

EXAMINING THE EFFECTS OF DIGITAL PORNOGRAPHY AMONG UNIVERSITY STUDENTS AGED 18 TO 30 YEARS IN ZIMBABWE

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Abstract: The research explores the effects of digital pornography basing on the ignorance of relevant information among University students in Zimbabwe. This form of ignorance is a type of illiteracy which can lead to undesirable behaviour. The study rose out of concern that ignorance among students continues to be a problem leading to high rates of Sexually Transmitted Infections (STIs). The study used a systematic data collection method. The sample consisted of University students (N = 1500; 64% male, 36% female) from Chinhoyi University of Technology. The review focused on areas pertaining: (1) demography, (2) porn use and perception, (3) adaptation of the Compulsive Internet Use Scale (mCIUS) surveying different components related with habitual web porn use, (4) questions evaluating enthusiastic and sexual states comparative with porn use (EmSS). According to most of the reviewed understudies, porn use might negatively affect the nature of social connections (58.7%), psychological wellness (63.9%) and sexual execution (67.7%), just as contrarily influence psychosocial advancement in youth and pre-adulthood (78.1%). The investigations demonstrate a huge connection between literacy ignorance and porn use, including practices reflecting conduct addictions which lead to an increase of STIs. There is need for conducting awareness campaigns, on campus and off campus talk shows, sensitisation workshops educating students on the negative effects of pornography. Mostly students use their smart gadgets to access their pornography graphics, therefore there is need to introduce technology which includes Short Message Service (SMS) engine warning generator against pornography with machine learning.

Keywords: Internet use, Digital Pornography, Graphics, Sexually transmitted disease (STI), Short message service (SMS), Social connections

Introduction

Internet can now be accessed anywhere as long as there is a smart gadgets to connect, that has caused an increase in the fast pace development of online pornography. There are different show setups of pornography on the internet from downloadable content to live streaming. Some websites that have got nothing to do with pornography carry pop up pages that advertise pornography to the extent that it has become so hard to avoid it, the content comes hidden in complex algorithms and internet based bots. Digital pornography accounts for 4%–20% of all online digital media (Johnson, 2021). The marketing of pornography is not helping the youth at all as it makes the links available almost everywhere (Wilkinson, 2017). Basing on information provided by pornhub which is an online website with explicit materials from videos to images, men are the ones who have the highest number of views that is over 70% of all combined users, young adults below the age of 35 also contribute to the number of viewers. According to this information over 72% of adult Zimbabwean citizens aged between 18 to 30 years confess to viewing online pornography at least twice a month while 64% of University students admitted to viewing twice a week (CovenantEyes, 2019). The new technologies have

promoted the viewing of pornography to undoubtedly high heights. The price of accessing these explicit contents is very low, video games are also now available including cartoons and mobile applications. Mobile applications offer offline viewing which is a priceless way of attachment. Uncensored movies and films are being aired on television without holding back (Laan & Everaerd). The ease, diversity, and excitement quality with which online erotica can reach its buyers indicates that it may work as a supernormal jolt (Park, et al., 2017).

There are, in any case, discussions over the exact impacts that it may possibly apply on its customers. A few studies detailed that long-term use correlates with erectile brokenness, diminished charisma (Carvalho, Traeen, & Stulhofer, 2017), higher interest in explicit entertainment than sexual contacts with genuine accomplices (Steele, Staley, Fong, & Prause, 2016), and lower sexual and relationship fulfilment (Perry, 2016). One ought to, be that as it may, note that the lion's share of these examinations cannot survey the causality and, furthermore, that there are a few other investigate that clearly created the opposite observations. Taking an example of a few cross-sectional studies and test examinations fizzled to discover an association between erectile dysfunction and explicit entertainment use (Grubbs & Gola, 2019), a few inquire about moreover propose that men with sexual dysfunctions, such as erectile brokenness, may tend to utilize more obscenity, counting designs they self-perceive as risky (Grubbs & Gola, 2019). There are examinations detailing a positive relationship between pornography use in men and their sexual excitement, desire for solo and partnered sexual behaviours (Prause & Pfaus, 2017), as well as studies proposing that explicit entertainment use may diminish unsafe sexual behaviours (Eders, 2018), demonstrating that ladies included in long-term relationships that use erotica more habitually may uncover expanded sexual desire towards their accomplices and report a higher desire for a sexual variety (Krejcová, Chovanec, Weiss, & Klapilová, 2017), and highlighting that shared seeing of explicit entertainment in hetero couples relates with an increment of sexual fulfilment (Sabina, Wolak, & Finkelhor, 2018).

The information gathered from neurobiological research demonstrates that pornography may fit into the general habit system, and share comparable components with those watched in addictions to chemical substances (Love, Laier, Brand, Hatch, & Hajela, 2017) in spite of the fact that discussions in this respect exist (Ley, Prause, & Finn, 2018) and a few alternative models based on compulsivity, impulsivity or ethical incongruence were proposed to depict high and tricky consumption of pornography (Ley, Prause, & Finn, 2018). A few preparatory case reports propose that naltrexone, transcendently used within the treatment of liquor and opioid dependence, can be successfully applied in patients with compulsive pornography use (Capurso, 2017). It is known that most people effectively investigate sexual behaviours and pick up sexual experience until their mid-20s (Bailey, Flemming, Henson, Catalano, & Haggerty, 2018). It can, subsequently, be hypothesized that for youthful grown-ups the consumption of pornography may represent a few sorts of substitute for these exercises or be a part of them. This, in turn, has to be compelled to get to know how these people may perceive explicit entertainment. For this reason, some studies have tended to this issue by examining groups of University students but sample estimate was often not high or restricted to as it were one sexual orientation (Ucar, Golbasi, & Senturk Erenel, 2016). This is of interest to conduct further studies that would survey expansive groups and evaluation to which extent person characteristics may affect differentiate the designs of explicit entertainment use. For example, it would be of great knowledge whether particular personality characteristics can be related to pornography use as a few past studies have detailed that they may impact sexual exercises, such as novelty search (Nasrollahi, Darandegan, & Rafatmah, 2019). The sexual exercises might moreover be influenced by physical characteristics such as Body Mass Index (Nagelkerke, Bernsen, Sgaier, & Jha, Body mass index, sexual behaviour, and sexually

