (2007) it is important to ensure that the UCT innocuous statements are low-variance. This means that the innocuous statements should not be arbitrary to the extent they require specific knowledge to understand them, instead the statements should be concerned with things that the majority of people have experience with, or at least are aware of. In addition to this, the researcher tried to keep the innocuous statements as contextually relevant as possible, whilst at the same time using basic English (e.g. I have been to Cape Town).

The devising of the sensitive statements was in many ways influenced by the first research question, which was to investigate how young people interact with pornography. With this in mind the researcher created five sensitive statements relating to pornography for inclusion into the UCT. These five sensitive statements were then modified into close-ended question format so that they could be incorporated into the Pornography/SEM questionnaire,

and provide useful information regarding young peoples' interactions with pornography. Below (as seen in table 2) are the five sensitive statements found in UCT 1 and UCT 2, as well as the question equivalents in the Pornography/SEM questionnaire:

Table 1.
Sensitive Items in the UCT and SRQ

UCT sensitive statements	Pornography/SEM equivalent questions
I am sexually active.	Are you sexually active?
I have been caught watching pornography.	Have you ever been caught watching pornography?
I have watched pornography with someone else.	Have you ever watched pornography with someone else and/or in a group setting?
I watch porn.	Do you actively seek out and consume pornography?
I have downloaded and/or bought porn before.	Have you ever downloaded and/or bought pornographic material?

It is important to ensure that sensitive statements/questions were located in both the SRQ and the UCT questionnaires so that base rates could be calculated for analytical purposes.

It must also be stated that not every UCT set had a sensitive statement. Those sets that had a sensitive statement consisted of six statements and all the others consisted of merely five innocuous statements. Therefore, the only aspect that differentiated sets in each UCT questionnaire was the inclusion of a sensitive statement. The sensitive items were placed in UCT 1 set one, three and four as well as in UCT 2 set two and four.

3.3.2.1 Demographic questions

It is always important to gather data concerning participant's demographics, as these are essentially where the majority of independent variables will be identified. For all the questionnaires participants were asked demographic questions relating to their age, sex, race, and romantic status. Such demographic information can be used in inferential statistical techniques to explore the relationship amongst variables as well as the difference between groups.

3.3.2.2 Social desirability scale

The Hays five item social desirability response set (SDRS-5) (Hays, Hayashi & Stewart, 1989) formed part of both the UCT questionnaires as well as the Pornography/SEM questionnaire (see appendix F). The SDRS-5 was incorporated into the study to assess social desirability. This was considered imperative as it helped to assess whether the UCT as an alternative method of collecting data reduces social desirability effects, thus producing more valid/accurate data (i.e. responses that best reflect participants' feelings and beliefs). Participants respond by indicating how true or false each statement is for them on a five-point Likert scale, where:

1	2	3	4	5
Definitely true	Mostly True	Don't Know	Mostly false	Definitely false

The SDRS-5 in comparison to other social desirability response sets, such as the Marlowe-Crowne Scale (33 items), consists of fewer items and therefore not only takes less time to complete but also reduces the probability of respondent fatigue. The SDRS-5 is considered a reliable measure obtaining an alpha reliability of 0.66, 0.68 and 0.75 on three different samples (Hays et al., 1989). Thus, the SDRS-5 averages an alpha coefficient of 0.70 and meets the minimum recommendation suggested by Nunnally (as cited in Hays et al., 1989) of 0.70.

3.3.2.3 Lucky draw and follow-up study

The final section of the online questionnaire allowed participants to decide whether or not they would like to be entered into a lucky-draw where they could win R50. If they were interested in the lucky draw all they had to do was click 'yes' and provide some contact details so that they could be contacted in the event they were the lucky winner. In addition to this, this research study formed part of a larger project that was investigating the

methodological effectiveness of the UCT and participants were also asked if they would like to participate in a follow-up study. If participants were interested in the follow-up study they were required to indicate so by clicking the ‘yes’ box and provide some contact details.

3.3.3 Pilot study

Once the interactions with pornography and attitudes towards pornography response sections had been compiled it was necessary to conduct a pilot study. Pilot studies are conducted on a sub-sample of the intended sample and allow the researcher to assess the research instrument(s) as well as identify any practical and/or design issues that may arise (Van der Riet & Durrheim, 2006). The researcher only piloted the Pornography/SEM questionnaire (see appendix G) as it consisted of items and measures that had not been tested before. It was decided not to pilot the UCT questionnaires as there appeared to be no difficulties in the literature concerning data collection using the UCT. In addition to this, assessing the methodological efficacy of the UCT was a primary objective of the study which would be investigated after ‘official’ data collection had been completed.

The Pornography/SEM questionnaire was piloted on a sample of 25 students between the ages of 18 and 24, of which only 20 questionnaires were fully completed. The researcher advertised the pilot study on the UKZN Moodle website as well as walking around university explaining the nature of the study and asking participants to fill out the pilot online questionnaire. The pornography/SEM questionnaire was made available online at <http://surveys.ukzn.ac.za/> . Participants were made aware in the information section of the questionnaire that it was a pilot study. The researcher added on additional response section at the end of the questionnaire where participants could provide and suggestions and feedback concerning the questionnaire.

From analysing the results of the pilot study it appeared that there were no major issues related to accessing and completing the questionnaire online. In fact it was through this process that the researcher became aware that the online questionnaire could be accessed and completed through the use of an internet enabled cell phone/device.

The items on the attitude scale were scored as following:

Positively worded items

Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
+2	+1	0	-1	-2

Negatively worded items

Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
-2	-1	0	+1	+2

The highest possible attitude score a participant could acquire was 32 and the lowest -32. The researcher took positive scores as indicative of a positive attitude and negative attitude scores as indicative of negative attitudes towards pornography, for this was the underlying logic of the item scoring. Descriptive analysis of the attitude scale revealed that Males (mean = 12.57) had higher attitude scores and thus more positive attitudes towards pornography than Females (mean = -4.54). The overall pilot sample mean was 1.45, indicating that participants had a positive attitude towards pornography. However, this must be interpreted with caution as a small sample was used for the pilot as well as the fact the calculation of the mean is influenced by high/low score. Table 1 displays the descriptive results for the piloted attitude scale.

Table 2.

Descriptive statistics of the piloted attitude towards pornography scale

Sex	Mean	N	Std. Deviation	Minimum	Maximum	Range
Male	12.57	7	13.302	-5	30	35
Female	-4.54	13	12.791	-28	12	40
Total	1.45	20	15.143	-28	30	58

When developing a new scale it is necessary to assess the reliability of the measure. According to Durrheim and Painter (2006, p. 152) reliability refers to the dependability of a measurement; that is, the extent to which the instrument yields the same results on repeated trials". One way of inspecting reliability of a measure, and in this case the attitude scale, would be to assess its internal consistency, which is essentially the degree to which the items that make up the scale are all measuring the same underlying attribute (Pallant, 2010). This was achieved by calculating the Cronbach alpha coefficient of the attitude scale on SPSS 21. The attitude scale obtained a Cronbach's coefficient of 0.958 (see appendix H) indicating high levels of internal consistency. The researcher was somewhat sceptical of the high coefficient and opted to assess the internal consistency again with the final sample.

3.4 Data collection

Data was collected through an online questionnaire which is hosted by LimeSurvey at the following URL: <http://surveys.ukzn.ac.za/>. The website link was easily accessible and could even be accessed through mobile devices that had internet browsing capabilities. At first the online questionnaire appeared to be a relatively simple way to collect data, as participants could complete the questionnaire at a time that was convenient to them. However, after a month and half of collecting data the amount of online responses appeared to stabilize-where no new responses were being recorded. This posed a real issue as the number of responses for the two UCT questionnaires did not meet the suggested number of 50 participants per UCT.

In an attempt to increase the UCT response rate the researcher adopted an additional data collection method whereby he recruited participants to specifically complete the UCT questionnaire. Participants received R20 as an incentive for completing one of the UCT questionnaires.

Official data collection started on the 24th of August 2012 and ended on the 21st of October 2012. There were no time restrictions placed on the questionnaires. However, participants on average took between five and seven minutes to complete the UCT questionnaires, and roughly ten minutes to complete the Pornography/SEM questionnaire.

3.5 Data analysis

The raw data was firstly exported from the LimeSurvey® into a Microsoft Excel® format. The researcher cleaned the data and coded all the necessary questions. The coded data was then entered into a statistical programme known as Statistical Package for Social Science statistical 21 (SPSS®).

As with all quantitative data analysis it was necessary to investigate the descriptive statistics first. Descriptive statistics are used to describe the basic features of the data in the study, they simply describe what is or what the data shows (Trochim, 2006). Descriptive analysis provided an overview of the study sample by indicating how many [frequency] of the participants belonged to particular demographic categories, such as age, gender, race, romantic status, and residency.

Analysis for research question one, regarding participants interactions with pornography, involved calculating the frequency and per cent of participants responses to items concerning exposure to pornography, consumption of pornography, motivations for

accessing pornography as well as participants viewing frequency of pornography. These results were cross-tabulated to allow for easy visual inspection.

Participants attitudes to pornography were investigated through both descriptive and inferential statistics. Firstly, the minimum, maximum, mean and standard deviation scores for the attitude scale were calculated for different independent variables (race, age, race and viewing frequency of pornography). Secondly the proposed hypotheses regarding young peoples' attitudes toward pornography were tested. These hypotheses were concerned with investigating whether there were significant differences in attitude scores [dependent variable] between participants of different genders, races, ages and viewing frequency of pornography [independent variables].

An Independent Samples *T-test* was conducted to assess whether there was a significant difference between males and females on the attitude scale as well as whether there was a difference between participants of different ages (two groups). An Independent samples *T-test* is a statistical technique that is used to compare the mean scores of an independent variable with two categories on a particular continuous dependent variable (Pallant, 2010). Thus, gender (male and female) and age (18-24 and 25-34) were the categorical independent variables and the attitude scores were the continuous dependent variable.

A between-groups one-way Analysis of Variance (ANOVA) was conducted to assess the difference in attitude scores between participants of different races and viewing frequency of pornography. A between-groups one-way ANOVA involves one independent variable which has a number of different categories (e.g. race: Black, White, Indian, Coloured and other) and one continuous dependant variable (e.g. attitude score). This statistical technique assesses whether there is any significant differences in the mean scores on the dependant variable [attitude score] across the categories of the independent variable [e.g. races and viewing frequency].

Research question three which involves the UCT component of this research study was analysed by firstly calculating the base rates for both the UCT and the SRQ. Once the base rates had been calculated the resulting proportions from the SRQ and the UCT were compared using the Winks 7.0.2 probability calculator. The probability calculator ran a Two-Sample Z-Test which tests whether there is statistical difference in proportions between the two independent samples [UCT and SRQ] (Walsh & Braithwaite, 2008). Once the Z statistic had been calculated its value was compared to the critical values in the Z distribution and a

determination of statistical significance was concluded with regard to the null hypothesis (Wimbush & Daily, 1994).

The SDRS-5 scale scores from the Pornography/SEM and the UCT questionnaires were analysed to see if there was any significant difference. This was carried out by conducting an Independent Samples *T-test*.

3.6 Ethical Issues

3.6.1 Permission to conduct the study

The study followed ethical protocol and sought ethical approval from The Ethics Review Committee of the University of KwaZulu-Natal(see appendix I). Ethical clearance to conduct the study was obtained on the 12th of October 2012. In addition to acquiring ethical clearance, permission from Risk Management Service was obtained in order to place the flyers advertising the research on university notice boards.

3.6.2 Respect for human dignity

The information sheet for both the pilot and actual study make it clear that participation is completely voluntary and that they could quit at any point during the questionnaire. Furthermore, those participants who the researcher recruited personally were told verbally that going to the Psychology Lab was complete voluntary and even once they started the questionnaire they could leave at any moment without any negative consequences.

3.6.3 Privacy, confidentiality and Anonymity

According to Binik, Mah & Kielser (1999) “the internet appears to provide a perfect setting in which anonymity and complete privacy can be achieved” (p. 85). However, the questions asked in a questionnaire may actually threaten anonymity. For example in this study participants who were interested in the lucky draw were provided with an opportunity to submit their contact details so that they could be contacted in the event they are a winner. This meant that the researcher, could, if he wanted to, link a participant to their responses. However, in order to ensure anonymity between responses the participant that provided the responses, the researcher electronically detached the contact details from each questionnaire and randomized the order Therefore, making it impossible to connect a participant’s contact details with a set of responses.

3.6.4 Nonmaleficence

Nonmaleficence requires that the researcher ensures that no intentional harm is experienced by the research participants as a consequence of partaking in the research (Wassenaar, 2012). It is important to note that harm is not merely the absence of physical harm, but may also be experienced on a psychological and emotional level, especially when asking questions about one's sexuality (Catania, 1999). This type of 'internal' harm is unpredictable and thus cannot be controlled entirely as it is impossible to know the history and psychological constitution of participants. The best a researcher can do is make provisions and establish counselling support to help in the event that harm is experienced. In line with this, the researcher on both the pilot and actual study makes it clear, on the information sheet, that should participants experience any distress they are encouraged to contact either the project supervisor, or approach the UKZN child and Family Centre for psychological assistance. All contact details were provided to participants on the information sheet of the questionnaire.

3.6.5 Beneficence

The study had no direct benefit towards participants that the researcher is aware of, but instead can be considered beneficial in the sense that it provides insightful knowledge concerning pornography within the South African context, as well as the methodological usefulness of the UCT.

3.6.6 Written Consent

As mentioned previously this study used an online questionnaire as the primary means of data collection. In regards to this the information sheet and informed consent form took on a virtual form but nonetheless had all the same information a paper version would have (See appendix J). Only once respondents had read and clicked the 'I agree' box provided were they able to fill out the questionnaire. In such instances, the ticking of the 'I agree' box is the equivalent of the participant signing a regular/printed informed consent form.

3.6.7 Dissemination of Data

This study formed part of a series of research projects which were concerned with investigating participant's responses to certain sensitive issues when asked using different techniques, such as the UCT. After data collection the online questionnaires was removed from the survey website. The data collected from this study will, in the future, be used as secondary data and analyzed at a later stage to investigate further the methodological validity

of the UCT. All data will be recorded and stored electronically and only the supervisor will have access to the data.

CHAPTER 4

ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter provides a detailed account of how the data in the study was analysed and what it reveals in relation to the research questions and hypotheses. This will be achieved by specifically focusing on each research question and set of hypotheses, and providing the steps that were followed during analysis.

In analysing the data, the study made use of three particular software packages, the first of which was Microsoft Excel 2010, where the raw data was imported, from Lime Survey, and made ready for analysis. The second was SPSS (Statistical Package for Social Sciences), version 21. And the third software package that was used in this study was WINKS SDA (Statistical Data Analytics)¹⁴. Multiple statistical techniques were employed and their findings reported, such techniques included; general descriptive statistics, *T-tests*, Analysis of Variance (ANOVA) and a Two-Sample *Z-test*.

4.2 General Description of the sample

In total 204 participants accessed the online questionnaire. Out of the 204 responses only 145 were complete responses whereas the remainder were incomplete responses, and not included in the final analysis. The pornography section of the questionnaire had 43 complete responses and the two UCT sections of the questionnaire had 102 complete responses. Due to the fact that the pornography section of the questionnaire had a low number of complete responses it was decided to incorporate the responses from the pilot study (n=21) into the final analysis as well.

The final analysable sample, after cleaning and removing missing data, consisted of 163 complete responses. Out of the 163 complete responses 64 came from the pornography section and 99 come from the two UCT questionnaires (UCT 1 n = 54 and UCT 2 n = 45). The sample was heterogeneous and differed on particular key variables such as; age, gender and race. Below are the frequency tables of the pornography/SEM group and the UCT group.

