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# Adolescents and web porn: a new era of sexuality

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#### **Abstract**

Fischer's test.

**Background:** Pornography can affect the lifestyles of adolescents, especially in terms of their sexual habits and porn consumption, and may have a significant influence on their sexual attitudes and behaviors.

**Objective:** The aim of this study was to understand and analyze the frequency, duration, and perception of web porn utilization by young Italians attending high school. **Materials and methods:** A total of 1565 students attending the final year of high school were involved in the study, and 1492 have agreed to fill out an anonymous survey. The questions representing the content of this study were: 1) How often do you access the web? 2) How much time do you remain connected? 3) Do you connect to pornographic sites? 4) How often do you access pornographic sites? 5) How much time you spend on them? 6) How often do you masturbate? and 7) How do you rate the attendance of these sites? Statistical analysis was performed by

**Results:** All young people, on an almost daily basis, have access to Internet. Among those surveyed, 1163 (77.9%) of Internet users admit to the consumption of pornographic material, and of these, 93 (8%) access pornographic websites daily, 686 (59%) boys accessing these sites perceive the consumption of pornography as always stimulating, 255 (21.9%) define it as habitual, 116 (10%) report that it reduces sexual interest towards potential real-life partners, and the remaining 106 (9.1%) report a kind of addiction. In addition, 19% of overall pornography consumers report an abnormal sexual response, while the percentage rose to 25.1% among regular consumers.

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Alessandro Bertoldo and Carlo Foresta: Department of Medicine, Section of Endocrinology and Center for Human Reproduction Pathology, University of Padua, Italy **Conclusion:** It is necessary to educate web users, especially young users, to a safe and responsible use of the Internet and of its contents. Moreover, public education campaigns should be increased in number and frequency to help improve knowledge of Internet-related sexual issues both by adolescents and by parents.

Keywords: adolescents; sexual health; web pornography.

# Introduction

Sexuality, in the era of digital technology, seems to be undergoing a new revolution, as momentous as the one that emerged in the 1960s (1). The two central elements of this revolution are the web and its pornographic contents that have allowed such success. On the one hand, access to pornographic material is made very easy by the Internet to the extent that it can be done at home, at work, anywhere, and at any time; is economic, and anonymous (2, 3). On the other hand, pornography provides a variety of media, such as pictures, movies, lyrics, e-mails, chats, web cams and teledildonics, and may rely on an inexhaustible market replete with a stream of new materials (4-6). Consumption of pornography is not in itself a disease, but it can be when sexuality achieved trough multimedia becomes dominant with respect to real sexuality, and takes on characteristics of addiction and obsession (7, 8). The main purposes of web users are the search for information about sexual topics, the consumption of pornography, the satisfaction of detailed desires, the search for sexual partners, and the purchase of sexual support. However, multimedia pornography not only meets such needs, but very often carries significant legal and moral consequences. For example, a very common problem affecting couples' relations is infidelity. Online infidelity is becoming widespread, causing significant issues for couples, and thus many therapists are studying new ways to treat this new form of 'pathology' (9, 10). There are two possible types of impacts related to web pornography: non-paraphilic behaviors that are nonetheless 'excessive' such as addiction, promiscuity, loss of habit to mediation and sexting, and paraphilic behaviors, such as fetishism, sadism, masochism, voyeurism, and pedophilia. In particular, the latter is of great interest and there is an ongoing debate on whether consumers of child pornography pose a further risk for violence and sex offenses (11, 12). In the light of this information, and considering the different motivations and consequences of multimedia pornography in adult males and adolescents, we have focused on the consumption of 'cybersex' by young males and the possible consequences of such consumption. Through the Androlife campaign, an Italian project for andrological health prevention, we administered an anonymous questionnaire to young participants enrolled in high schools, with the aim of investigating family, physiological, and pathological histories as well as lifestyles. In particular, in this study, we wanted to understand and analyze the frequency, duration, and perception of web porn utilization by young Italian males attending high school.