transmitted infections, 2017), however not much is known whether it may be related in any way with explicit entertainment use. Additionally, designs of obscenity consumption may depend on whether studied people are single or in a relationship; it was detailed recently that the last-mentioned gather tend to use it less regularly (Miller, McBain, Wendy, & Raggat).

Related works

Predisposing factors of digital pornography

Pornography is defined as a fictional drama in printed or visual form depicting explicit sexual body parts and sexual activity which some individuals may find offensive, rude, and immoral, and it is primarily intended to sexually arouse the target audience and is intended to entertain or arouse erotic desire (Mamun, Yasir, Ambiatunnahar, & Griffiths, 2018). Mental health conditions can contribute to pornography as an individual will be trying to escape psychological distress. In addition sexual dissatisfaction that is relationship problems can also lead to pornography as well as some biological causes which can be due to changes within the brain chemistry and it can as well increase the risk of addiction to pornography to certain individuals (Brito, 2018). Unhealthy cultural norms may draw some individuals to pornography. Other predisposing factors of pornography includes sexual arousal, masturbation, improving mood and sexual fantasies (Mattebo, Larson, Tyen, & Mardin, 2018). According to research pornography helps individuals to normalise their desires, increases sexual satisfaction and alleviation of stress (Anna Pulley, 2017). Pornographic materials are easily accessible and available on internet, television, videos and print materials. College students have reported high levels of pornography use due to the fact that they are at a crucial stage in life, where they are making choices that affect their sexuality (Wamathai, 2014).

Negative effects of pornography

Pornography can negatively affect community morals, attitudes and daily lives and activities (Mamun, Yasir, Ambiatunnahar, & Griffiths, 2018). Pornography changes the way brain reacts to sexual arousal, making a man less likely to feel aroused by a life partner leading to increased insecurity and unrealistic sexual expectations. It may increase sexual risk taking, such as not using a condom or other barrier methods and it can destroy a relationship. Pornography may as well increase interest in friends, therefore increasing exposure to Sexual Transmitted Infections (STIs), (Brito, 2018). According to Pulley, pornography affects men's feelings towards women as women are viewed as objects and it can lead to addiction, alters attention span and memory of an individual (Anna Pulley, 2017). Pornography also interferes with the daily life of an individual, his or her relationships and the ability to function. According to Litner, an individual sex life becomes less satisfying with his or her partner because of pornography (Litner, 2021). A person engages in risky behaviour, viewing pornography whilst at work, ignoring his or her responsibilities whilst viewing pornography. An individual feels frustrated after viewing pornography or ashamed but continue to do so. According to Fagan, pornography distorts an individual's concept of sexual relations, which in turn alters both sexual attitudes and behaviour (Fagan, 2019). Adolescents who view pornography feel shame, has diminished self-confidence, and sexual uncertainty. Pornography increases risk of job loss and financial strain, increases risk of separation and divorce, decreased parental time and attention both from the pornography addicted parent and from the parent preoccupied with the addiction (Fagan, 2019).

Pornography Addiction Model by David Ley (2014)

The addiction model is rarely used to describe high-frequency use of visual sexual stimuli (VSS) in research studies and yet common in media and clinical practice. The theory and

research behind ‘pornography addiction’ is affected by poor experimental designs, limited methodologies, and lack of model specification. The history and limitations of addiction models are reviewed, including how VSS fails to meet standards of addiction. VSS use can reduce health-risk behaviours. The negative effects, including erectile problems, difficulties in regulating sexual feelings, and neurological adaptations are indicated as non-pathological evidenced based learning. Persons reporting ‘addictive’ use of visual sexual stimuli would be better conceptualized by considering issues such as gender, sexual orientation, libido, desire for sensation, with internal and external conflicts which are influenced by religion and desire discrepancy. Since a large, lucrative industry has promised treatments for pornography addiction despite this poor evidence, scientific psychologists are called to declare the treatment industry and supporting evidence. When faced with such complaints, clinicians are encouraged to address behaviours without labelling of clients. Some have suggested that easier access to sexual films online is responsible for creating an epidemic of porn addiction. Emotional images with movement may increase sexual arousal.

Resources and Methods

Survey

To investigate the designs of explicit entertainment consumption, the self-perceived impacts of its use, and how it is for the most part seen by the Chinhoyi University of Technology students, an unknown, online study based on a self-designed, organized survey was conducted. As already demonstrated, research-based on online surveys makes the opportunity to gather information across the country and to reach particular groups of individuals (Rzymiski & Jaskiewicz, 2017). The anonymity of the study was guaranteed to eliminate the impact of shame that may be related to explicit entertainment utilization (Gilliland, South, Carpenter, & Hardy, 2019). As of late evidenced, studying adolescent pornography consumption does not increase its subsequent use by pondering participants (Do questions about watching internet pornography make people watch internet pornography?, 2012).