¹⁴ WINKS SDA (Statistical Data Analytics) is a statistical software package, that can be bought and downloaded from: <http://www.texasoft.com/>

Table 3.

<i>Combined sample frequencies (SRQ and UCTs)</i>		
Demographic characteristics	Frequency	%
Sex		
Male	79	48.5
Female	84	51.5
Age		
18	9	5.5
19-21	66	40.5
22-24	88	54.0
Race		
Black	79	48.4
White	45	27.6
Indian	22	13.5
Coloured	13	7.9
Other	4	2.4
Total	163	

Table 4.

<i>Frequencies of the SRQ sample</i>		
Demographic characteristics	Frequency	%
Sex		
Male	25	39.1
Female	39	60.9
Age		
18	5	7.8
19-21	23	35.9
22-24	36	56.3
Race		
Black	31	48.4
White	21	32.8
Indian	2	3.1
Coloured	7	10.9
Other	3	4.7
Total	64 SRQ participants	

Table 5.

<i>Frequencies of the UCT sample</i>		
Demographic Characteristics	Frequency	%
Sex		
Male	54	54.5
Female	45	45.5
Age		
18	4	4
19-21	43	43.4
22-24	52	52.5
Race		
Black	48	48.5
White	24	24.2
Indian	20	20.2
Coloured	6	6.1
Other	1	1
Total	99 UCT participants	

Demographic information for the UKZN Pietermaritzburg campus 2012 was obtained from UKZN's online statistics website (Institutional intelligence, 2013). This data is presented in table 6.

Table 6.

<i>UKZN Pietermaritzburg Campus Demographic Statistics for Race and Sex 2012</i>		
Demographic Characteristics	Frequency	%
Sex		
Male	4405	42.4
Female	5979	57.6
Race		
Black	7889	76.0
White	932	9.0
Indian	1298	12.5
Coloured	227	2.2
Other	38	0.3
10384 UKZN PMB students		

Comparing the SRQ demographic data with the UKZN PMB campus data shows that males were underrepresented (39.1% vs. 42.4%) whilst females were overrepresented (60.9

vs. 57.6). In regards to race, the SRQ sample had underrepresented “Black” (48.4% vs. 76.0%), “Indian” (3.1% vs. 12.5%) participants and overrepresented “Coloured” (10.9% vs. 2.2%) “White” (32.8% vs. 9.0%) and “Other” (4.7% vs. 0.3%) participants.

Comparing the UCT sample data with the UKZN PMB campus data indicates that males were overrepresented (54.5% vs. 42.4%) and females were underrepresented (45.5% vs. 57.6%). Racially, the UCT underrepresented “Black” (48.5 % vs. 76.0%) participants but overrepresented “Coloured” (6.1% vs. 2.2%), “White” (24.2% vs. 9.0%), “Indian” (20.2% vs. 12.5%), and “Other” (1% vs. 0.3%) participants. The researcher was unable to obtain any data pertaining to age of registered students at the UKZN PMB campus, therefore no age comparison is provided. In light of the above demographic data it is clear to see that both the SRQ and UCT samples are not fully representative of the UKZN PMB campus student population.

A Chi-square for independence was conducted to establish whether the proportions of different races in each UCT questionnaire were similar. The analysis revealed a violation of the minimum expected cell frequency, having a minimum cell frequency of four. However, it is still possible to assess the similar in race between each of the UCT questionnaire groups through visual inspection. As can be seen in table XX, the percentages of Black, White, Indian and Coloured participants in each UCT are all within 2.8% of each other, and thus the two UCT groups can be considered demographically similar. It must be noted that only one participant categorized as ‘other’ completed the UCT questionnaire.

UCTquestionnaire * Race Crosstabulation

			Race					Total
			Black	White	Indian	Coloured	Other	
UCTquestionnaire	uct1	Count	26	13	10	3	1	53
		% within UCTquestionnaire	49.1%	24.5%	18.9%	5.7%	1.9%	100.0%
		% within Race	54.2%	54.2%	50.0%	50.0%	100.0%	53.5%
		% of Total	26.3%	13.1%	10.1%	3.0%	1.0%	53.5%
UCTquestionnaire	uct2	Count	22	11	10	3	0	46
		% within UCTquestionnaire	47.8%	23.9%	21.7%	6.5%	.0%	100.0%
		% within Race	45.8%	45.8%	50.0%	50.0%	.0%	46.5%
		% of Total	22.2%	11.1%	10.1%	3.0%	.0%	46.5%
Total		Count	48	24	20	6	1	99
		% within UCTquestionnaire	48.5%	24.2%	20.2%	6.1%	1.0%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	48.5%	24.2%	20.2%	6.1%	1.0%	100.0%

4.3 Answering Research Questions

4.3.1 How do young people interact with pornography?

The first research objective was primarily concerned with investigating how young people interact with pornography. This included exploration of the exposure, consumption and motivation for accessing pornographic. For this section, descriptive statistics were calculated using SPSS.

4.3.1.1 Exposure, consumption and access to pornographic material

Investigating how many participants had been exposed to pornography was a pivotal exploratory goal of this research project. The results indicated that 93.75% of the sample had been exposed to pornography at some point in their lives, and there appeared to be no recognizable difference between males (96.0%) and females (92.3%), as can be seen in table 7.

Table 7.*Descriptive statistics of participants exposed to pornography and through what sources*

	Sex				
	Male		Female		
	Count	Column N %	Count	Column N %	Total sample %
Exposed to Porn	24	96.0%	36	92.3%	93.75%
Exposed mobile phone	21	84.0%	20	51.3%	64.06%
Exposed TV/DSTV	16	64.0%	25	64.1%	64.06%
Exposed Magazine	14	56.0%	15	38.5%	45.31%
Exposed Internet computer	22	88.0%	27	69.2%	76.56%
Exposed Other	1	4.0%	1	2.6%	3.13%

Closely related to exposure is that of actively accessing pornography for particular personal/social purposes. Table 4 contains the results of how many participants in this study consume pornography. As can be seen in table 8, 43.75% of the sample reported consuming pornography. In addition to this participants were also asked to report through what sources they accessed such sexually explicit content. Out of the five sources provided a computer/ a computer with internet was selected as the most (40.6%) used to access pornography. The second most was a mobile phone with 23.4%.

Gender differences were also evident. A larger percentage of Males than females had consumed pornography on a mobile phone (76.0% vs. 23.07%), TV/DSTV (8.0% vs. 2.6%), Magazine (4.0% vs. 0.0%), Computer/Internet (68.0% vs. 23.1%). No participants indicated that they had consumed pornography through “Other” mediums/sources.

Table 8.*Descriptive statistics of participants who consume pornography and through what sources*

	Sex				Total Sample %
	Male		Female		
	Count	Male %	Count	Female %	
Consume porn	19	76.0%	9	23.07%	43.8%
Mobile phone	12	48.0%	3	7.7%	23.4%
TV/DSTV	2	8.0%	1	2.6%	4.7%
Magazine	1	4.0%	0	0.0%	1.6%
Computer/Internet	17	68.0%	9	23.1%	40.6%
Other	0	0.0%	0	0.0%	0.0%

4.3.1.2 Motivations for accessing pornography

Exposure, consumption and sources of access are but only a few core components that provide information about young people's interaction with pornography. In addition to these, it is also necessary to explore what motivates (i.e. the reasoning) young people to access pornography. Table 9 shows the motivations for accessing pornography amongst the sample population. It is important to note that these 'motivations' are not mutually exclusive, and that participants may actually access pornography for multiple reasons/motivations.

The results show that respectively the three most selected motivations for accessing pornography amongst the sample were: 1) 'curiosity' with 40.6%, 2) 'sexual release/masturbation' with 28.1%, and 3) 'I incorporate into my sexual activities/practices' with 20.3%. However, the results reveal some differences in motivations by gender. For males the three most selected motivations for accessing pornography were for sexual release (60%), curiosity (44%), and to incorporate it into my sexual practices/activities (36%). In contrast to this for females, the three most selected motivations for accessing pornography were due to curiosity (38.5%), to obtain sexual information (12.8%), and thirdly to explore their sexuality (10.3%) as well as to incorporate into their sexual practices/activities (10.3%).

Table 9.***Motivations for accessing pornography***

	Sex				Total Sample %
	Male		Female		
	Count	Male %	Count	Female%	
Curiosity	11	44.0%	15	38.5%	40.6%
Sexual release/ masturbation	15	60.0%	3	7.7%	28.1%
Sexual information	6	24.0%	5	12.8%	17.2%
I incorporate into it my sexual practices	9	36.0%	4	10.3%	20.3%
Explore Sexuality	8	32.0%	4	10.3%	18.8%
other	1	4.0%	0	0.0%	1.6%

4.3.1.3 Viewing frequency of pornographic material

This question in the questionnaire had four possible responses:1) Daily, 2) A few times a week, 3) A few times a months and 4) Other, which was open-ended. However, after reviewing all the ‘other’ responses it soon became apparent that many of the participants’ responses could be divided into three additional categories, namely: Every few months, Hardly ever and I don’t watch porn. These additional categories were added to the final analysis for this question.

Table 10 provides some descriptive information regarding the viewing frequency of pornography for each gender. For male participants in this study, the majority had either selected a viewing frequency of ‘a few times a month’ (44.0%) or ‘a few times a week’ (32.0%). In contrast to this, for female participants the most selected viewing frequency was ‘I don’t watch pornography’ with 51.3%. Furthermore, for the total combined sample, and similarly with the female participants, the overall most selected response was “I don’t watch porn” with 35.9%, followed by ‘A few times a month’ with 28.1%. It is important not to over-interpret these results as males and females were not equally represented in the sample.

Table 10.***Viewing frequency of pornographic material***

		Sex				Sample %
		Male		Female		
		Count	Male %	Count	Female %	
Viewing frequency of porn	Daily	1	4.0%	1	2.6%	3.13%
	Few times a week	8	32.0%	2	5.1%	15.63%
	A few times a month	11	44.0%	7	18.9%	28.13%
	Every few months	0	0.0%	4	10.2%	6.25%
	Hardly ever	2	8.0%	5	12.8%	10.93%
	Don't watch porn	3	12.0%	20	51.3%	35.94%

4.3.2 Attitudes towards pornography

The second objective of the study was to investigate the attitudes young people have towards pornography. As mentioned earlier in methodology chapter the researcher took positive scores as indicative of a liberal-accepting attitude and negative attitude scores as indicative of negative-disapproving attitudes towards pornography. Therefore, an attitude score of +1 or greater was considered a liberal-accepting attitude an attitude score equal to or less than -1 was considered as a negative-disapproving attitude towards pornography, and an attitude score of 0 was considered a neutral-ambivalent attitude towards pornography.

4.3.2.1 Factor Analysis

Exploratory factor analysis (EFA) was performed once the sample had been finalized. EFA is a statistical technique that is used to explore the underlying dimensions that a scale is measuring (Kim & Mueller, 1978 as cited in Traeen et al., 2004). More specifically exploratory factor analysis was used to gather information regarding each item in the proposed attitude scale.

The researcher decided to use principle component analysis (PCA) for factor extraction, not only is PCA the most commonly used approach for factor extraction (Pallant, 2010) but it also provides "... an empirical summary of the data set" (Tabachnick & Fidell, 2007, p. 635). In regards to factor rotation it was decided to use the oblique approach over the orthogonal approach. The underlying assumption of the orthogonal rotation is that the components are uncorrelated (Pett, Lackey & Sullivan, 2003). Conversely the underlying assumption of the oblique approach is that there is some degree of correlation between the components (Pett et al., 2003). This point is particularly important to acknowledge because

psychological constructs, such as an attitude, often consist of subcategories (components) that are naturally correlated to some degree (Pett et al., 2003). More specifically, the Direct Oblimin technique was used to rotate the components. The Direct Oblimin rotation attempts to satisfy the principles for what Thurstone (as cited in Pallant, 2010) refers to as a simple structure. A simple structure is said to be present when each item loads highly on only one component, as well as having each component represented by a number of strongly loaded items (Pallant, 2010).

The 16 items of the attitudes towards pornography scale were subjected to PCA using SPSS version 21. The first Principal Component analysis revealed the presence of four components, each exceeding eigenvalues of 1 (Kaiser's criterion), explaining 46.90%, 10.01%, 6.96% and 6.35% of the variance (see appendix K). Together these four components explain a total of 70.24 % variance. Visually examining the Scree plot revealed one clear component followed by a steady decline after the second component (see appendix L). An inspection of the pattern matrix indicated that there were multiple strong loadings on a number of factors (see table 11). There is some disagreement in the factor analysis literature regarding how the multiple-loading problem should be handled (Pett, Lackey & Sullivan, 2003). One way of addressing this problem, as is suggested by Kline (2000), is to simply eliminate the high multiple-loading items. This is done to reduce the difficulty in interpreting the meaning of the revised scale at a later stage (Pett et al., 2003). Therefore items 10 and 15 were removed and the remaining items were reanalysed.

Table 11.***Pattern matrix for initial factor analysis***

	Component			
	1	2	3	4
Att11	.904			
Att4	.789			
Att2	.785			
Att1	.700			
Att7	.559			.311
Att15	.508		.439	
Att14		.823		
Att3	.365	.636		
Att5		.536		.516
Att9			.869	
Att16			.833	
Att12	.399		.496	
Att8	.365		.445	
Att6				.806
Att10	.472	-.400		.518
Att13				.454

The attitude scale went through three additional Principle component analyses, where each time item(s) were deleted if they loaded highly on more than one component. In total five items were removed, namely items 8, 10, 12, 13 and 15.

A fourth PCA was conducted with the five removed items. Inspection of the correlation matrix indicated that all items correlated ≥ 0.30 with at least four other items in the matrix. No inter-item correlation exceeded $r = 0.80$, thus indicating that there was no problem concerning multicollinearity. The Kaiser-Meyer-Oklin (KMO) of sampling adequacy value was 0.825, which exceeded the recommended value of 0.60 (Kaiser as cited in Pett et al., 2003). The Barlett's test of sphericity reached statistical significance ($\chi^2 = 405.454, p = 0.000$), supporting the factorability of the correlation matrix (see appendix M). Cronbach's alpha for the 11-item scale [final attitude scale] was 0.888 (see appendix N).

The fourth PCA, with the five removed items, revealed the presence of three components, with component one contributing 47.69%, component two contributing 13.05%

and component three contributing 9.32%. In total the three components solution explained 70.08% of the variance (as is shown in table 12). Below the pattern matrix is also provided (see table 13) and was used in naming the three components.

Table 12.

Total variance explained for the fourth PCA (11 items)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.246	47.695	47.695	5.246	47.695	47.695	4.473
2	1.436	13.058	60.753	1.436	13.058	60.753	3.144
3	1.026	9.329	70.083	1.026	9.329	70.083	3.069

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 13.***Pattern matrix for the fourth PCA (11 items)***

	Components		
	Pornography as a component of sexual life (1)	Pornography as a socio-personal issue (2)	Pornography as a moral issue (3)
Pornography can enhance the viewer's sex life (att 11).	.905	-.194	.134
Masturbating to pornography is a great way to release sexual tension (att 4)	.832	-.123	.033
Pornography is okay if watched in private (att2)	.813	.087	-.024
Watching pornography can be a healthy source of sexual information (att 1)	.788	.198	-.126
Pornography should be illegal in South Africa (att 7)	.688	.145	.079
I enjoy talking about pornography (att16)	-.015	.931	-.004
I don't enjoy talking about pornography (att9)	-.042	.820	.107
Pornography can cause relationship problems (att6)	<u>.315</u>	.418	.045
Pornography degrades men (att14)	-.111	-.035	.983
Pornographic material is degrading towards women (att3)	.208	0.59	.705
Pornography is bad for society at large (att5)	.145	<u>.329</u>	.539

Note: Underlined values indicate a double loading on two components. Loadings highlighted in bold indicate the factor on which the item was placed.