The questionnaire employed in the present research aimed to assess:

1. The prevalence of pornography use and age of first exposure in the studied group.
2. The patterns of pornography exposure: (i) the forms and frequency of use, (ii) an average length of single use, (iii) use of private (incognito mode) and multi-window browsing when watching online pornography, and (iv) consumption outside a place of residence.
3. The frequency of attempts to cease pornography use in the group of its current users, and prevalence and severity of associated effects (using a four-point scale).
4. The self-perceived effects of pornography regarding (i) changes in the type of consumed content such as switching to a novel genre, progression to more extreme (violent) material, viewing content not matching sexual orientation, (ii) sexual satisfaction, (iii) romantic relationship quality, (iv) changes in time of stimulation and number of stimuli needed to reach an orgasm when using pornography, and (v) neglecting basic needs (e.g., sleeping, eating) and duties (e.g., home-associated, occupational) due to pornography use.
5. The prevalence of self-perceived addiction to use of pornography.
6. General opinion on pornography: (i) the effect it may have on social relationships, mental health and sexual performance, and psychosocial development in childhood and adolescence, (ii) the possibility that it may cause addiction, (iii) border age of harmless pornography exposure, and (iv) the current legal status of pornography in Poland (an open access to adult pornography).

The sample studies were the Chinhoyi University of Technology students, age between 18-30 years old, female and male gender. These criteria were proven by the response given to the corresponding survey questions. Completely answered questionnaire were analysed and the incomplete ones were not included. In terms of demographic attributes of each surveyed student included gender, studied field of technology (ICT, Engineering, Business and other), and BMI (calculated using the formulae kg/m^2). The questionnaire was made available online for a period of three months (July 2021 –September 2021). Previous studies indicated that individual characteristics may influence the search of new sexual genres (Nagelkerke, Bernsen, Sgaier, & Jha, Body mass index, sexual behaviour, and sexually transmitted infections, 2017), unique personality traits were identified individually by each student that suited them best. Basing on DeNeve and Cooper (Chowdhury, Chowdhury, Kabir, Perera, & Kader, 2018), in order to get a large possible number of students, invitations to complete the questionnaires were sent by the researcher, were made available through social media (Facebook, WhatsApp, Twitter and Instagram) and Emails. Chinhoyi University of Technology's student affairs department made it possible for the research to be undertaken (March 01 2021).

Statistical analysis

A total of 2064 questionnaires were collected of which 564 did not meet the inclusion standard (27.3%), the complete questionnaires were 1500 (72, 7%). The analyses were done using Statistica v 13.1 (Statsoft Inc). There were questionnaires which were excluded in the analysis because they did not meet the Gaussian distribution criteria (Shapiro-Wilk test), nonparametric methods were used to test the results. To evaluate the differences between two and more independent groups, the Mann–Whitney U test and Kruskal–Wallis ANOVA were used respectively. To come up with the differences in the dichotomous data, the Pearson's χ^2 test was used. To assess the connections between age of first exposure, demographical attributes and personal traits, individual reported effects of pornography use (need for a prolonged stimulation time to reach an orgasm when using pornography, decrease in sexual gratification, decrease in romantic connections quality, ignoring basic needs, ignoring duties and self-identified pornography addiction), as well as the event of adverse effects of pornography termination, the classical odds ratios (ORs) with confidence interval at 95% were done basing on the formulas provided by Bland and Altman (Bland & Altman, 2020) using MedCalc (MedCalc, Belgium). The age of first exposure to pornography was categories into four classes based on the quartile distribution in the study population: ≤ 18 , 22, 26 and ≥ 30 . A p-value of $p < 0.04$ was reflected as statistically substantial.

Results

Demographic attributes

The sample group had 1500 students (960 male and 540 female), aged 18-30 years old, representing school of natural sciences and mathematics (15.6%), school of entrepreneurship and business sciences (8.9%), school of engineering science and technology (18.9%), School of tourism and hospitality (16.8%) and other (39.8%) sciences. The demographic attributes of the analysed sample are presented in Table 1.

The pervasiveness of Pornography use

The coverage to pornography was affirmed by 72.7% students ($n=2064$: 1260 male and 804 female). In the inclusion subset, the students constituted 72.7% ($n=1500$: 960 males and 540 females), while the rest ($n=564$: 300 males and 264 females) had no inclusion standard. The prevalence of exposure was almost the same in female (76.2%) and male students (74.7%) ($p > 0.05$, χ^2 test). The mean $\pm$ SD age of first pornography exposure was 14.6 ± 2.0 (median 12.0)

with a little difference between males and females ($p > 0.04$, Mann–Whitney U test). There is no connection or association between age and any other personality trait, relationship status was indicated ($p > 0.05$ in all cases, χ^2 test). On the overall it was observed that the frequency of pornography ($n=1500$), female and male, using pornography did not show any difference in BMI ($p > 0.05$, Kruskal–Wallis ANOVA). The rate at which pornography was used by females in a relationship was higher than the rate by single females in comparison (68.0 vs. 64%; $p < 0.05$, χ^2 test). The rate of percentage of females regarding themselves as social and males regarding themselves as trustworthy were higher in the group exposed to pornography (76.6 vs. 72.2% and 62.8 vs. 56.9%, respectively; $p < 0.05$ in both cases, χ^2 test). There are no other connections and associations between prevalence of pornography use and individual traits in female and male students were identified ($p > 0.05$ in all cases, χ^2 test).