4.3.2.2 Naming the Components

The final attitudes towards pornography scale consisted of 11 items and were divided into three components. The components were interpreted by assessing whether there was any common theme to the items that loaded highly on each of the components. Below the interpretation and naming of each component is discussed.

4.3.2.2.1 Component 1

The items that loaded highly on component one were;

Item 11- Pornography can enhance the viewer's sex life

Item 4- Masturbating to pornography is a great way to release sexual tension

Item 2- Pornography is okay if watched in private

Item 1- Watching pornography can be a healthy source of sexual information

Item 7- Pornography should be illegal in South Africa

When initially assessing the items in component one it is clear that there is a common theme of using pornography as sexual resource for multiple purposes (e.g. items 11, 4 and 1). However, items 2 and 7 do not fit conceptually with the other items despite loading relatively highly. According to Pett et al. (2003) the items that load the highest on a particular component provide a strong clue for naming that component. Similarly, labelling a component is an inductive and conceptual process that should take other high loading factors into consideration. Therefore it was decided to define component one as “*Pornography as a component of sexual life*”. This label can be considered a synthesis of all the items in component one. It encapsulates the items that assert that pornography can be used as a sexual resource for multiple purposes but at the same time acknowledges the social context in which sexual life is experienced.

4.3.2.2.2 Component 2

The items that loaded highly on component two were;

Item 16- I enjoy talking about pornography

Item 9- I don't enjoy talking about pornography

Item 6- Pornography can cause relationship problems

The items in component two all appeared to possess a social element/theme. For example item 16 and 9 included the social activity of ‘talking’. It is also important to take into consideration the words that make up an item. For example the subjective personal pronoun - that being the ‘I’ in items 16 and 9 – explicitly requires the participant to answer the statement from their personal point of view, this is not to say that the other items don't require the same from the participant, but rather that subjective personal pronouns read in such a way as to require participants to reflect personally upon themselves and the item being read (e.g. I enjoy talking about pornography). Inspection of the pattern matrix reveals that item 6 loaded on both component 1 and 2. However, seeing as though it loaded higher on component 2 it was decided to place that item within that component. Much like items 9 and 16, item 6 also possess a social element/theme – ‘relationship’. By taking into account all the item's content that loaded on component two it was decided to label the component ‘*Pornography as a socio-personal issue*’.

4.3.2.2.3 Component 3

The items that loaded highly on component three were;

Item 14- Pornography degrades men

Item 3 – Pornographic material is degrading towards women

Item 5 – Pornography is bad for society at large

The items loading on component three, at first glance, all appeared to focus on the effects that pornography had on women, men and society. However, these effects (degrading and being bad) are not effects that can be easily observed, but instead are abstract and to a large degree subjective. All one has to do is read the debates between the pro-sex and anti-porn feminists concerning pornography and degradation. From an anti-porn perspective “Images of facials and double anal ... form part of a consistent narrative of degradation and humiliation of the woman ...” (Long, 2012, p. 84). However, pro-sex feminists disagree and argue that there is nothing inherently degrading about pornography (McElroy , 1997). On a conceptual note the degradation of a person is not so much a physical effect but rather it is a psychological effect that comes into being through the practice of certain sexual activities, in certain ways, that are perceived by the viewers/actors as degrading according to their personal sexual understandings/sexual scripts.

Item 5 loaded on both component 2 and 3. However, it was decided to keep item 5 within component 3 as it loaded highest on this component. Item 5 required participants to indicate whether they thought pornography was bad for society. This item essentially asked participants to judge the badness/goodness of pornography, and thus requires participants to morally scrutinize pornography’s effect on society. By taking the content of all the items in this component it was to name component three ‘*Pornography as a moral issue*’.

The final attitude scale that was analysed consisted of items; 1, 2, 3, 4, 5, 6, 7, 9, 11, 14 and 16 (see appendix O).

4.3.2.3 Descriptive statistics of attitude scores.

As can be seen in Table 14 the overall sample had a positive mean score on the attitude scale (mean = 0.7188) thus indicating a liberal-accepting attitude towards pornography. However, by assessing the attitude scores according to sex one can immediately see the differences in means between the Males (mean= 4.68) and Females (mean= -1.82). This clearly indicates that the males in the study possessed a more liberal-accepting attitude towards pornography than the females.

The attitudes scores also differed across age groupings. The only age group that obtained a negative attitude mean score was the 18 age group (mean = -5), whereas both the 19-21(mean= 1.17) and 22-24(mean= 1.22) age groupings obtained positive mean attitude scores. In regards to race, participants who identified as 'Black' (mean = .77), "White" (mean = 1.95) and 'Indian' (mean = 4.00) all obtained a positive attitude mean score. Whereas participants who identified as 'Coloured' (mean = -.29) and 'Other' (mean= -8.33) obtained negative mean attitude scores.

There were also mean attitude score differences between participants of different viewing frequencies of pornography. From visual inspection of the table it appeared that participants who viewed pornography more frequently scored higher attitude scores. Participants who viewed pornography daily (mean= 13.00), a few times a week (mean=10.00) and a few times a month (mean=3.67) all possessed positive attitude scores. Whereas participants who view pornography every few months (mean= -3.00) and don't view pornography at all (mean= -5.87) all obtained negative mean attitude scores. Interestingly, participants who hardly ever viewed pornography (mean=0.00) expressed a neutral-ambivalent attitude towards pornography.

Table 14.*Descriptives for final attitude scale (11 items)*

		Attitude score			
		Mean	Minimum	Maximum	Standard Deviation
Sex	Male	4.68	-21.00	22.00	9.68
	Female	-1.82	-21.00	15.00	8.90
Age					
	18-21	0.7	-21.00	22.00	9.15
	22-24	1.22	-17.00	18.00	10.18
Race	Black	.77	-21.00	15.00	10.07
	White	1.95	-10.00	18.00	8.32
	Indian	4.00	-1.00	9.00	7.07
	Coloured	-.29	-21.00	22.00	13.03
	Other	-8.33	-13.00	.00	7.23
Viewing frequency of porn	Daily	13.00	4.00	22.00	12.73
	Few times a week	10.10	-3.00	18.00	6.95
	A few times a month	3.67	-21.00	15.00	8.44
	Every few months	-3.00	-11.00	8.00	7.96
	Hardly ever	.00	-7.00	13.00	6.98
	Don't watch porn	-5.87	-21.00	9.00	7.44

4.4 Hypothesis-by-hypothesis presentation and analysis of data, and the interpretation of results

4.4.1 Hypotheses for young people's attitudes towards pornography

This section provides statistical insight into young people's attitudes towards pornography based on specific independent variables, namely; gender, race, age and viewing frequency of pornography. This is achieved by proposing null and alternate hypotheses which are primarily concerned with investigating whether a significant difference exists between the groups within each of the independent variables on the attitude scores recorded (dependent variable).

4.4.1.1 Gender difference in attitude scores

H₀: There is no significant difference in attitude mean scores between male and female participants.

H₁: Males will obtain significantly higher attitude mean scores than females.

An independent-samples *t*-test was conducted on SPSS to compare the scores for males and females on the attitude towards pornography scale. The results revealed that, as can be seen in table 15, there was a significant difference in attitude mean scores for males ($M= 4.68, SD= 9.68$) and females ($M= -1.82, SD= 8.90$; $t(62) = 2.754, p = 0.004$, one tailed). An obtained *p* value (0.0004) less than alpha (0.05) indicates that there is a significant difference between the males and females, therefore providing evidence to reject the null hypothesis. The magnitude of the differences in the means (mean difference = 6.500, 95% *CI*: 1.78 to 11.21) was moderate (eta squared = 0.108).

Table 15.

Independent samples t-test comparing the mean attitude scores of males and females

		Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Final scale	Equal variances assumed	.023	.881	2.754	62	.008	6.50051	2.36012	1.78271	11.21832
	Equal variances not assumed			2.704	48.138	.009	6.50051	2.40443	1.66644	11.33459

4.4.1.2 Race differences in attitude scores

H₀: There is no significant difference in attitude scores between participants of different races.

H₁: There is a significant difference in attitude scores between participants of different races.

A one-way between groups analysis (ANOVA) was conducted, on SPSS, to explore the differences between different races on total attitude score, as measured by the attitudes towards pornography scale. Participants were categorized into five groups according to their race (Group 1: Black; Group 2: White; Group: 3 Indian; Group: 4 Coloured and Group 5: Other). Analysis revealed that there was no significant difference between the five race groupings regarding their attitudes towards pornography scores ($p = 0.525 > 0.05$, $F(4, 59) = 0.807$) and as such no post-hoc test was conducted. Thus, as the obtained p value (0.525) is greater than alpha (0.05) the null hypothesis is not rejected and it is concluded that there is no significant difference between the different race groups on attitude scores.

Table 16.

ANOVA for race differences in attitude scores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	306.471	4	76.618	.807	.525
Within Groups	5598.467	59	94.889		
Total	5904.938	63			

4.4.1.3 Age differences in attitude scores

H_0 : There is no significant difference in attitude scores between participants of different age groups.

H_1 : There is a significant difference in attitude scores between participants of different age groups.

An independent-samples t -test was conducted to compare the attitude scores between the two age groups (Group 1: 18-21 and Group 2: 22-24). There was no significant difference in attitude scores for age group 1 ($M = 0.714$, $SD = 9.148$) and age group 2 ($M = 1.222$, $SD = 10.175$; $t = (-0.469) = 1.78$, $p = 0.641$, two-tailed). Therefore, as p (0.641) is greater than alpha (0.05) the null hypothesis is not rejected and it is concluded that there is no significant difference between the two age groups on the attitude scores. The magnitude of the differences in means (mean difference = 0.508, 95% CI : -6.057 to 3.756) was very small (eta squared = 0.016).

Table 17.

Independent Samples Test										
	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
final_scale	Equal variances assumed	1.859	.178	-.469	62	.641	-1.15079	2.45473	-6.05772	3.75613
	Equal variances not assumed			-.475	60.644	.636	-1.15079	2.42190	-5.99426	3.69267

4.4.1.4 Viewing frequency and attitude scores

H₀: There is no significant difference in attitude score between participants of different viewing frequencies of pornography.

H₁: There is a significant difference in attitude score between participants of different viewing frequencies of pornography.

A one-way between groups analysis of variance was conducted to explore the impact of viewing frequency of pornography on attitudes scores, as measured by the attitudes towards pornography scale. Participants were divided into six distinct groups according to viewing frequency (Group 1: daily; Group 2: Few times a week; Group 3: A few times a month; Group 4: ever few months; Group 5: hardly ever; Group 6: I don't watch porn). There was a statistically significant difference at the $p < 0.05$ level in attitude scores for the six viewing frequency groups: $F(5, 58) = 7.918, p = 0.00$. The effect size, calculated using eta squared, was 0.68 (68%) and was considered a large effect size. Post- Hoc comparisons using the Tukey HSD test indicated that the mean score for;

Group 1 ($M = 13.00, SD = 12.73$) was significantly different from Group 6 ($M = -5.87, SD = 7.44$).

Group 2 ($M = 10.10, SD = 6.95$) was significantly different from Group 6 ($M = -5.87, SD = 7.44$).

Group 3 ($M= 3.67$, $SD = 8.44$) was significantly different from Group 6 ($M= -5.87$, $SD = 7.44$).

Therefore, the null hypothesis is rejected as there is a significant difference between four of the six viewing frequency groups. The results from the ANOVA (see table 18) indicate that participants who express liberal-accepting attitudes towards pornography tend to view pornography more frequently than those that express a negative-disapproving attitude towards pornography.

Table 18.

ANOVA for viewing frequency differences

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2395.429	5	479.086	7.918	.000
Within Groups	3509.509	58	60.509		
Total	5904.938	63			

Table 19.

Multiple comparisons for viewing frequency

(I) Viewing frequency of porn	(J) Viewing frequency of porn	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Daily	Few times a week	2.90000	6.02538	.997	-14.8575	20.6575
	A few times a month	9.33333	5.79793	.596	-7.7538	26.4205
	Every few months	16.00000	6.73659	.182	-3.8535	35.8535
	Hardly ever	13.00000	6.23687	.310	-5.3807	31.3807
	Don't watch porn	18.86957*	5.73456	.020	1.9692	35.7699
Few times a week	Daily	-2.90000	6.02538	.997	-20.6575	14.8575
	A few times a month	6.43333	3.06798	.303	-2.6083	15.4750
	Every few months	13.10000	4.60196	.064	-.4625	26.6625
	Hardly ever	10.10000	3.83340	.105	-1.1975	21.3975
	Don't watch porn	15.96957*	2.94647	.000	7.2860	24.6531
A few times a month	Daily	-9.33333	5.79793	.596	-26.4205	7.7538
	Few times a week	-6.43333	3.06798	.303	-15.4750	2.6083
	Every few months	6.66667	4.29986	.634	-6.0055	19.3388
	Hardly ever	3.66667	3.46493	.896	-6.5448	13.8782
	Don't watch porn	9.53623*	2.44794	.003	2.3219	16.7506
Every few months	Daily	-16.00000	6.73659	.182	-35.8535	3.8535
	Few times a week	-13.10000	4.60196	.064	-26.6625	.4625

	A few times a month	-6.66667	4.29986	.634	-19.3388	6.0055
	Hardly ever	-3.00000	4.87558	.989	-17.3689	11.3689
	Don't watch porn	2.86957	4.21403	.983	-9.5496	15.2888
Hardly ever	Daily	-13.00000	6.23687	.310	-31.3807	5.3807
	Few times a week	-10.10000	3.83340	.105	-21.3975	1.1975
	A few times a month	-3.66667	3.46493	.896	-13.8782	6.5448
	Every few months	3.00000	4.87558	.989	-11.3689	17.3689
	Don't watch porn	5.86957	3.35782	.507	-4.0263	15.7654
Don't watch porn	Daily	-18.86957*	5.73456	.020	-35.7699	-1.9692
	Few times a week	-15.96957*	2.94647	.000	-24.6531	-7.2860
	A few times a month	-9.53623*	2.44794	.003	-16.7506	-2.3219
	Every few months	-2.86957	4.21403	.983	-15.2888	9.5496
	Hardly ever	-5.86957	3.35782	.507	-15.7654	4.0263

*. The mean difference is significant at the 0.05 level.

4.4.2 The unmatched-count technique

According to Dalton et al., (1994) “the typical criterion for assessing the methodological efficacy of the unmatched count technique (UCT) is to determine it results in higher rates of admission of some sensitive behaviour than is achieved through other means of data collection.” (p. 824). Therefore;

A test for: H_0 : There is no significant difference in base rate estimates between the Self-Report Questionnaire and the Unmatched Count Technique on the specific sensitive questions.

H_1 : There are significantly higher base rate estimates for the unmatched Count Technique than the Self-Report Questionnaire on the specific sensitive questions.

Firstly, in order to investigate the above hypotheses it was necessary to calculate the base rates for both the SRQ and UCT for each question. The base rate for each method was calculated differently. For the SRQ the base rate was calculated by taking the total amount of endorsement admission responses to questions 5, 9, 10, 11, 14 and dividing it by the total amount of participants that answered the questions, thus;

Base rate for SRQ: $\frac{\text{total number of affirmative responses}}{\text{total number of answered responses}} \times 100$

Table 20.