Table 1. Demographic attributes of the studied group of university students ($n = 1500$).

Parameter	Male (n=960)	Female (n=540)
	Mean±SD (min–max)	Mean±SD (min–max)
Age (years)	22.1±1.7 (18–26)	22.1±1.7 (18–26)
Body Mass Index (kg/m ²)	14.6±2.0 (11.2–56.1)	22.0±3.7 (9.4–70.6)
	(n%)	(n%)
Underweight (<18.5)	93 (3.5)	495 (12.9)
Normal weight (18.5–24.9)	960 (68.0)	540 (70.0)
Overweight (25.0–29.9)	635 (24.1)	524 (13.7)
Class I obesity (30.0–34.9)	96 (3.6)	97 (2.5)
Class II obesity (35.0–39.9)	15 (0.6)	23 (0.6)
Class II obesity (>40.0)	3 (0.1)	11 (0.3)
Romantic relationship status	490 (54.9)/470 (45.1)	310 (72.2)/230 (56.9)
Single / In a relationship	n/n(%/%)	n/n(%/%)
Personality traits	1681/952 (63.8/36.2)	2289/1541 (59.8/40.2)
Optimistic/Pessimistic	2633/1742 (66.2/33.8)	1545/2285 (40.3/59.7)
Extroversive/Introversive	1430/1203 (54.3/45.7)	1988/1842 (51.9/48.1)
Confident/Shy	2322/311 (88.2/11.8)	3489/341 (91.1/8.9)
Curious/Uninquisitive	2240/393 (85.1/14.9)	3503/327 (91.5/8.5)
Sensitive/Insensitive	1957/676 (74.3/25.7)	2908/922 (75.9/24.1)
Happy/Sad Calm/Aggressive	2279/354 (86.6/13.4)	2990/840 (78.1/21.9)
Trusting/Conscious	1525/1108 (57.9/42.1)	2120/1710 (55.4/44.6)
Sociable/Unsociable	1815/818 (68.9/31.1)	2789/1038 (72.9/27.1)

SD–standard deviation.

Pornography usage patterns

The current sample with 1500 students, the most detected and reported occurrence of usage of aromatic material was twice per week. Daily usage of pornography was recorded by 11.9%, with no difference indication between male and female students ($p > 0.05$, χ^2 test) (Figure 1a). Looking at the daily users there was no huge difference between the male and female students of those who do less basing on BMI ($p > 0.05$, Mann–Whitney U test) including the status of romantic relationship and any individual trait ($p > 0.05$ in all cases, χ^2 test).

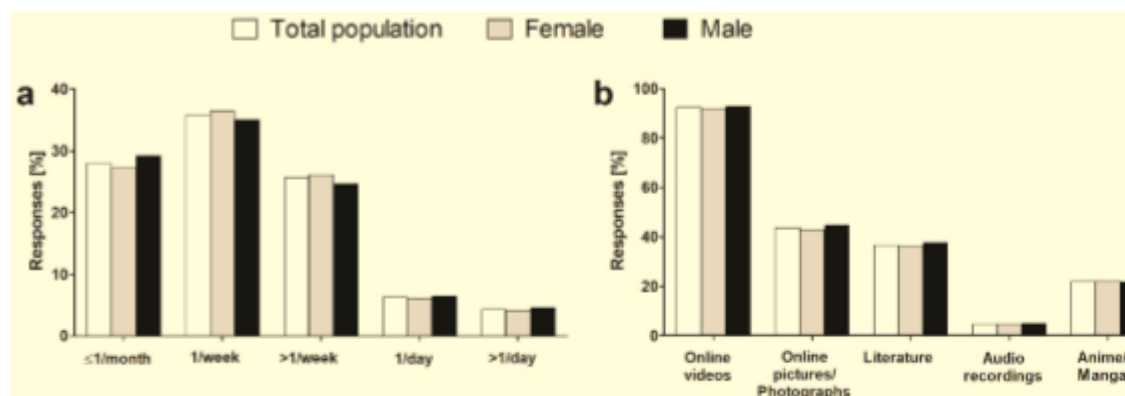


Figure 1. Frequency of digital pornography usage (a) and its types (b) in the surveyed sample of University students ($n=1500$).

Online content which includes images, videos and novels were discovered to be the most often used form. Other forms included cartoons, audio recordings and many other highlighted in Figure 1b. The assumed or estimated length of pornography use did not exceed 2 hrs of 92% surveyed. Most students admitted to be using private mode passages like the VPN or their own private network which cannot be dictated or even closed by a University public network. Use of the place outside the residence was indicated by 35% ($n=525$). There is no much difference if there is a comparison done between the females and males.

Attempts to stop digital pornography use

Among those surveyed who declared themselves to be current digital pornography consumers ($n = 4260$), 51.0% admitted to making at least one attempt to give up using it with no difference in the frequency of these attempts between males and females ($p > 0.05$; χ^2 test). 72.2% of those attempting to quit pornography use indicated the experience of at least one associated effect, and the most frequently observed included erotic dreams (53.5%), irritability (26.4%), attention disturbance (26.0%), and sense of loneliness (22.2%) (Table 2). Compared to males engaged in romantic relationships, singles reported a higher incidence of the occurrence of adverse effects during pornography cessation OR (95%CI) was 1.22 (1.01–1.5) ($p < 0.05$). BMI and personal traits were not found to significantly differentiate the incidence of cessation-associated effects within subsets of female and male students.

Table 2. The individual perspective surveyed by students during chances to stop pornography usage ($n = 1500$).

Effects	Incident (%)	Severity of Pornography Effect (%)			
		Minorsly Disruptive	Moderately Disruptive	Severely Disruptive	Very Severely Disruptive

Insomnia	11.7	48.7	29.6	12.5	7.8
Irritability	27.7	54.6	26.8	10.9	6.6
Hands trembling	6.3	48.3	30.0	12.4	5.5
Aggression	15.0	55.1	23.6	12.5	6.7
Anxiety	8.0	48.6	25.4	16.9	7.1
Libido decrease	16.7	51.3	34.2	10.8	7.3
Depression	12.0	42.6	29.6	15.4	10.9
Erotic dreams	50.5	33.6	43.5	19.5	8.3
Attention	25.0	47.3	29.6	12.7	9.0
disturbance Sense of loneliness	21.3	40.6	25.0	16.8	12.8

Individual perspective surveyed by students

The number of students who are currently using pornography (n=1500), there are those who always regret and feel embarrassed by the use reached 48.5%, the percentage and rate was higher in females than in males (56.8% vs 40%: $p < 0.04$, χ^2 test). Numerous and different changes of pornography patterns use happening in the period of exposure period was recorded: moving to a new type of pornography (45.0%), use of resources that mismatch sexual orientation (56.6%), the necessity to use more violent material (31.2%) (Figure 2a). Females preferred to be viewed more curious than being inquisitive (31.7% vs. 25.9%; $p < 0.02$, χ^2 test), and the violent man in an aggressive manner compared to calmness (33.5% vs 25.8%; $p < 0.03$, χ^2 test). Sexual stimuli and longer stimulation required to reach an orgasm when involving pornography was recorded by 13.0% and 18.9%, of those surveyed (Figure 2b). From the findings, most of the students did not even regard the negative effects of pornography usage on sexual satisfaction and relationship quality (6% and 30%) respectively (Figure 2c, d).

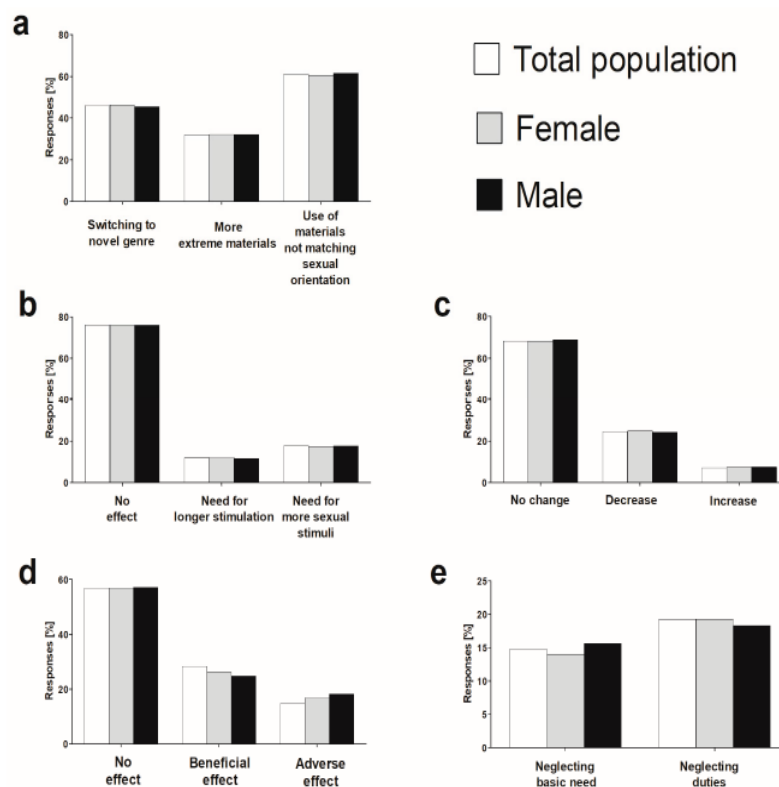


Figure 2. Individual perspective surveyed by students in pornography pattern usage (a) individual perceived effects of pornography of pornography usage (b) sexual satisfaction (c) quality of relationship (d) basic needs neglect at least once in their life (e) surveyed University students (n=1500).

The results that show the attribute of relationship quality for students (the females rate was higher than the males rate) with BMI < 25 (OR=1.44, 95%CI: 1.09–1.92, $p < 0.02$, and OR=1.35, 95%CI: 1.02–1.79, $p < 0.04$, respectively) in connection to sex subsets of BMI < 25 kg/m², as well as in males and females who indicated embarrassed by their pornography use (OR = 3.38; 95%CI: 2.65–4.31, $p < 0.002$ and OR = 4.68, 95%CI: 3.45–6.36, $p < 0.002$), pointing to their partners not experiencing it. The neglect of important basic needs (e.g., sleep, bath, cleaning) and duties (e.g., at work) neglect because of explicit content use was experienced at least one at a time by 14.8 and 19.3% of students, respectively (Figure 2e). More sexual stimuli and longer stimulation with pornography usage, most rates were higher in females than in males especially in terms of romantic relationship quality, negligence of romantic needs and sexual satisfaction.

Table 3. Exposures in males (n = 960) and females (n = 540) for different pornography association with age of first use (95% confidence interval).