Base rates for the SRQ

	Affirmative responses	Base rate%	Base rate proportion
Question 5 (consume porn)	28	43.75%	0.438
Question 9 (sexually active)	43	61.18%	0.612
Question 10 (caught watching porn)	15	23.43%	0.234
Question 11 (downloaded /or bought porn)	31	48.43%	0.484
Question 14 (watched in a group setting)	42	65.62%	0.656

Establishing the base rate for the UCT was calculated using the formula proposed by Dalton et al. (1994), where;

$$\text{Estimate (p)} = \text{mean}_b - \text{mean}_a$$

Where p = the proportion of subjects involved in the sensitive behaviour.

Mean_b = the mean number of statements agreed with for the participants with the sensitive question.

Mean_a = the mean number of statements agreed with for the participants without the sensitive question.

Table 21.

Base rates for the UCT

Sensitive item	Mean(a)	Mean(b)	Base rate %	Base rate proportion
I watch porn	2.46	2.05	41	0.41
I am sexually active	4.18	3.31	87	0.87
I have been caught watching porn	2.98	2.57	41	0.41
I have bought and/or downloaded porn	2.93	2.16	77	0.77
I have watched porn with someone else	3	2.08	92	0.92

Once the base rates for the UCT and SRQ had been calculated a 2-sample *Z-test* was conducted on WINKS to compare and assess whether there was a significant difference between the proportions of the UCT and SRQ on the sensitive questions. Table 22 presents the results of the comparison. The “significance” column in table 3 provides the Z scores for proportions comparison that was calculated. In addition to this, the “Factor” column is the

UCT base rate divided by the SRQ base rate, and indicates how more likely it is that a participant will admit to a certain sensitive question if answered under the UCT in comparison to the SRQ. A review of each sensitive question is provided.

Table 22.

Difference of proportion tests: Comparison of sensitive questions through the UCT and SRQ

Item	UCT (95% conf. inter)	SRQ	Significance ^a (Z score)	Factor ^b
I watch porn	41% (32.9% - 49.1%)	43.8%	0.354	0.93
I am sexually Active	87% (81.4% - 92.6%)	61.2%	3.815*	1.42
I have been caught Watching porn	41% (32.9% - 49.1%)	23.4%	2.315*	1.75
I have downloaded and/or bought porn	77% (70.0% - 83.9%)	48.4%	3.758*	1.60
I have watched porn With someone else	92% (87.5% - 95.5%)	65.6%	4.251*	1.40

^a The “Z” score provides the significance distribution for a difference of proportion test and indicates whether the differences in the percentages for the UCT estimate and Self-Report Questionnaire levels are statistically significant on a question by question basis.

^b The “factor” score is calculated by dividing the UCT percentage by the SRQ. The “1.42” for the I am sexually active item indicates that participants under the unmatched count technique are 1.42 times more likely to admit they are sexually active than those answering from the SRQ.

4.4.2.1 I watch porn

H₀: There is no significant difference in base rate scores between the UCT and SRQ on sensitive questions 1.

H₁: The UCT has a significantly higher base rate than the SRQ for sensitive question 1.

The difference between the two proportions = 0.028

Z = - 0.354; p = 0.3618 (one tail)

A p-value greater than 0.05 suggests no evidence that there is a significant difference in proportions between the UCT and SRQ regarding this question, therefore we fail to reject

the null hypothesis. The factor score of 0.93 indicates that participants are actually more likely to admit to watching pornography under the SQR than under the UCT.

4.4.2.2 I am sexually active

H₀: There is no significant difference in base rate scores between the UCT and SRQ on sensitive questions 2.

H₁: The UCT has a significantly higher base rate than the SRQ for sensitive question 2.

The difference between the two proportions = 0.258

$z = 3.815$; $p = 0.0$ (one tail).

A p-value less than 0.05 indicates that there is a significant difference in the proportions between the UCT and SRQ groups, and provides the evidence to reject the null hypothesis. The factor score indicates that participants responding under the UCT are 1.42 times more likely to admit to being sexually active than those responding under the SRQ.

4.4.2.3 I have been caught watching porn

H₀: There is no significant difference in base rate scores between the UCT and SRQ on sensitive question 3.

H₁: The UCT has a significantly higher base rate than the SRQ for sensitive question 3.

The difference between the two proportions = 0.176

$z = 2.315$; $p = 0.0103$ (one tail)

A p-value of less than 0.05 indicates that there is a significant difference in the proportions between the UCT and SRQ groups regarding this question, and provides evidence to reject the null hypothesis. The factor score indicates that participants under the UCT are 1.75 times more likely to admit being caught watching porn than those responding to the same question under the SRQ.

4.4.2.4 *I have downloaded and/or bought porn*

H₀: There is no significant difference in base rate scores between the UCT and SRQ on sensitive questions 4.

H₁: The UCT has a significantly higher base rate than the SRQ for sensitive question 4.

The difference between the two proportion = 0.286

$z = 3.758$; $p = 0.0001$ (one tail)

A p-value of less than 0.05 indicates that there is a significant difference between the UCT and SRQ groups regarding this question, and provides evidence to reject the null hypothesis. The factor score indicates that participants answering the question under the UCT are 1.60 times more likely to admit to downloading and/or buying pornographic material than those responding to the same question under the SRQ .

4.4.2.5 *I have watched porn with someone else*

H₀: There is no significant difference in base rate scores between the UCT and SRQ on sensitive questions 5.

H₁: The UCT has a significantly higher base rate than the SRQ for sensitive question 5.

The difference between the two proportions = 0.264

$Z = 4.251$; $p = 0.0001$ (one tail)

A p-value of less than 0.05 indicates that there is a significant difference in proportion between the UCT and SRQ group regarding this question, and provides evidence to reject the null hypothesis. The factor score indicates that participants answering under the UCT are 1.40 times more likely to admit to watching porn with someone else than those responding to the same question under the SRQ.

4.4.3 Hays Five Item Social desirability Scale

H₀: There is no significant difference in scale mean scores between the SRQ and UCT.

H₁: There will be significantly higher scale mean scores on the SRQ than the UCT.

As mentioned previously the Hays Five Item social desirability scale was incorporated into both the SRQ and the UCT. The scale measures participants tendency to provide socially desirable answers and thus is imperative to assess when investigating the efficacy of the UCT. In the SDRS-5 scale participants are scored a 1 for every socially desirable response they provide on each question, all other responses are scored as 0. Thus, the maximum score a participant may obtain is 5 and the minimum 0. For data analysis purposes the total scale scores of each participant were transformed to a 0-100 score distribution so that it could be interpreted directly as a percentage.

The total scale score for the SRQ and UCT were tallied and the mean calculated. An independent *t-test* was conducted to assess whether the SRQ scale mean score was significantly greater than the UCT's scale mean score. Thus;

Table 23.

Descriptives for the SDRS-5

	Method	N	Mean	Std. Deviation	Std. Error Mean
Hays score	UCT	64	22.8125	24.13380	3.01673
	SRQ	99	16.1616	18.66499	1.87590

Table 24.

Independent samples t-test comparing the SDRS-5 scores from the UCT and SRQ

		Levene's Test for Equality of Variances		<i>t-test for Equality of Means</i>						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hays score	Equal variances assumed	3.304	.071	1.977	161	.050	6.65088	3.36432	.00699	13.29478
	Equal variances not assumed			1.872	110.518	.064	6.65088	3.55241	-.38880	13.69057

An independent *t*-test was conducted, on SPSS, to compare the SDRS-5 scores for the SRQ and UCT. A significant difference in scores for the UCT (M= 22.81, SD = 24.13) and SRQ (M = 16.16, SD = 18.66; $t(161) = 1.977, p = 0.025$, one tailed). Thus, providing evidence to reject the null hypothesis and assert that the SRQ SDRS-5 scores are significantly higher than the scores found on the UCT. The magnitude of the difference in the means (mean difference = 6.65, 95% CI: 0.00 to 13.29) was small (eta squared = 0.016).

It is important to state, that only after conducting the analysis did the researcher and his supervisor realise that the SDRS-5 means from the UCT and SRQ could not be compared using an independent *t*-test as the SDRS scores cannot be analysed using cut means. In addition to this, it is worth noting a critical point that the SDRS-5 scale was incorporated into the study to investigate social desirability bias in the UCTs and the SRQ. However, this was under the assumption that the social desirability was attributed to the way in which the sensitive questions were asked. The issue here is that the SDRS-5 views social desirability as being located within the individual and thus does not take into analytical consideration the format in which an individual is asked sensitive questions. Thus, one cannot infer that because one scores lower on the SDRS-5 on the UCT than the SDRS-5 on the SRQ that it is due to the format of the UCT – the difference may be attributed to the participants' personal characteristics (i.e. how comfortable they are answering sensitive questions about pornography). With this in mind it was decided to drop the SDRS-5 from the discussion section of the thesis.

4.5 Summary of findings

The research results presented in this chapter reveal that the majority of the sample had been exposed to pornography and that males are more likely to consume pornography than females. The results also show that pornography is mostly accessed via a computer (with internet connectivity) and/or through a mobile device (with internet connectivity), and that for females the main reason for accessing pornography was due to curiosity, whereas for males it was for sexual release/masturbation.

In relation to attitudes towards pornography significant differences were found between males and females, and participants of different viewing frequency. The results indicate that males, generally, possessed a more liberal-accepting attitude towards pornography than women. In addition to this, participants who viewed pornography more frequently obtained greater positive attitude scores than those who viewed pornography less frequently. However, no significant differences in attitude scores were observed between participants of different races and ages.

The analysis of the UCT and SRQ show that there is a significant difference in the base rates for four of the five sensitive questions proposed, with one non-significant result coming from the question that asked participants to disclose whether they had watched pornography before. Furthermore, participants who completed the SRQ obtained a significantly higher mean SDRS-5 score than those participants who completed it under the UCT. These findings are further explored and discussed in the following chapter.

CHAPTER 5

DISCUSSION, SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The objectives for this study were to explore young peoples' interactions with and attitudes towards pornography, as well as to assess the methodological efficacy of the UCT as alternative method which can be used to investigate sensitive issues/behaviours. This chapter discusses in detail the findings of the study by drawing on current literature whilst simultaneously grounding the discussion within the South African social context.

5.2 Interactions with pornography

5.2.1 Exposure and Sources

Exposure refers to whether a participant, in their personal opinion and recollection, has viewed pornography (in any form) before. Exposure was investigated in this study to explore not only how many participants had been exposed to pornography but also through what sources. The results from this study show that the majority (97.75%) of the participants had been exposed to pornography, either intentionally or unintentionally, at some stage in their lives. This appears to be a relatively common finding for research studies exploring young people's exposure to pornography as many studies reveal that the majority of participants, both male and female, have been at least exposed to pornography. For example, a study conducted by Hald (2006) found that 87% of the sample had been exposed to pornography. Similarly, the Kaiser Foundation (2001) found that 70% of their participants had been accidentally exposed to pornography.

The majority of participants (76.6%) in this study had been exposed to pornography on a computer with internet connectivity. This is not a surprising finding considering that an increasing number of South Africans are using the internet on a daily basis (De Lanerolle, 2012). Research shows that the number of internet users (older than 15 years of age) in South Africa has more than doubled in the last four years (De Lanerolle, 2012).

The internet is a spectacular intangible realm/library that is populated with an abundance of information relating to just about every aspect of human life, which makes exploring it so attractive, interesting, and for many, addictive. The internet offers a private and alternative means for one to educate themselves about different aspects of sexuality (Boies, 2002). The internet also allows users to explore sexuality visually (i.e. to see how sexual acts are done and the anatomy of the opposite sex). This has particular relevance within the South African education context, where sexuality education programmes are generally theoretical, leaving learner's curious. It is this curiosity which the internet, including pornography, has the ability to quench, as is stated by a male research participant in a study conducted by Du Toit (2011);

Alan: The whole reason why you watch porn is because you want to see things [sexual acts and the naked female body] and when you're a teenager that's the only way you can see that sorta stuff, unless you have a girlfriend.

In addition, the aggressive marketing of online pornography (Thornburgh & Lin as cited in Flood, 2009) also increases the likelihood of users being exposed to pornography. One of the most common and persistent forms of this aggressive marketing strategy is unsolicited porn spam e-mail. This is a particularly effective and inexpensive way to market pornographic content especially in a day and age where there are just as many e-mail users (of various ages) as there are internet and cell phone users. Paassonen (2010) reports the extent to which she received unsolicited porn e-mail spam to her work e-mail in the United States of America; over a period of 17 months in 2002-04 she received 1000 messages advertising pornography websites.

Television/DSTV (64.1%) and mobile phones (64.1%) were other commonly selected sources of where participants had been exposed to pornography. In South Africa there is a local television channel (E.TV) which has been known to broadcast soft-core pornographic movies and sexually suggestive shows late at night and during the early hours of the morning during weekends. Airing the shows late in the evening is an attempt to deter young people under the age of 18 from viewing such shows. However, these shows are advertised earlier in the evening and are described in some detail in television guides. Thus, viewers under the age of 18 may come across an advert for the pornographic show and may want to view it due to curiosity or out of sheer boredom. In addition to this, viewers may accidentally expose themselves to such content simply by watching television during that time.

Many of the latest mobile phones today can perform the same functions as a personal computer. In fact, all a mobile phone requires in order for the user to gain access to pornography is internet access and a colour screen display. Once the pornographic content has been downloaded onto the cell phone it can then be easily transferred to other mobile devices through Bluetooth, Wi-Fi and SMS.

Fisher (1983) asserts that among boys, social prestige is awarded to possessors of pornographic content. This may not only encourage boys to access and download pornography but may equally encourage them to share and view it with their friends, thereby deliberately exposing their friends to pornography. This notion appears to be supported by research findings in South Africa, as a study exploring the exposure of pornography amongst learners revealed that 33% of the participants had received pornographic messages on their cell phones and that 81% of the participants had knowledge of pornographic content on their friend's cell phones (Chetty & Basson, 2006).

Many participants (45.5%) had also been exposed to pornography in magazines. This is a rather interesting finding considering that pornographic magazines are not as popular as they were 10-20 years ago. Initial exposure to pornography usually happens during adolescence (Bryant & Brown, 1989) and may also apply to online exposure (Peter & Valkenburg, 2006). For participants in this study however, adolescence was roughly 6-10 years ago, a time when it was still cheaper to purchase pornographic magazines rather than to access pornography over the internet, which required not only purchasing the computer but also ensuring that one had access to the internet. Furthermore, it is possible that some participants may have stumbled across a pornographic magazine that belonged to one of their family members, and/or they might have been shown one by their friends.

5.2.2 Consumption and sources

Consumption extends further than just initial exposure to pornography. Consumption involves the individual actively/intentionally accessing pornography for a specific purpose (e.g. to become sexually aroused and masturbate, to see 'things' – like the naked male/female body). In this study 43.8% of the participants indicated that they consume pornography.

In relation to gender, males (76.0%) in this study consumed significantly more pornography than females (23.07%). Comparatively, international studies, with some variation report the consumption of pornography amongst men to be in the range of 70.2% - 98% and for women in the range of 43.4%-72% (Häggström-Nordin et al., 2009; Jonghorbin et al, 2003; Lam & Chan, 2007; Rogala & Tydén, 2003; Tydén, Olsson & Häggström-

Nordin, 2001). It is clear to see that the males fit comfortably within the range reported in international studies; however the female participants do not consume pornography to the same extent as their female counterparts elsewhere.