Effect	Sex	Quartiles of Age of First Exposure to Pornography (Years)			
		Q4 (>16)	Q3 (15–16)	Q2 (13–14)	Q1 (≤12)
Need for longer stimulation to reach orgasm	Female	1.0 (reference)	1.16 (0.81–1.66) $p > 0.05$	1.79 (1.30–2.5) $p < 0.001$	1.62 (1.09–2.41) $p < 0.05$
	Male		1.06 (0.68–1.66) $p > 0.05$	1.58 (1.06–2.36) $p < 0.05$	2.41 (1.52–3.80) $p < 0.001$
Need for more sexual stimuli to reach orgasm	Female		1.56 (1.13–2.17) $p < 0.01$	2.37 (1.76–3.20) $p < 0.001$	2.64 (1.86–3.74) $p < 0.001$
	Male		1.06 (0.74–1.53) $p > 0.05$	1.51 (1.01–2.09) $p < 0.05$	1.94 (1.31–2.88) $p < 0.001$
Decrease in sexual satisfaction	Female		0.92 (0.70–1.20) $p > 0.05$	1.73 (1.36–2.20) $p < 0.001$	2.21 (1.65–2.94) $p < 0.001$
	Male		1.32 (0.94–1.83) $p > 0.05$	1.90 (1.40–2.57) $p < 0.001$	2.40 (1.67–3.46) $p < 0.001$
Decrease in romantic relationship quality	Female		1.01 (0.70–1.46) $p < 0.05$	1.87 (1.36–2.57) $p < 0.001$	2.16 (1.49–3.14) $p < 0.001$
	Male		1.15 (0.76–1.75) $p > 0.05$	1.91 (1.31–2.77) $p < 0.001$	1.87 (1.20–2.93) $p < 0.01$
Neglecting basic needs	Female		1.15 (0.81–1.64) $p > 0.05$	2.04 (1.50–2.79) $p < 0.001$	2.30 (1.61–3.30) $p < 0.001$
	Male		1.66 (1.07–2.57) $p < 0.05$	2.52 (1.69–3.76) $p < 0.001$	3.20 (2.04–5.04) $p < 0.001$
Neglecting everyday duties	Female		1.30 (0.94–1.81) $p > 0.05$	2.75 (2.06–3.67) $p < 0.001$	3.07 (2.20–4.28) $p < 0.001$
	Male		2.16 (1.43–3.28) $p < 0.001$	3.56 (2.43–5.21) $p < 0.001$	3.82 (2.48–5.90) $p < 0.001$
Self-perceived pornography addiction	Female		1.95 (1.32–2.89) $p < 0.01$	3.73 (2.61–5.31) $p < 0.001$	4.23 (2.85–6.28) $p < 0.001$
	Male		3.46 (2.01–5.99) $p < 0.001$	5.94 (3.55–9.94) $p < 0.001$	7.25 (4.16–12.63) $p < 0.001$

Individual perspective of pornography addiction

The total surveyed population (n = 1500) was 72.7% of the total included population, with zero difference recorded between male students and female students ($p > 0.04$, χ^2 test). All the associations are shown in Table 3, from the lowest quartile to the highest quartile. The Body Mass Index (BMI) had no association with individual perspective in female and male students ($p > 0.04$ in all cases, χ^2 test). Individual character attribute had no connection with all the associations and pornography attribute when compared to females and males (71.3% vs. 64.5%; $p < 0.03$, χ^2 test). The OR (95%CI) for individual perspective addiction in introverted males was 1.31 (1.01–1.71, $p < 0.05$) in connection to the group of extroverted individuals.

Pornography General Opinion

The attributes were not classified between sex subsets ($p > 0.04$, χ^2 test) except for the opposite attribute which was indicated by female students (82.3 vs. 72.1%; $p < 0.001$, χ^2 test). In terms of gender comparison, females indicated that there was a safe age exposure (37.6 vs. 31.7%; $p < 0.002$, χ^2 test), assessed in both sex subsets at mean $\pm$ SD (median) of 17 $\pm$ 2 (17) years ($p > 0.04$, Mann–Whitney U test). Some of the surveyed number of students agreed on the presence of pornography addiction on younger age (26.8%, n = 368) or wide on a scale (66.6%, n = 756). In view of 67.8% (n = 896) the current law in Zimbabwe (open access to adult materials) referring to pornography should not be subject to any change, 24.1% (n = 324) supported for access limitations, and the rest had nothing to say on that point.