One way of understanding the large gender difference in consumption between males and females in this study can be achieved by taking a closer look at gender roles/norms that exist within the South African socio-cultural environment. Hald (2006) asserts that “for most countries ... it is more socially acceptable for men than women to consume pornography” (p. 582). In many socio-cultural environments viewing, sharing and discussing pornography amongst boys is viewed as normative adolescent male behaviour and is often considered as a normal expected aspect of ‘growing-up’ (Du Toit, 2011). Even when viewing pornography is not seen as normative adolescent behaviour for young people, it is still, in most cases, more acceptable for young men to view and possess it than young women. This may be arguably attributed to the existent gender roles/norms that make it, to varying degrees, acceptable/expected for young boys to consume pornography. It allows for the creation of a socially acceptable space where boys can explore and interact with the sexually explicit content. However, this socially acceptable space is not afforded to women as the only, or most dominant, norm involving pornography for women is that they should not possess it. This is not to say that norms alone are the sole reason why more men than women consume pornography, but rather that it is one possible explanation.

It is also important to take into account the general South African attitude towards pornography, which appears to be at best ambivalent. Recently (March, 2013) Top-TV, a local satellite service in South Africa was given the go-ahead to broadcast three separate pornographic channels. This was a lengthy legal battle that involved many Christian and other organizations fighting to prevent the airing of pornography, citing moral decay in society and sexual degradation as some of the harms pornography causes (“TopTv porn channel faces stiff resistance”, 2011). A short inspection of user comments regarding articles concerning pornography being broadcast on Top-TV reveals that it isn’t all negative. Many users comment that is a matter of choice or freedom of speech whether a person wants to watch pornography, that they themselves watch and enjoy porn, and that the arguments made against pornography are not credible (i.e. based on contradictory findings). Although these comments cannot be taken as the general attitude of the broader South African population as online users are not representative of the average South African citizen – it does, however bring to light the clear divide amongst the supporters, the non-supporters and the ambivalent attitude towards pornography.

The primary source of consumption of pornography was the computer/internet (92.86%) and mobile phones (53.57%). A number of international studies report that the internet was the primary source of pornography amongst their selected sample (Hägström-Nordin, Hanson & Tydén, 2005; Štulhofer et al., 2010; Wallmyr et al., 2006). However, many of these studies fail to acknowledge the critical point that participants may in fact consume pornography by accessing the internet via their mobile phones. Overlooking this critical point may be attributed to the research context in which the studies are conducted. For example, the large majority of studies concerning pornography are carried out in developed countries where the population's access to the internet is extremely high¹⁵. However, the same cannot be said for South Africa as recent census data indicates that 64.8% of households have no internet access (Statistics South Africa, 2011). Thus, the lack of internet accessibility within South Africa may be but one reason why a large number of participants consume pornography through their mobile phones.

It is also important to note that many mobile phones are capable of accessing the internet and allow users to view pornographic content on their phones. This is supported by research conducted in South Africa where young men acknowledged using their mobile phones to download pornography, citing that not only was it cheaper to do so in South Africa than any other medium, but also that it enabled them to do so wherever they were (Du Toit, 2011). This exemplifies the triple-A notion (Cooper, 1998) of the internet that even when accessed through a mobile device, offers users an *anonymous*, *affordable* and easily *accessible* mode of consuming pornography.

5.2.3 Motivations for accessing pornography

As mentioned earlier in the literature review, there is surprisingly very little research that investigates why young people access pornography. In this study, motivations refer to participant's reasoning for accessing pornography. The female participants' motivations are discussed first followed by a discussion of male participants' motivations for accessing pornography.

In this study the main motivations for accessing pornography for the females was 'curiosity' (38.5%) followed by 'sexual information' (12.8%). Although only a few (12.8%) female participants indicated that they had accessed pornography for sexual information, it was still the second most common reason. There is agreement amongst some researchers

¹⁵ In Sweden 89% of the population have access to the internet and in Australia 86% of the households have an internet connection (World Internet project,).

within the literature that people can learn, healthy and unhealthy things, from watching pornography (Du Toit, 2011; Mckee, 2010). Participants in a study conducted by Rogala & Tydén (2006) provided comments about how they thought pornography influenced their sexual behaviour. Amongst the positive comments there was a clear theme that pornography can provide sexual information, as participants stated:

- A tip on new positions
- Inspiration to do new (sexual) things
- I believe I learn
- It gives you ideas, you get influenced in a good way
- One can see how others do and maybe do it in the same way if it feels like something nice.

For the males all the categories except 'other (reasons for accessing pornography)' obtained a relatively high percentage (> 24.0%). Accessing pornography for sexual release/masturbation (78.4%) was the most common reason provided by male participants, which mirrors the finding in Wallmyr and Welin's (2006) study where 48.8% of the males indicated that they watched pornography to get aroused and masturbate. This finding was not surprising as a wealth of literature suggests that males are more likely than females to use pornography (Flood & Hamilton, 2003; Häggström-Nordin et al., 2005; Wallmyer & Wellin, 2006) for sexual release/masturbation (Du Toit, 2011; Flood, 2007; Jensen, 2007), especially when there is an absence of a sexual partner. Thus pornography can be considered as a sexual substitute to actual sexual activities with another person (Træen, et al., 2004).

Curiosity (57.89%) was the second most common reason why male participants in this study accessed pornography. Curiosity is often the main reason why young people, both males and females, initially expose themselves to pornography especially when (older) peers bring it up in conversation. As one enters the sexually varied world of pornography they may become increasingly curious of the sexual acts and the different genres of pornography, which may fuel their curiosity to explore more of the pornography world.

Interpreting Wallmyr and Welins' (2006) results reveals that curiosity, as a reason for accessing pornography was more prominent amongst boys between the ages of 15-19 (41.7%), whereas only 24.2% of the young men between the ages of 20-25 reported accessing pornography because they were curious. In addition to this, of the 20-25 male age group, 63.9% indicated that they watched pornography to become sexually aroused and masturbate, while 50.5% of the male participants between the ages of 15-19 reported accessing pornography for the same reason. This suggests, at least within the Swedish context, that as young male consumers of pornography age, their curiosity towards pornography may

diminish (perhaps because they have explored a fair amount of the pornographic landscape at this stage) and thus their primary reason for accessing pornography becomes for sexual gratification. However, this notion is not supported by the findings in this study as the male older age group (22-24) obtained higher percentages on all the reasons for accessing pornography than the younger age groups (18; 19-21). This may be attributed to the low number of male participants completing the SRQ (25) and the distribution of the participants across the different age groups, as there were no male participants in the 18 year old age category.

Just over forty seven per cent (47.36%) of male participants indicated that they incorporated pornography into their sexual practices. Pornography can be used in a multitude of ways, and one such way is using it as an additional sexual stimulus. Sexual partners may watch pornography together in order to become, maintain and intensify sexual arousal during sexual activity. Sexual partners may also incorporate pornography into their sexual lives in order to vary their sex life.

Pornography can also provide sexual information about sex and sexualities (Measor, 2004, Trostle, 2003). In this study 31.57% of the male participants that consumed pornography indicated they did so for sexual information. In a study conducted in Australia, participants stated that pornography informs one about biological facts, that it is okay to be interested in sex, and that it provides information pertaining to possible sexual techniques (McKee, 2007a). More contextually relevant, young men in South Africa expressed that one could learn how to perform sexual activities from watching pornography (Du Toit, 2011), as sexual acts can be integrated into people's sexual repertoire. This is in line with Social Learning Theory which posits that people can learn through observing others in social situations (Bandura, as cited in Häggström-Nordin, Tydén, Hanson & Larsson, 2009), including those social situations presented in the media. This is not to suggest that people merely see a sexual act and attempt to imitate it in real-life sexual situations, but rather that social learning involves a dynamic socio-cognitive process whereby the individual and/or couple evaluate and extract the relevant sexual knowledge that they deem appropriate for their sexual lives – thereby exercising their critical media literacy (McKee, 2007a).

A moderate percentage (42.10%) of participants who accessed pornography indicated that they did so to explore their sexuality/sexual attractions. Within South Africa, sexuality education programmes are generally taught from a heterosexual perspective (Butler, Alpasan, Strümpher & Astbury, 2003), which does not provide the discursive and educational spaces for students to learn about other sexual orientations. In fact, teaching sexuality education

from heterosexual perspectives not only silences those students who may be trying to establish a gay, lesbian or bisexual identity but also reinforces the notion that an alternative sexual orientation is not a viable and socially accepted option. Pornography is but one possible resource that can provide sexual information, even if it is only sexual acts, concerning same-sex interactions. It provides sexual content that can be used to explore one's sexual preferences/attractions.

Pornography as an industry is non-judgemental about sexual preferences and identities (McKee, 2010) but instead celebrates and accommodates sexual diversity. Thus making it an appealing sexual resource that can be accessed easily and anonymously by young people wanting to gain sexual information and explore their own sexuality. This reemphasises the potential educational value of pornography and the vastness of sexual content it covers, especially in a context of limited sexuality education.

5.2.4 Viewing frequency of pornographic material

Viewing frequency for this study was defined as the frequency with which a person comes into contact with pornography, and includes both intentional access and unintentional exposure. Overall, the results show that male participants view pornography more frequently than female participants.

The findings showed that the majority of male participants viewed pornography either a 'few times a week' (32.0%) or 'a few times a month' (44.0%). In contrast, females viewed pornography less frequently than their male peers, with 18.9 %, 10.2% and 12.8 % viewing pornography 'a few times a week', 'every few months' and 'hardly ever'. The clear gendered difference in the viewing frequency of pornography is not an unexpected finding and is consistent with research conducted in developed countries. For example, a study conducted by Forsberg (2001) revealed that 30% of males and only 3% of females had watched pornography at least once a week. In a Danish study among young adults between the ages of 18 and 30, 63.4% of the male participants had watched pornography within the last week, compared to only 13.6% of the female participants.

It is unlikely, particularly within the South African context that the gendered difference in the viewing frequency of pornography is going to equalise anytime soon. As is mentioned previously gender norms for males legitimize the access and consumption of pornography as a normative male 'thing' to do, but for women such behaviour is not socially legitimized, and even if it is, it is done within a particular cohort (e.g. group of peers). This is not to say that the gendered difference cannot equalise or at least narrow between the two

genders, for there are a number of contextual factors within South Africa that could lead to a rise in viewing frequency for adolescents and young people (including women) – these are discussed below.

5.2.4.1 Media content

In South Africa, during Apartheid, legislation was drafted and implemented that prohibited the media from displaying explicit depictions of sex¹⁶ and broadcasting shows/radio stations where sexual issues were discussed. However, post-1994 saw a steady sexualisation of the South African media characterised by “an abundant circulation of movies, magazines and pornography, previously considered taboo” (Posel, 2004, p.54). The media is a powerful force that makes particular content available to people on a large scale. Such content is repetitively shown which can result in the normalization of the content and the behaviours presented.

A critical point to acknowledge is that a lot of what the media shows relates in some way or another to human sexuality, after all, sex does sell (Posel, 2004). The implication of this is that many (young) people are socializing in a context whereby they are continually bombarded by sexual media (both visual and verbal). Continual exposure and inundation of sexual media (including pornography), on a national/global scale, has the potential to normalize the behaviours, values and sexual scripts it contains. Therefore, viewing and consuming pornography may not be considered such a taboo because it has been accepted, or at the very least acknowledged, as consisting apart from the legitimized sexual media spectrum.

Modern sexual media plays a pivotal role in changing how women perceive themselves sexually. Much of the westernized sexual media, which is shown and accessible in South Africa, portrays women as self-determining sexual agents in, for example T.V series such as *Sex in the City*, *Skins* and *4Play: Sex Tips for Girls*¹⁷ as well as in the popular erotic, but also described as pornographic, romance novels *50 Shades of Grey*. Such sexualized media celebrates and encourages women to empower themselves sexually (McElroy, 1997) and to view themselves as sexual equals with men. It is for this reason that future research may reveal an increase in female consumers of pornography.

¹⁶ Pornography during the Apartheid regime was banned.

¹⁷ *4Play: Sex Tips for Girls* is a television series that airs on South African local channel E.TV. The show follows the realities of four women living in Johannesburg, South Africa. The show is said to celebrate female sexuality. It is written and directed by an all-women team.

5.2.4.2 Mobile phones and internet access

Statistics for South Africa reveal that 50% of internet users are under the age of 25, and that seven out of ten internet users connect to the internet through their cell phones (De Lanerolle, 2012). This may be attributed to the fact that within South Africa, it is substantially cheaper to access the internet through one's cell phone. According to De Lanerolle (2012, p. 6) if the amount of internet users continues to grow at the current rate, "more than half of the South African population (aged 15 and over) will be online by 2014, and more than two out of three could be online by 2016". This means that more people than ever before in South Africa will have access to a variety of online content, including pornography. Thus, with a predicted increase in internet users one may hypothesize that future research will show a larger number of (young) people being exposed to and consuming pornography, perhaps even for both genders.

5.3 Attitudes toward pornography

Studies suggest that young people in South Africa are showing signs of liberal and accepting attitudes towards aspects of sexuality. A review of studies published in South Africa between 1990 and 2000 indicates that 50% of young people aged 16 are sexually active, and that by age 20 the figure is expected to reach 80% (Eaton, Flisher & Aarø., 2003). The review also found that between 10% and 30% of "sexually active youth have more than one sexual partner at a given time ..." (Eaton et al., 2003, p. 151). In addition to this, South Africa is growing into an increasingly "mediaized" (Johansson & Hammarén, 2009, p. 60) society which allows for sexual issues (e.g. homosexuality, bisexuality, sexual violence, sexuality education programmes, teenage pregnancy, abortion, pornography) to enter into the public sphere. It is within the public sphere that pertinent discussion and debates regarding sexual issues are brought to the fore, exposing and allowing citizens, including young people, to gain a greater understanding of the sexual issues facing South Africa. These discussions and debates which consist of varying perspectives can influence not only an individual's sexual attitude but also wider society.

Exploring young peoples' attitudes toward pornography assists in understanding the interaction and use of pornography within the South African context. Overall, the complete sample, consisting of males and females, expressed a liberal-accepting attitude towards pornography. This result concurs with research regarding attitudes towards pornography conducted in Denmark (Hald, 2006) and Norway (Træen et al, 2004).

5.3.1 Females' attitudes towards pornography.

A significant gender difference was observed in this study. Female participants expressed significantly lower attitude scores towards pornography than their male counterparts who expressed a liberal-accepting attitude towards pornography. This gender divide is well documented within the literature concerning attitudes towards pornography (Wallmyr & Welin, 2006; Häggström-Nordin et al., 2009; Johannsson & Hammarén, 2007; O'Reilly, Knox & Zusman, 2007; Træen et al., 2004). Studies have found that gender is a significant factor for explaining the differences in attitude scores (Häggström-Nordin, 2009; Træen et al., 2002). However, a pertinent question must be asked – why is there this gender difference with regards to attitudes? A number of possibilities are put forward below.

5.3.1.1 The content of pornography

The sexual content and behaviours depicted in pornography may be responsible for female's negative-disapproving attitude towards pornography. A content analysis study conducted in the United States shows exactly the pervasiveness of sexual violence and aggression in the mainstream pornography industry, particularly towards women (Bridges et al., 2010). The findings show that 88.2% of the analysed scenes depicted physical aggression (e.g. spanking, choking, hair pulling and open-hand slapping) and 48.7% depicted verbal aggression, which included calling the other actor, in most cases a female, “bitch” and “slut”. In most cases the perpetrator of the aggression was a male (70.3%) and the target, female (94.4%). Although some women may find aggression sexually arousing, it is unlikely that the majority of women do. Contrary, many women may find the aggression in pornography disturbing, degrading, demeaning and abusive.

Female consumers of pornography in Sweden described the sexual content they watched as erotica/soft porn (Häggström-Nordin et al., 2009). This is a very interesting finding for two particular reasons. Firstly, it illustrates how flexible and conceptually blurring the definition of pornography really is (due to pornography's many sub-genres), as participants considered the pornography they watched as erotic/soft pornography. Secondly, mainstream pornography is in direct contrast to erotica/soft pornography as it portrays sex as a purely physical activity, absent of any romance or intimacy. It is for this reason that young females may find pornography unappealing and thus evaluate its content in a negative light. In addition, one may suspect that female participants may feel more comfortable disclosing that they watch/read erotica than watch/consume pornography.

In a study conducted by Schnieder (2000) which investigated the effects cybersex addiction had on the family, female participants reported they felt hurt, angry, sexually rejected and physically inadequate when their partner consumed pornography. One participant described perceived online pornography as the equivalent of having a mistress, and thus felt that an intangible fantasy object had replaced her sexual role (Schnieder, 2000). In addition to this, females in a documentary concerning the youth of Australia and pornography stated that they could not compete with the female pornographic actors and that it made them feel self-conscious about their body image, especially when having sex (Goldman, 2010). It is clear to see, in light of the findings and the documentary, that pornography can have very real and serious psychological implications for young women, both personally and within the context of a relationship. This is but one other reason why young women may express a negative-disapproving attitude towards pornography.

5.3.1.2 The Socio-Cultural context

Berg (as cited in Johansson & Hammarén, 2007) suggests that (young) women may learn to dislike pornography merely by participating (socializing) within their socio-cultural environment. There are a number of factors that intersect and are influential in constructing/learning a negative-disapproving attitude towards pornography. The first of which could possibly be the values and beliefs that one is born into. For example, one's parents could make it explicitly clear and reinforce that pornography is morally unacceptable and should not be consumed. This notion, that pornography is bad, can be reinforced by certain institutions (e.g. School, Church), peers, one's romantic partner and the attitude of the wider public.

A second factor which may also influence the way in which (young) women construct/learn a negative attitude may be through the anti-porn discourse and rhetoric which, when it does enter the public realm usually through the media, refers to pornography in a negative manner using powerful words such as: 'degrading', 'dehumanizing', 'oppressive', 'harmful', 'moral decay', 'sexual violence', etc. By focusing on the negative aspects of pornography, the positive elements are side-lined. This means that (young) women come to associate pornography with negative words only, and if one can only describe pornography using negative words without knowing the possible positive aspects of pornography then this may predispose one to form a negative-disapproving attitude. However, attitudes are not static. A negative-disapproving attitude towards pornography can change over time (e.g. historical context pornography is more acceptable today than it ever has been), through

education (e.g. media literacy, ethics-based sexuality education programmes, developing critical thinking) and personal experience (e.g. consuming and experimenting with pornography).

5.3.2 Males' attitudes toward pornography

The male participants in this study expressed a liberal-accepting attitude towards pornography which is a common finding that is reflected in international studies (Hägström-Nordin et al., 2009; Johannseen & Hammarén, 2007; O'Reilly et al., 2007; Træen et al., 2004; Wallmyr & Welin, 2006). Male participants appeared to be more accepting of pornography as a component of their sexual lives, as the majority of them agreed that pornography can be a healthy source of sexual information, is a great way to release sexual tension and can enhance the viewer's sexual life.

It is reported elsewhere that men find pornography more sexually exciting and enhancing than females (Træen et al., 2004). Arousal theory asserts that people are likely to engage in behaviour to either increase or decrease their current level of arousal (Cherry, 2013). With regards to pornography young men may view pornography, become sexually aroused and masturbate to it, thereby associating it with sexual pleasure. Thus, young men may frequently consume pornography in order to experience sexual arousal and pleasure. It is this frequent consumption (with or without the intent of sexual release) that can lead to the normalization of pornography – for what was previously considered as novel/non-normative is slowly re-worked as a variation of “normal” and acceptable sexual behaviours (Wienberg et al., 2010). Furthermore, the process of normalization may in fact occur within a collective context amongst peers which is often characterised by discussion and debate (Du Toit, 2011). Such collective viewership, which can be considered as a male ritual, allows for pornography to be normalized and accepted beyond the individual level, and may be one reason why young men tend to express a liberal-accepting attitude towards pornography.

5.3.3 Age and attitudes

This study also sought to investigate whether there was any difference in attitudes towards pornography between participants of different age groups. The findings indicate that there was no significant difference between participants of different ages on the attitude scale. Both age categories obtained a positive attitude score which is indicative of a liberal-accepting attitude towards pornography. The failure to find a significant difference may have been attributed to the small size, which consisted of only 64 participants that were all students and were between the ages of 18 and 24. One may speculate that a significant age

difference would be more easily detected if the sample was larger and more diverse in terms of education (students vs. non-students) and age (e.g. 18–45).

5.3.4 Race and attitudes

Not all research contexts are the same. South Africa is a highly diverse country that is populated by people of many different races, and as an exploratory research project it was thought necessary to investigate whether there was any difference between participants of different race groupings. Furthermore, race appears to be a demographic factor that isn't really focused on in research concerning attitude towards pornography in developed countries.

There appeared to be no significant difference in attitude scores between participants of different races. Participants that identified themselves as “Black”, “White” and “Indian” all expressed liberal-positive attitudes towards pornography, whereas participants who identified themselves as “Coloured” and “Other” expressed a negative-disapproving attitude. It is important, once again, to stress that these results must be interpreted with caution, especially since this study consisted of a relatively small sample size. The “Coloured” race category consisted of only seven participants (four males and three females). Similarly, the “Other” also consisted of a small number of participants- only three, who were all female. The very high negative-disapproving attitude by the “Other” category may be the result of only having females within the race category. In summation, the findings from this study suggest that race does not appear to be a significant factor when investigating young people's attitudes towards pornography. However, a larger sample size with more participants in each race grouping may yield significant differences.

5.3.5 Viewing frequency and attitudes towards pornography

The data shows that participants who viewed pornography frequently score higher on the attitude scale than those who viewed pornography less frequently. This was an expected finding since it would be logical to assume that those participants who perceive pornography in a positive way are likely to consume it, and more often, than those who perceive pornography in a negative way.

When an individual or group of people are frequently exposed to pornography there is a strong probability that the sexual acts (content including sexual scripts) and the pornography itself, as a genre of media, will over time come to be considered as a variation of “normal”- this has been described previously as the process of normalization (Weinberg et al., 2010). Importantly, normalizing pornography may also lead to the normalization of its

inherent liberal and non-traditional sexual scripts such as “having sex for pleasure is fun and normal”, “Sex can occur between people of different sexes and races”, “Sex can occur outside the context of marriage”. Such sexual scripts have the potential to sexually empower viewers by acknowledging them as sexual agents with sexual preferences and sexual orientations. Therefore one may agree and adopt the sexual liberalness inherent in pornography, through frequent exposure, and thus may express a positive-liberal attitude towards pornography because it agrees with them personally.

5.4 The unmatched-count technique

The UCT has had very little empirical application in studies investigating pornography but has widely been used to assess disclosure concerning a variety of sensitive behaviours. The second objective of this study was to assess whether the UCT as an alternative data collection method, elicits more truthful responses from participants than the online SRQ. According to Dalton et al. (1994, p. 824) the typical criterion for assessing the efficacy of the UCT is to “determine whether it results in significantly higher base rates of admission [on] some of the sensitive [items] than is achieved through other means of data collection”. Following this the analysis assumed that higher base rates on sensitive items reflect more accurate/valid responses from the participant’s (Langhuag, Sherr & Cowan, 2010). The results from this study show that the UCT obtained significantly higher base rates on four out of the five sensitive items. Each item is addressed briefly below.

The UCT obtained a significantly higher base rate for the sensitive question “I am sexually active” than was observed in the SRQ; therefore the null hypothesis was rejected. The calculated factor score for this sensitive item indicates that participants were 1.42 times more likely to admit they are sexually active than those answering the same questions on the SRQ. Initially, the researcher thought that this sensitive item would yield a non-significant result (i.e. reject the alternative hypothesis) due to the fact that previous research experience¹⁸ gave the impression that university students were relatively comfortable not only to disclose their sexual status but also to disclose other aspects of their sexuality (e.g. sexual orientation). It is clear to see that this finding provided evidence to the contrary.

¹⁸ The researcher conducted qualitative interviews with young men investigating their attitudes and meanings towards pornography. The researcher, at the time of writing this discussion, had also conducted six focus groups at another South African University and four focus groups at a Further Education Training (FET) college, where the study was aimed at exploring young people’s co-constructions of sexuality education programmes and pornography.

Analysis revealed that for the sensitive item “I have been caught watching pornography” – the UCT reported a significantly higher base rate than the SRQ, therefore rejecting the null hypothesis. The calculated factor score indicates that participants are 1.75 times more likely to admit they have been caught watching pornography under the UCT than the SRQ. It is also noteworthy to mention that this sensitive item on the UCT obtained the highest factor score suggesting that it is the area of highest sensitivity within this study. Being caught watching pornography can be embarrassing for a number of reasons. Firstly, many people use pornographic material to become sexually aroused and to masturbate, therefore being caught watching pornography may also be synonymous with being caught masturbating (i.e. increasing the embarrassment experienced). Secondly, pornography can be used to explore one’s sexual preferences; the type of pornography one watches often reflects one’s sexual preferences/curiosity. Being caught watching pornography reveals to the other person the viewer’s sexual preferences, which can be particularly embarrassing if the scene includes non-normative sexual acts.

There was a significant difference in base rates between the UCT and SRQ regarding the questions “I have downloaded and/or bought pornography”. The UCT obtained a significantly higher base. This item obtained the second highest factor score of 1.60, which means that participants were 1.60 times more likely to admit they have downloaded and/or bought pornography than those answering under the SRQ.

The UCT obtained a significantly higher base rate than the SRQ for the sensitive item “I have watched porn with someone else. The calculated factor score indicates that participants answering under the UCT are 1.40 times more likely to admit they have watched pornography with someone else than those participants answering under the SRQ.

There was no significant difference in the base rate between the UCT and SRQ regarding the sensitive item “I watch porn”. This was the sensitive item where the base rate was higher on the SRQ (43.8%) than it was on the UCT (41%), therefore failing to reject the null hypothesis. The factor score of 0.93 means that participants were actually less likely to admit to watching pornography on the UCT than on the SRQ. There may be a number of reasons why such a finding occurred. Firstly, perhaps admitting to watching pornography, amongst young university going people in South Africa, is not such a sensitive issue as expected; this claim is supported by the overall sample’s ATP which was positive-liberal. In addition, the literature suggests that amongst young people, being exposed to pornography appears to be a routine part of their sexual socialization (Paul, 2005). The findings in this study support this claim by showing that 97.75% of the participants had been exposed to

pornography at some stage of their life. This may suggest, much like in developed countries, that pornography is slowly working itself into mainstream culture (Weinberg et al., 2010) especially since mainstream media has become so fixated on issues pertaining to sexuality. Overall, the UCT produced significantly higher base rates on four out of the five sensitive items, which is a testament to its design which seeks to uphold the anonymity of the participant and thereby increase the accuracy/validity of responses by decreasing social desirability.

The factor scores show that participants were more likely to admit to a sensitive behaviour on the UCT than on the SRQ. The factor scores ranged from 1.40 to 1.75 which is similar to the factor scores, ranging from 1.03 to 1.78, obtained by LaBrie & Earleywine (2000) in their study comparing base rates between the UCT and SRQ on sensitive questions relating to sexual risk and alcohol. A review of the UCT literature shows that base rate ranges vary across studies and may be attributed to the sensitive behaviour under investigation. For example, Dalton et al. (1994) obtained base rates ranging from 2.90 to 4.04 when investigating proscribed behaviours for professional auctioneers, whereas the base range in Rayburn et al.'s (2003) study which investigated anti-gay hate crimes ranged from 7.14 to 50. It is worth noting that the UCT performed adequately with the small sample (UCT 1 n= 54; UCT 2 n=45). Interestingly, no previous research comparing the UCT to conventional self-report questionnaires (SRQ) explicitly addresses the issue of how many participants should be in the SRQ. For example, in a study conducted by Dalton et al. (1994) the researchers, although not explicitly stated, ensured that there was equivalence in numbers across all the survey methods, thus there were 80 participants in each UCT and in the SRQ. In Rayburn et al.'s (2003) study the conventional survey consisted of 150 participants and the UCT consisted of 317 participants.

The assessment of the UCT in this study empirically suggests that it is a more effective method in eliciting affirmative responses to sensitive questions than the SRQ, a finding which is in agreement with the theoretical literature (Dalton et al., 1994; Walsh & Braithwaite, 2008; Rayburn et al., 2003).

5.6 Conclusions

This study had two primary objectives. The first of which was explore young peoples' interactions with and attitudes towards pornography, and as such provided valuable information regarding pornography's role in young people's sexual lives. The results from this show that many young people are exposed to pornography and that, particularly young men do consume pornography and watch it more frequently than young women. The internet and mobile phones (with internet connectivity) were the two most common sources in which pornography was accessed and consumed. For both male and female participants the main reason for viewing pornography was due to 'curiosity'.

In addition, this study also revealed that young people within the South African context tend to express a liberal-accepting attitude towards pornography, with males expressing more liberal-accepting attitudes than females who expressed more negative-disapproving attitudes. There were no significant differences in attitude scores between participants of different ages and races. However, participants who viewed pornography more frequently expressed a liberal-positive attitude towards pornography.

The second primary objective of this study was concerned with assessing the methodological efficacy of the UCT as an alternative method that can be used to investigate sensitive behaviours. The results showed that the UCT obtained significantly higher base rates than the online SRQ on four out of the five sensitive items and therefore is more effective in eliciting truthful responses from participants and reducing response bias.

5.7 Limitations

Although this study has provided valuable information regarding young peoples' interactions with and attitudes towards pornography, as well as the usefulness of the UCT, it does possess a number of limitations. Firstly, the sample for the SRQ was very small ($n = 64$) meaning that the results must be interpreted with caution and are limited in terms of their generalizability. Secondly, the sample was not representative of the student body at the University of KwaZulu-Natal, Pietermaritzburg campus. For both the UCT and SRQ sample females were underrepresented and males were overrepresented. With regards to race, the SRQ overrepresented "Blacks" and "Indians" and underrepresented "Coloureds", "Whites" and "Other". For the UCT sample "Blacks" were underrepresented whilst all the other race categories were overrepresented.

Thirdly, this study made use of a pseudo-randomization technique in order to direct participants to the online UCT 1, SRQ or UCT 2. The technique involved participants

selecting a random number between one and three, where each number represented a particular survey method (i.e. UCT 1, SRQ and UCT 2). Although participants did not know which number represented which survey method, this randomization technique cannot be considered truly random. In addition to this, as is mentioned earlier, the number of participants who had initially completed the UCT 1 and UCT 2 did not meet the recommendation of 40-50 as suggested by Dalton et al., (1994). In an attempt to obtain the necessary number of participants the researcher approached potential participants, recruited them to the psychology lab, and explicitly asked them to select the UCT questionnaires – thereby partially removing the randomization dimension of the study.

Fourthly, the analysis of the SDRS-5 could not be used to make any evidence based inferences about the UCT's ability to elicit more accurate responses, by reducing social desirability, in comparison to the SRQ when investigating sensitive issues/topics. However, an exploration of existent statistical techniques may prove useful in finding a method which can be used to interpolate individual scores from proportion data in order to allow for meaningful analysis of social desirability.

Lastly, online based research, if not carried out in a laboratory setting, is usually conducted in an environment which the researcher knows little about and is unable to control (Mustanski, 2001). Participants may have filled out the online questionnaires in distracting environments (e.g. University computers LANS where other students are also working), late at night when they are not fully alert or when intoxicated [although unlikely, it is not beyond the realm of possibility]. Such factors may threaten the validity of the data. On a side note, it is also important to acknowledge the possibility that non- students of the University of KwaZulu-Natal may have filled out the online questionnaires, as the survey required no identifying information in order to maintain anonymity.