Chinhoyi University of Technology (CUT) 6-Way Pornography reduction model

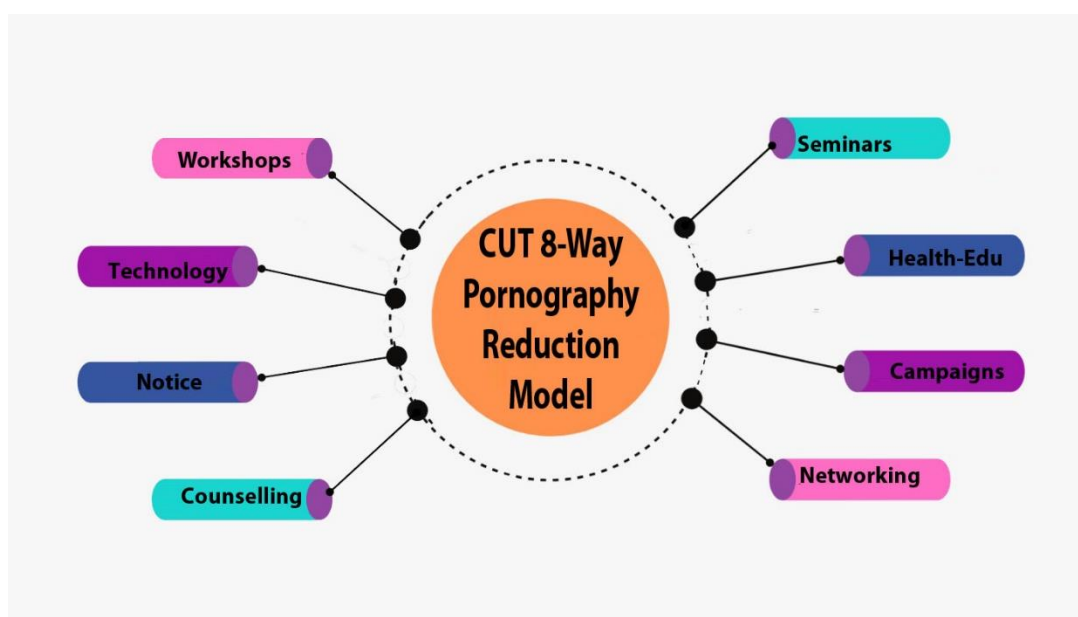


Figure 3. CUT 8-Way Pornography Reduction Model (Own Source)

The model was designed to reduce the use of pornography in eight different ways.

1. Workshop

The workshops includes first year orientation, peer educator's workshop, stakeholder's workshop and students' off campus and on campus workshops. This procedure describes

the processes of workshops at the Chinhoyi University of Technology (CUT). The Dean of Students is responsible for the implementation and co - ordination of CUT-workshops.

Definitions

Workshop refers to the process of orienting a group of young adults of the same age group on their sexual reproductive health issues and on the use of pornography.

Process Description

- Hosting a meeting to brainstorm on how we are going to conduct the orientation workshop.
- Send confirmation of the proposed briefing session to the Dean of students.
- Evaluate which tools and aids (Resources) that are most appropriate for conducting an orientation workshop.
- Seek authority from the Dean of students and the Campus Protection Department to conduct the Peer educators' orientation workshop.
- Arrange date, time and venue of the orientation workshop.
- Select resource persons, stake holders (SAYWHAT, NAC) and other participants for particular briefing sessions.
- Arrange for logistics (funds, laptop, projector, PA system etc).
- Delegate staff i.e. Reverend for opening prayer, welcome remarks from the Dean of students, presentation on the respective topic (Substance and abuse and Life Skills officer), peer educator presenters and closing remarks from the President (peer educators).

2. Technology

Technology includes a Text and SMS engine platform, the number of text messages depends on the rate at which the user watches pornography. The system uses machine learning to choose the type of warning to send and to select the rate of frequency to send the text messages. There will be a database with a list for every student number, the engine will be sending random texts at an interval to every student. The texts will be based on the warnings against the use of pornography. The University will continue with its site blocker, the one that blocks every pornography website from opening. On the Chinhoyi University of Technology mobile application and website will also have adverts and posters that warn against the use of pornography.

3. Notice

Notice includes flyers, banners (static and motion banners) and posters. All these notices will be including warnings against the use of pornography including the potential dangers.

4. Counselling

This procedure describes the process of counselling at Chinhoyi University of Technology (CUT). This procedure applies to the process of counselling a client at Chinhoyi University of Technology (CUT). The Dean of Students is responsible for the implementation of the counselling process.

Definition

- **Counselling** is the process of assisting and guiding clients especially by a trained person on a professional basis to resolve especially personal, social, physical or psychological problems and difficulties.
- **Rehabilitation** is the process of restoring someone such as substance and drug abuse addiction to a useful and constructive place in society.

Process Description

- Organizing the counselling environment at the rehabilitation section.
- Using a range of different tools and aids to support the counselling activities.
- Evaluating tools and aids which are most appropriate for the needs of a counsellor and tailor them to the needs of the client.

5. Seminars

The seminar will include students of the same level in a meeting. This procedure describes the processes of seminars at Chinhoyi University of Technology (CUT). The Dean of Students is responsible for the implementation and co - ordination of CUT-seminars.

Definitions

Seminar refers to a class held by advanced studies in which students meet regularly to discuss original research under the guidance of a professor.

Process Description

- A meeting held for the exchange of useful information by students and lectures
- Sharing of notes and links that assist every member in terms of pornography use.

6. Health Education

This procedure describes the process of preparing for a Talk show on campus and off campus at Chinhoyi University of Technology (CUT). This procedure applies to the process of preparing a Talk show. The Dean of Students is responsible for the preparing and implementation of the Talk shows both on and off campus.

Definition

Talk show is a program in which a well-known person engages in discussions or is being interviewed.

Process Description

- Organising the environment for the talk show which is conducive for learning.
- Using a range of different tools and aids to support the talk show activities.
- Evaluating the tools and aids which are most appropriate for the needs of the presenter and tailor them to the needs of the recipients.
- Making the introduction relevant to the listeners' goals, values, and needs.
- Asking questions to stimulate thinking.
- Sharing a personal experience.
- Beginning with a joke or humorous story.
- Projecting a cartoon or colourful visual.
- Making a stimulating or inspirational statement.
- Giving a unique demonstration.
- Asking for questions after your demonstration.

- Thanking participants for their contributions and attendance.

7. Awareness Campaigns

This procedure describes the process of hosting an awareness campaign at Chinhoyi University of Technology (CUT). This procedure applies to the standard expected for conducting an awareness campaign at Chinhoyi University of Technology (CUT). The Dean of Students is responsible for the implementation and co - ordination of this procedure. These include roadshows, on campus and off campus campaigns.

Definitions

- **Awareness** is the quality or state of being aware: knowledge and understanding that something is happening or exists.
- **Campaign** is any series of actions or events that are meant to achieve a particular result.

Process Description

- 3-step recovery model
- Identifying a problem on campus /off campus or in Zimbabwe at large.
- Hosting several meetings to brainstorm on how to conduct an awareness campaign.
- Sending confirmation of the proposed briefing session to the Dean of students.
- Evaluating tools and aids (Resources) that are most appropriate for conducting an awareness campaign and delegating staff members.
- Seeking authority from the Dean of students and the Campus Protection Department to conduct an awareness campaign.
- Arranging date, time and venue of the event.
- Selecting resource persons, stake holders (SAYWHAT, NAC) and other participants for particular briefing sessions.
- Arranging for logistics (funds, laptop, generator, PA system, truck etc).

8. Networking

This procedure describes the process of networking with stakeholders at Chinhoyi University of Technology (CUT). This procedure applies to the process of network with stakeholders at Chinhoyi University of Technology (CUT). Dean of Students is responsible for networking with both internal and external stakeholders.

Definitions

- **Networking:** Is the exchange of information and ideas among people with a common profession or special interest in a social setting.
- **Stakeholders:** Are people that support your social interest and has an impact on or connects funders, clients, beneficiaries, supporters etc.

Process Description

Meeting stakeholders and having conversations related to substance abuse and life skills.

- Be direct and not forceful with the stakeholders.
- Advice, efforts and resources provided by stakeholders.
- A report on the various activities done is sent to the stakeholders via telephone or email.

- The Substance Abuse and Life Skills Officer seeks to continuously maintain relationships and looks for opportunities to reconnect with the stakeholders.

Discussion

The research looks at the University students who are aged between 18 and 30 years old that is a group regarded as sexually active. A large number of students use pornography a lot and most have proved to be addicted to it. Some watch movies and photo collages basing on entertainment to remove boredom. The access to these websites comes from the access of smart devices and virtual private networks. The rate of exposure is similar to previous studies done on pornography and its use (Ybarra & Mitchell, 2015). Basing on Pornhub annual statistical results, the number proved to be very large on the male side (Pornhub, 2021). On the research done at the Chinhoyi University of Technology, similar conclusions were also drawn, proving that males are more exposed to pornography use as compared to females. Basing on the University of Polish, males also had a higher number in terms of explicit content use (Martyniuk, Briken, Sehner, Richter-Appelt, & A, 2016). Pornography use and its frequency have proved to be different if evaluated as subsets of sex. The number of woman using explicit content cannot be exactly known because most of them are shy to report that they are into the use of explicit content. The woman are only comfortable to answer the issues on sex only when they are answering a questionnaire in a hidden answering session. Some studies have shown that the rate of women in the use of pornography has increased over the years (CovenantEyes, 2019) (Wright, Bae, & Funk, 2015). Anonymous surveys attract a lot of people in terms of questionnaire answering so many of these students could not shy away from questions but answered directly.

Some studies did not pay attention to the rate of use of pornography but shifted their focus to the negative effects of pornography on a much broader level (Campbell & Kohut, 2017). The current research reported that nearly 35% and 18% of surveyed students perceived that they got their sexual satisfaction through the use of pornography. The majority of students did not see anything wrong with pornography use because they categorized it as an entertainment center when then are free. They did not view it as a destruction or the use of it as reduction in their sexual satisfaction. Those in a relationship did not view the use of pornography as a negative effect on their sexual life, they took it as an instruments which plays an enticing role in hyping their sexual morale. In the current study, the students reported that pornography use affected health mentally. Adults and young perceive pornography in different ways, because of culture guidance, opinions formulated by the government and media, this plays a role in the way they view pornography. The actors in the pornography movies often exude extreme sexual content which is unreal and exaggerated. When normal people want to copy exactly what was done by the actors, they often fail and this affects relationships. Most people will be forced to undergo surgeries to enlarge their private parts, maintain an erection by the use of pharmaceutical drugs (Geczy, 2018). This creates a demand which is large for sexual need which always proves to be hard to meet. Woman who are heavy are perceived by their partners to be very bad at their performance (Boyes & Latner, 2019). High body mass index means a person has got a weight that is not in their height range. Therefore a high BMI proved to point to a high potential of erectile dysfunction (Cheng & Ng, 2017), an association which could also lead to a possible discrepancy in the middle of male sexual skills and those presented by pornography actors.

Conclusion

The research reports high pornography frequency use among Chinhoyi University students, the patterns of use are similar in both males and females, even though the females proved to be

very embarrassed by the use of pornography. The earliest age of exposure was reported to be 10 years, these were mainly associated by individually viewed negative consequences of pornography use coming out from University students from ages 18 to 30 years. The developed model manages and reduces the use of pornography through different platforms like counselling which includes a three step recovery model. Technology which includes Text/SMS engine and website blockers. Notices which include flyers, motion and static banners and posters. Health education which include talk shows that is on campus and off campus meetings. Awareness campaigns which include on campus and off campus roadshows. Workshops/ Seminars with internal and external stakeholders.

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