5.8 Recommendations

This study shows that pornography is a phenomenon that does warrant investigation within the South African context, especially since pornography has formed an integral part of so many (young) people's sexual socialization. It is important to reiterate that this study was primarily of an exploratory nature and thus did not make use of powerful multivariate statistical techniques. Future research should seek to extend the exploratory lens by using larger and more diverse samples. There are a wealth of international studies that can be used as useful resources when conceptualizing future research concerning pornography in South Africa, as many of the issues/interests pertaining to pornography exist within multiple

countries and contexts. The inclusion of multivariate statistical techniques in the analysis would greatly aid in better understanding pornography within the South African context.

It would also prove useful if future research addressed the conceptual and definitional confusion between pornography and erotica. Many studies, including this one, are guilty of side lining such a discussion instead of openly addressing it, or at least trying to. Rea (2001), as is mentioned in the literature review, provides a comprehensive framework for understanding what exactly constitutes pornography, and perhaps a similar framework should be developed for erotica? In addition, future research could focus on understanding how people young appraise sexual content as either pornography or erotica.

Research investigating sensitive behaviours, including pornography, are faced with a number of challenges, such as participant's over- or under-reporting socially desirable behaviour (Tourangeau & Yan, 2007). The UCT, as an alternative survey method, has proven in this study, and elsewhere, that it is an effective tool that researchers can utilise when investigating sensitive behaviours. In pornography related research, participants may very well under-report certain behaviours regarding pornography, especially when asked under the traditional SRQ. However, the UCT, due to its superior design, reduces such response bias and thus leads to the collection of more accurate/valid responses. Future research investigating pornography and other sensitive behaviours in South Africa should consider using the UCT to reduce such response bias.

There is a romantic assumption, at least on the part of the researcher of this study, that online based research is advantageous in the sense that all one has to do is create and host the online survey, advertise it, and participants will simply complete the survey. However, personal experience of this research study contradicts such an assumption. It was particularly difficult to recruit students to fill out all of the online questionnaires, hence the small sample size, especially for the SRQ. Of course, this may be attributed to the fact that the research topic was pornography which for many people is considered disgusting, degrading, immoral and taboo. Future research should consider exercising some creativity when recruiting participants; for example, ensuring that each participant receives an incentive for completing the online survey, instead of having only a small percentage of participants getting an incentive. Researchers could also investigate what incentives participants would like by adding in a relatively open-ended question in the pilot study (e.g. what incentive do you think would be appropriate as a thank you for participating in this study?).

Online based research is also highly depersonalised, meaning that participants rarely get to see the person behind the research. Although this is not necessarily a bad thing as it can

maintain anonymity, one would suspect that participants would be more likely to complete an online survey when they can associate a person with the research. Recruiting potential participants in person allows for them to see that there is a 'real' person behind the research, and not a simple advertisement with details regarding the study.

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Appendices

Appendix A: Research pamphlet

Research

What: A study concerning young peoples' interactions and attitudes towards pornography

How: Go to <http://surveys.ukzn.ac.za/>

- Click on the Pornography/SEM Questionnaire under available surveys.
- Read the information sheet about the research and decide if you would like to participate in this study.

Incentive offered: R500 in a lucky draw

Appendix B: Pornography/SEM questionnaire (Final)

Sexually Explicit Material/Pornography Self-Report Questionnaire

Relatively little is known about young people and their interaction with pornography within the South African context. The purpose of this questionnaire is to gain a better understanding of what young people think and feel about pornography.

Welcome to the UKZN survey website. My name is Ryan du Toit, a psychology research masters student at UKZN Pietermaritzburg campus. As part of my masters course I am required to conduct a research project which be supervised by Mr Vernon Solomon, a psychology lecturer at the University of KwaZulu-Natal, Pietermaritzburg campus.

INFORMED CONSENT

- Participation is completely voluntary and you may quit the online questionnaire at anytime.
- You do not have to take part in this study or answer any question if you are not completely comfortable.
- An INCENTIVE will be offered in the form of a lucky draw. There will be 10 winners, each of which will win R50.
- You will also be asked to participate in a follow-up study related to this questionnaire. Participation in the follow-up study is completely voluntary.
- If you wish to be included in the lucky draw and/or the follow-up study you will be asked to provide your contact details at the end of the study.
- Contact details will be separated from the online questionnaire as to ensure that your contact details cannot be matched with your responses.
- All responses to the questionnaire will be kept confidential as they will be stored on the researcher's computer and will be password protected.
- The data from this research will be subjected to further analysis in a subsequent PhD study.

Should you experience any psychological distress as a result of completing the questionnaire you are encouraged to contact the project supervisor, or approach the UKZN Child and Family Centre for psychological assistance.

Any questions regarding this research project can

be discussed with: Project Supervisor- Vernon

Solomon: Solomon@ukzn.ac.za Researcher-

Ryan Du Toit: 208512643@stu.ukzn.ac.za

I hereby confirm that I understand the contents of the information and Informed consent page, and that I consent to participating in this research project by clicking on the box below.

I agree to all the above information

Please choose a number

There is no right or wrong answer

1

2

3

Section 1) Pornography/ Sexually Explicit Material (SEM)

1) Are you sexually active

- a. Yes
- b. No

2) Have you ever been exposed to any form of pornography?

- a. Yes
- b. No

3) If **yes**, on what medium did you view it?

- a. Mobile phone
- b. TV/DSTV
- c. Magazine
- d. Internet/ Computer
- e. Other... *comment box*

4) Do you actively seek out and consume pornography?

- a. Yes
 - b. No
- 5) If yes, on what medium do you access pornography?
- a. Mobile phone
 - b. TV/DSTV
 - c. Magazine
 - d. Internet/ Computer
 - e. Other... *comment box*
- 6) If you do access pornography what is your reason/motivation?
- a. Curiosity
 - b. For Sexual release/masturbation
 - c. I consider it to be a source of sexual information
 - d. I incorporate it into my sexual activities/practices
 - e. I use it to explore my sexual attraction(s)
 - f. Other... *comment open*
- 7) How often do you view/access pornography/SEM
- a. Daily
 - b. Few times a week
 - c. Few times a month
 - d. Other – please specify
- 8) Have you been caught watching pornography?
- a. Yes
 - b. No
- 9) Have you ever downloaded and/or bought pornographic material?
- a. Yes
 - b. No
- 10) Do you think it is easy to access pornography in South Africa?
- a. Yes
 - b. No
- 11) Do you think that pornography is largely accessed by males?
- a. Yes
 - b. No
 - c. I think it depends on the individual
 - d. Other... *comment box*

- 12) Have you ever watched pornography with someone else and/or in a group setting?
- Yes
 - No
- 13) Do you think that pornography contributes to some of the social issues experienced in South Africa, especially in regard to women and children? i.e. Sexual harassment, paedophilia, rape etc.
- Yes
 - No
- 14) And why?
- Open ... * comment box*
- 15) Do you think that people that watch pornography will try and incorporate what they see into their personal sexual encounters?
- Yes
 - No

Section 2) Attitudes Towards Pornography

Instructions to participants: please indicate how much you **agree** or **disagree** with the below statements. Where:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

- 1) Watching pornography can be a healthy source of sexual information.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

- 2) Pornography is okay if it was watched in private.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

- 3) Pornographic material is degrading towards women.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

- 4) Pornography is a great way to release sexual tension.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 5) Pornography is wrong and is bad for society at large.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 6) Pornography can cause relationship problems in a relationship.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 7) Pornography should be illegal in South Africa.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 8) Pornography is not as bad as people think it is.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 9) It is ok for porn to be broadcasted on local television, provided it's at an appropriate time.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 10) Pornography can enhance the viewer's sex life.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 11) Pornography is simply just another genre of film.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |
- 12) Watching Pornography makes one sexually aggressive.
- | | | | | |
|----------------|-------|---------|----------|-------------------|
| Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| 1 | 2 | 3 | 4 | 5 |

13) Pornography degrades men.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

14) Accessing and watching pornography can be fun and exciting.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

15) I can talk openly about pornography with my friends.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

16) I don't enjoy talking about pornography with my friends.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

Section 3) Biographical Questions

1) How old are you?

- a. 18
- b. 19- 21
- c. 22-24

2) I am...

- a. Male
- b. Female

3) What is your current romantic status?

- a. Single
- b. In a relationship
- c. Married
- d. Divorced
- e. More than one sexual partner
- f. Other....* comment box*

4) I am a...

- a. Under-grad
- b. Post-graduate student

Section 4) Relationships with others

Instruction to participant for this section: How much is *each* statement TRUE or FALSE for you? Where:

Definitely true Mostly true Don't know Mostly false Definitely false

1 2 3 4 5

1) I am always polite, even to people who are unpleasant

Answer _____

2) There have been occasions when I took advantage of someone

Answer _____

3) I sometimes try to get even with people rather than forgive and forget

Answer _____

4) I sometimes feel resentful when I don't get my way

Answer _____

5) No matter who I'm talking to, I'm always a good listener

Answer _____

Appendix C: Preliminary attitudes towards pornography scale items

Instructions to participants: please indicate how much you agree or disagree with the below statements. Where:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

- 1) Watching pornography can be a healthy source of sexual information
- 2) Pornography is okay if it was watched in private.
- 3) Pornographic material is degrading towards women.
- 4) Pornography is a great way to release sexual tension.
- 5) Pornography is wrong and is bad for society at large.
- 6) Pornography can cause relationship problems in a relationship.
- 7) Pornography should be illegal in South Africa.
- 8) Pornography is not as bad as people think it is.
- 9) It is ok for porn to be broadcasted on local television, provided it's at an appropriate time.
- 10) Pornography can enhance the viewer's sex life.
- 11) Pornography is simply just another genre of film.
- 12) Watching Pornography makes one sexually aggressive.
- 13) Pornography degrades men.
- 14) Accessing and watching pornography can be fun and exciting.
- 15) I can talk openly about pornography with my friends.
- 16) I don't enjoy talking about pornography with my friends

Appendix D: UCT 1

Section 1) UCT

Instructions: In the boxes, indicate how many of the statements below are true for you

Set 1

I have been to Cape Town

I would consider myself a sports fan

I have a sister

I type reasonably well

Set 2

I own a cell phone

I have a pet cat

*I watch pornography

I have more than one sister

I read a newspaper nearly every day

Set 3

I speak more than one language

I own a digital camera

My shoe size is larger than 5

I have more than one sister

Set 4

I wear glasses because I have bad eyesight

I do not smoke cigarettes

*I have downloaded and/or bought pornography before

I own my own car

I have a TV in my bedroom

Set 5

I wear a watch

I go jogging at least once a week

I live with my parents

I went to a public high school

Section 2) Biographical Questions

- 1) How old are you?
 - a. 18
 - b. 19- 21
 - c. 22-24
- 2) I am...
 - a. Male
 - b. Female
- 3) What is your current romantic status?
 - a. Single
 - b. In a relationship
 - c. Married
 - d. Divorced
 - e. More than one sexual partner
 - f. Other....* comment box*
- 4) I am a...
 - a. Under-grad
 - b. Post-graduate student

Section 3) Relationships with others

Instruction to participant for this section: How much is *each* statement TRUE or FALSE for you? Where:

Definitely true Mostly true Don't know Mostly false Definitely false

1 2 3 4 5

- 1) I am always polite, even to people who are unpleasant

Answer _____

- 2) There have been occasions when I took advantage of someone

Answer _____

3) I sometimes try to get even with people rather than forgive and forget

Answer _____

4) I sometimes feel resentful when I don't get my way

Answer _____

5) No matter who I'm talking to, I'm always a good listener

Answer _____

Appendix E: UCT 2

Section 1) UCT

Instructions: In the boxes, indicate how many of the statements below are true for you

Set 1

I have been to Cape Town

I would consider myself a sports fan

I have a sister

I type reasonably well

Set 2

I own a cell phone

I have a pet cat

*I watch pornography

I have more than one sister

I read a newspaper nearly every day

Set 3

I speak more than one language

I own a digital camera

My shoe size is larger than 5

I have more than one sister

Set 4

I wear glasses because I have bad eyesight

I do not smoke cigarettes

*I have downloaded and/or bought pornography before

I own my own car

I have a TV in my bedroom

Set 5

I wear a watch

I go jogging at least once a week

I live with my parents

I went to a public high school

Section 2) Biographical Questions

- 1) How old are you?
 - a. 18
 - b. 19- 21
 - c. 22-24
- 2) I am...
 - a. Male
 - b. Female
- 3) What is your current romantic status?
 - a. Single
 - b. In a relationship
 - c. Married
 - d. Divorced
 - e. More than one sexual partner
 - f. Other....* comment box*
- 4) I am a...
 - a. Under-grad
 - b. Post-graduate student

Section 3) Relationships with others

Instruction to participant for this section: How much is *each* statement TRUE or FALSE for you? Where:

Definitely true Mostly true Don't know Mostly false Definitely false

1 2 3 4 5

- 1) I am always polite, even to people who are unpleasant

Answer _____

- 2) There have been occasions when I took advantage of someone

Answer _____

- 3) I sometimes try to get even with people rather than forgive and forget

Answer _____

4) I sometimes feel resentful when I don't get my way

Answer _____

5) No matter who I'm talking to, I'm always a good listener

Answer _____

Appendix F: SDRS-5

Relationships with others

Instruction to participant for this section: How much is *each* statement TRUE or FALSE for you? Where:

Definitely true Mostly true Don't know Mostly false Definitely false

1 2 3 4 5

1) I am always polite, even to people who are unpleasant

Answer _____

2) There have been occasions when I took advantage of someone

Answer _____

3) I sometimes try to get even with people rather than forgive and forget

Answer _____

4) I sometimes feel resentful when I don't get my way

Answer _____

5) No matter who I'm talking to, I'm always a good listener

Answer _____

Appendix G: Piloted SRQ

Sexually Explicit Material/Pornography Self-Report Questionnaire

Relatively little is known about young people and their interaction with pornography within the South African context. The purpose of this questionnaire is to gain a better understanding of what young people think and feel about pornography.

Welcome to the UKZN survey website. My name is Ryan du Toit, a psychology research masters student at UKZN Pietermaritzburg campus. As part of my masters course I am required to conduct a research project which be supervised by Mr Vernon Solomon, a psychology lecturer at the University of KwaZulu-Natal, Pietermaritzburg campus.

INFORMED CONSENT

- Participation is completely voluntary and you may quite the online questionnaire at anytime.
- This is a pilot study to assess the reliability and validity of this questionnaire
- You do not have to take part in this study or answer any question if you have are not completely comfortable.
- **No incentive** will be offered.
- Should you experience any psychological distress as a result of completing the questionnaire you are encouraged to contact the project supervisor, or approach the UKZN Child and Family Centre for psychological assistance.

Any questions regarding this research project can be discussed with:

Project Supervisor- Vernon Solomon: Solomon@ukzn.ac.za

Researcher- Ryan Du Toit: 208512643@stu.ukzn.ac.za

I hereby confirm that I understand the contents of the information and Informed consent page, and that I consent to participating in this research project by clicking on the box below.

I agree to all the above information

Section 1) Pornography/ Sexually Explicit Material (SEM)

- 1) Are you sexually active
 - a. Yes
 - b. No
- 2) Have you ever been exposed to any form of pornography?
 - a. Yes
 - b. No
- 3) If **yes**, on what medium did you view it?
 - a. Mobile phone
 - b. TV/DSTV
 - c. Magazine
 - d. Internet/ Computer
 - e. Other... *comment box*
- 4) Do you actively seek out and consume pornography?
 - a. Yes
 - b. No
- 5) If yes, on what medium do you access pornography?
 - a. Mobile phone
 - b. TV/DSTV
 - c. Magazine
 - d. Internet/ Computer
 - e. Other... *comment box*
- 6) If you do access pornography what is your reason/motivation?
 - a. Curiosity
 - b. For Sexual release/masturbation
 - c. I consider it to be a source of sexual information
 - d. I incorporate it into my sexual activities/practices
 - e. I use it to explore my sexual attraction(s)
 - f. Other... *comment open*
- 7) How often do you view/access pornography/SEM
 - a. Daily
 - b. Few times a week

- c. Few times a month
 - d. Other – please specify
- 8) Have you been caught watching pornography?
- a. Yes
 - b. No
- 9) Have you ever downloaded and/or bought pornographic material?
- a. Yes
 - b. No
- 10) Do you think it is easy to access pornography in South Africa?
- a. Yes
 - b. No
- 11) Do you think that pornography is largely accessed by males?
- a. Yes
 - b. No
 - c. I think it depends on the individual
 - d. Other... *comment box*
- 12) Have you ever watched pornography with someone else and/or in a group setting?
- a. Yes
 - b. No
- 13) Do you think that pornography contributes to some of the social issues experienced in South Africa, especially in regard to women and children? i.e. Sexual harassment, paedophilia, rape etc.
- a. Yes
 - b. No
- 14) And why?
- a. Open ... * comment box*
- 15) Do you think that people that watch pornography will try and incorporate what they see into their personal sexual encounters?
- a. Yes
 - b. No

Section 2) Attitudes Towards Pornography

Instructions to participants: please indicate how much you **agree** or **disagree** with the below statements. Where:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

1) Watching pornography can be a healthy source of sexual information.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

2) Pornography is okay if it was watched in private.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

3) Pornographic material is degrading towards women.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

4) Pornography is a great way to release sexual tension.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

5) Pornography is wrong and is bad for society at large.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

6) Pornography can cause relationship problems in a relationship.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

7) Pornography should be illegal in South Africa.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

8) Pornography is not as bad as people think it is.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

9) It is ok for porn to be broadcasted on local television, provided it's at an appropriate time.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

10) Pornography can enhance the viewer's sex life.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

11) Pornography is simply just another genre of film.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

12) Watching Pornography makes one sexually aggressive.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

13) Pornography degrades men.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

14) Accessing and watching pornography can be fun and exciting.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

15) I can talk openly about pornography with my friends.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

16) I don't enjoy talking about pornography with my friends.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
	1	2	3	4	5

Section 3) Biographical Questions

- 5) How old are you?
- a. 18
 - b. 19- 21
 - c. 22-24
- 6) I am...
- a. Male
 - b. Female
- 7) What is your current romantic status?
- a. Single
 - b. In a relationship
 - c. Married
 - d. Divorced
 - e. More than one sexual partner
 - f. Other....* comment box*
- 8) I am a...
- a. Under-grad
 - b. Post-graduate student

Section 4) Relationships with others

Instruction to participant for this section: How much is *each* statement TRUE or FALSE for you? Where:

Definitely true Mostly true Don't know Mostly false Definitely false

1 2 3 4 5

- 6) I am always polite, even to people who are unpleasant

Answer _____

- 7) There have been occasions when I took advantage of someone

Answer _____

8) I sometimes try to get even with people rather than forgive and forget

Answer _____

9) I sometimes feel resentful when I don't get my way

Answer _____

10) No matter who I'm talking to, I'm always a good listener

Answer _____

Appendix H: Preliminary attitude scale data reliability analysis outputs

Case Processing Summary			
		N	%
Cases	Valid	20	100.0
	Excluded ^a	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.958	16

Inter-Item Correlation Matrix																
	att1	att2	att3	att4	att5	att6	att7	att8	att9	att10	att11	att12	att13	att14	att15	att16
att1	1.000	.797	.439	.656	.878	.790	.637	.839	.613	.723	.817	.687	.656	.147	.714	.620
att2	.797	1.000	.360	.713	.893	.667	.709	.859	.687	.774	.869	.605	.820	.117	.810	.625
att3	.439	.360	1.000	.469	.418	.317	.214	.399	.580	.279	.418	.286	.319	.510	.497	.394
att4	.656	.713	.469	1.000	.772	.620	.647	.678	.735	.537	.697	.405	.652	.345	.823	.694
att5	.878	.893	.418	.772	1.000	.758	.808	.926	.652	.716	.872	.705	.811	.241	.832	.680
att6	.790	.667	.317	.620	.758	1.000	.613	.714	.687	.412	.621	.460	.620	.184	.651	.693
att7	.637	.709	.214	.647	.808	.613	1.000	.799	.505	.631	.733	.495	.814	-.007	.685	.681
att8	.839	.859	.399	.678	.926	.714	.799	1.000	.642	.778	.807	.766	.801	.120	.778	.666
att9	.613	.687	.580	.735	.652	.687	.505	.642	1.000	.485	.489	.436	.625	.385	.634	.850
att10	.723	.774	.279	.537	.716	.412	.631	.778	.485	1.000	.667	.565	.685	.088	.584	.475
att11	.817	.869	.418	.697	.872	.621	.733	.807	.489	.667	1.000	.443	.697	.136	.814	.496
att12	.687	.605	.286	.405	.705	.460	.495	.766	.436	.565	.443	1.000	.590	.078	.504	.464
att13	.656	.820	.319	.652	.811	.620	.814	.801	.625	.685	.697	.590	1.000	.069	.777	.610
att14	.147	.117	.510	.345	.241	.184	-.007	.120	.385	.088	.136	.078	.069	1.000	.281	.203
att15	.714	.810	.497	.823	.832	.651	.685	.778	.634	.584	.814	.504	.777	.281	1.000	.566
att16	.620	.625	.394	.694	.680	.693	.681	.666	.850	.475	.496	.464	.610	.203	.566	1.000

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
att1	1.65	197.608	.866	.981	.953
att2	1.15	194.239	.890	.978	.952
att3	1.90	209.674	.487	.661	.960
att4	.95	202.892	.804	.832	.954
att5	1.20	195.747	.949	.969	.951
att6	1.95	201.524	.749	.942	.955
att7	.90	203.042	.764	.910	.955
att8	1.20	197.958	.916	.973	.952
att9	1.75	199.566	.763	.946	.955
att10	1.70	201.379	.716	.947	.956
att11	1.35	195.924	.820	.983	.954
att12	1.45	204.155	.633	.946	.957
att13	.95	202.471	.819	.862	.954
att14	.80	220.905	.237	.716	.963
att15	1.05	202.787	.853	.862	.953
att16	1.80	203.958	.741	.865	.955

Appendix I: Ethical clearance



12 October 2012

Mr Ryan du Toit 208512643
School of Applied Human Sciences
Pietermaritzburg Campus

Dear Mr du Toit

Protocol reference number: HSS/1046/012M

Project title: Young People and XXX: An exploratory survey study into the consumption and attitudes relating to pornography – a methodological comparison

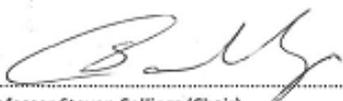
EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process.

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 school/department for a period of 5 years.

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

Yours faithfully


Professor Steven Collings (Chair)

/pk

cc Supervisor Vernon Salomon
cc Academic leader Professor JH Buitendach
cc School Admin. Mr MW Ngubane

Professor S Collings (Chair)
Humanities & Social Sc Research Ethics Committee
Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 3587/8350 Facsimile: +27 (0)31 260 4609 Email: ximbop@ukzn.ac.za / snymanm@ukzn.ac.za

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS



Appendix J: Information sheet and Informed consent as appeared online

Sexually Explicit Material/Pornography Self-Report Questionnaire

Relatively little is known about young people and their interaction with pornography within the South African context. The purpose of this questionnaire is to gain a better understanding of what young people think and feel about pornography.

Welcome to the UKZN survey website. My name is Ryan du Toit, a psychology research masters student at UKZN Pietermaritzburg campus. As part of my masters course I am required to conduct a research project which be supervised by Mr Vernon Solomon, a psychology lecturer at the University of KwaZulu-Natal, Pietermaritzburg campus.

INFORMED CONSENT

- Participation is completely voluntary and you may quit the online questionnaire at anytime.
- You do not have to take part in this study or answer any question if you are not completely comfortable.
- An INCENTIVE will be offered in the form of a lucky draw. There will be 10 winners, each of which will win R50.
- You will also be asked to participate in a follow-up study related to this questionnaire. Participation in the follow-up study is completely voluntary.
- If you wish to be included in the lucky draw and/or the follow-up study you will be asked to provide your contact details at the end of the study.
- Contact details will be separated from the online questionnaire as to ensure that your contact details cannot be matched with your responses.
- All responses to the questionnaire will be kept confidential as they will be stored on the researcher's computer and will be password protected.
- The data from this research will be subjected to further analysis in a subsequent PhD study.

Should you experience any psychological distress as a result of completing the questionnaire you are encouraged to contact the project supervisor, or approach the UKZN Child and Family Centre for psychological assistance.

Any questions regarding this research project can be discussed with:

Project Supervisor- Vernon Solomon: Solomon@ukzn.ac.za

Researcher- Ryan Du Toit: 208512643@stu.ukzn.ac.za

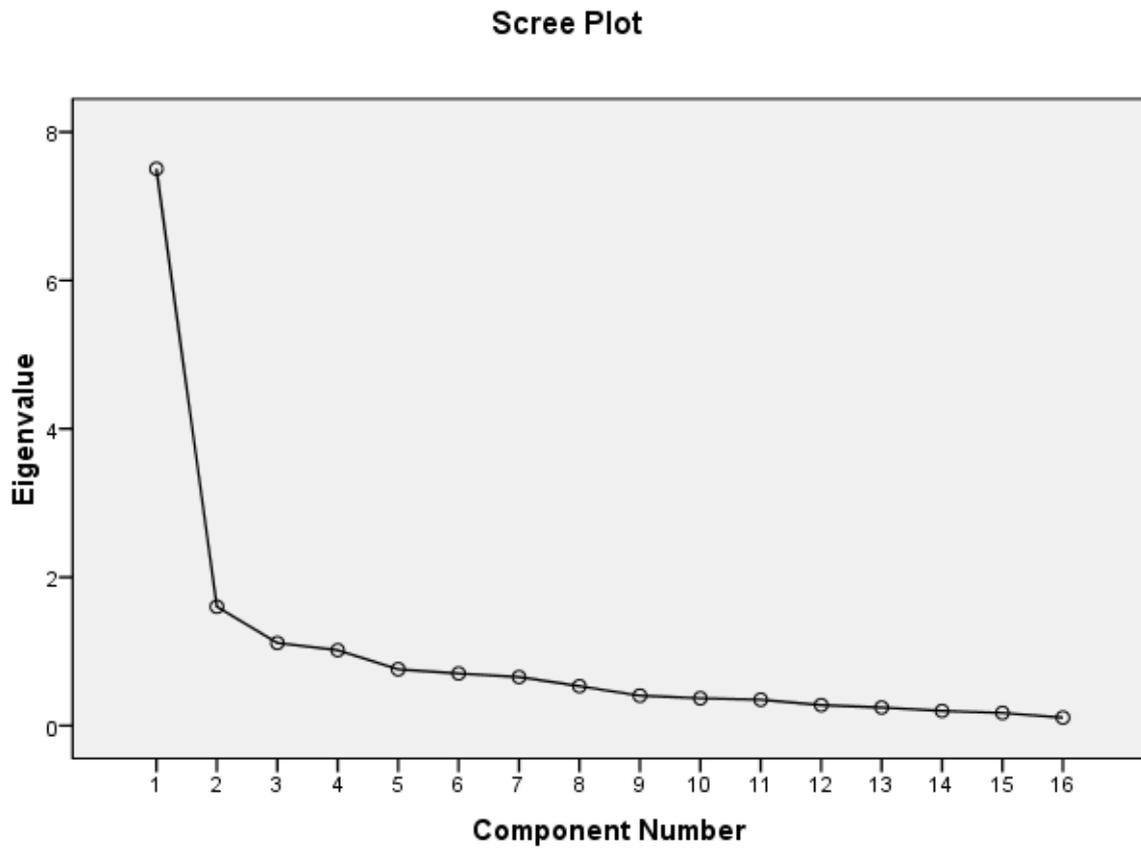
I hereby confirm that I understand the contents of the information and Informed consent page, and that I consent to participating in this research project by clicking on the box below.

I agree to all the above information

Appendix K: Initial PCA explained variance

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	7.505	46.905	46.905	7.505	46.905	46.905	5.870
2	1.602	10.015	56.920	1.602	10.015	56.920	2.584
3	1.114	6.963	63.883	1.114	6.963	63.883	4.393
4	1.016	6.352	70.235	1.016	6.352	70.235	3.889
5	.759	4.745	74.980				
6	.702	4.386	79.367				
7	.654	4.089	83.455				
8	.531	3.318	86.773				
9	.404	2.525	89.298				
10	.368	2.298	91.596				
11	.349	2.183	93.778				
12	.276	1.727	95.506				
13	.244	1.525	97.030				
14	.197	1.234	98.265				
15	.170	1.065	99.329				
16	.107	.671	100.000				
Extraction Method: Principal Component Analysis.							
a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Appendix L: Scree plot for initial PCA



Appendix M: KMO and Bartlett's Test for the fourth PCA

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.825
Bartlett's Test of Sphericity	Approx. Chi-Square	405.454
	df	66
	Sig.	.000

Appendix N: Final attitude towards pornography scale (11 items) reliability statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.888	.888	11

Correlation Matrix												
		Att1	Att2	Att3	Att4	Att5	Att6	Att7	Att9	Att11	Att14	Att16
Correlation	Att1	1.000	.662	.380	.498	.436	.407	.507	.434	.710	.202	.345
	Att2	.662	1.000	.456	.600	.348	.349	.556	.412	.687	.283	.351
	Att3	.380	.456	1.000	.407	.493	.261	.493	.392	.472	.607	.436
	Att4	.498	.600	.407	1.000	.312	.326	.586	.200	.604	.249	.274
	Att5	.436	.348	.493	.312	1.000	.540	.518	.415	.454	.557	.476
	Att6	.407	.349	.261	.326	.540	1.000	.448	.249	.351	.260	.424
	Att7	.507	.556	.493	.586	.518	.448	1.000	.264	.615	.252	.463
	Att9	.434	.412	.392	.200	.415	.249	.264	1.000	.259	.375	.692
	Att11	.710	.687	.472	.604	.454	.351	.615	.259	1.000	.314	.168
	Att14	.202	.283	.607	.249	.557	.260	.252	.375	.314	1.000	.236
	Att16	.345	.351	.436	.274	.476	.424	.463	.692	.168	.236	1.000

Appendix O: Final attitude towards pornography scale (11 items)

Instructions to participants: please indicate how much you agree or disagree with the below statements. Where:

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5

- 17) Watching pornography can be a healthy source of sexual information
- 18) Pornography is okay if it was watched in private.
- 19) Pornographic material is degrading towards women.
- 20) Pornography is a great way to release sexual tension.
- 21) Pornography is wrong and is bad for society at large.
- 22) Pornography can cause relationship problems in a relationship.
- 23) Pornography should be illegal in South Africa.
- 24) It is ok for porn to be broadcasted on local television, provided it's at an appropriate time.
- 25) Pornography is simply just another genre of film.
- 26) Accessing and watching pornography can be fun and exciting.
- 27) I don't enjoy talking about pornography with my friends.