# Materials and methods

## Androlife campaign

Androlife is a project that has the following objectives: 1) to sensitize and to inform young people on general and andrological health; 2) to promote primary prevention of diseases especially related to the male reproductive system; 3) to collect information on habits, lifestyles, general and sexual health status of young people through an anonymous questionnaire; and 4) to highlight pathological conditions detectable by a free medical examination performed only on volunteers. To achieve these objectives the 'Androlife team' organized social and cultural events, as well as free clinics dedicated to andrological prevention and interventions run by specialists in high schools for students in their final year in order to inform, educate, and provide free medical preventive evaluations for those who wished to avail them.

#### Patients and setting

A total of 1565 students attending their final year of high school in 2012-2013 in the Veneto Region of North-East of Italy participated in the study. All students, aged 18-19 years, attended an information session held by a physician of the University of Padua. Of all participants, only 1492 agreed to fill out an anonymous survey. On a voluntary basis, 1083 participants decided to undergo an on-site clinical examination. The study was approved by the local Ethics Committee with the protocol number 2208P.

## Information session

The sessions focused on five main topics: sexually transmitted diseases, andrological diseases, lifestyles, drugs and alcohol, and cybersex. For each topic, the specialist explained the risk factors, how to prevent them, how to take care of one's own health, any forms of self examination such as testicular self-examination, and possible solutions to existing problems. Students could also ask public questions and/or ask for further information on the topics covered.

#### Survey

The anonymous survey included a general family history and a number of questions on lifestyle, with particular attention to smoking, diet, physical activity, and the use and/or abuse of drugs. Moreover, a large section focused on sexual activity, such as number of partners, sexual orientation, use of condom, and use and/or abuse of pornography on the web. This latter section represents the content of this paper. In particular, the questions were: 1) How often do you access to the web? 2) How much time do you remain connected? 3) Do you connect to pornographic sites? 4) How often do you access pornographic sites? 5) How much time you spend on them? 6) How often do you masturbate? and 7) How do you rate the attendance of these sites?

#### Visit

On-site clinical examination aimed at detecting anthropometric and penile measurements that included: height, weight, body mass index (BMI), waist circumference, arm span, pubis-to-floor and crownto-pubis length, penis length, penis circumference, and testicular examination.

### Statistical analysis

Statistical analysis was performed using Fisher's test. Differences were considered significant when p<0.05.

## Results

The survey conducted among the 1492 subjects showed that all have access to Internet, and most of them (1283, 86%), access the web everyday. Only 45 (3%) indicated that they accessed the web less than once a week, while the remaining 11%, indicated they did not access it every day but they did more than once a week. Figure 1 shows the average of hours per day that users spent connected to the web.

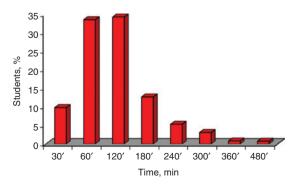


Figure 1: Average time of Internet connection for each session.

The majority (67.6%) stated that they remained connected for 1-2 h: rarely, someone indicated a connection of 6 or even 8 h. In addition, 1163 (77.9%) of Internet users admitted that they consumed pornographic material; of these, 93 (8%) accessed pornographic websites daily, 500 (43%) more than once per week, and 570 (49%) less than once per week. The percentage of attendance of pornographic sites was similar both for the 482 (41.4%) boys coming from the city and for the 681 (58.6%) coming from the countryside. The average connection time was less than 15 min for 369 (31.7%) students, between 15 and 30 min for 441 (37.9%), and more than 30 min for 353 (30.4%). A total of 686 (59%) boys attending these sites perceived the consumption of pornography as always stimulating, 255 (21.9%) reported that it became habitual, 116 (10%) stated that it reduced their sexual interest towards the outside world, while the remaining 106 (9.1%) reported a kind of addiction. Figure 2 displays the relationship between porn site attendance and average number of masturbations per month. Finally, Figure 3 shows the evaluation of sexual response according to access to porn sites in the whole group of porn consumers and in relation to their weekly consumption.

# **Discussion**

The need to research and monitor Internet content has already been demonstrated mainly due to easy accessibility, health warning of some sites, and use of pornography without control (13). In particular, some authors have pointed out that the consumption of pornography can affect lifestyle choices, especially sexual habits (14). Many studies considered pornography consumption among adolescents a significant influence on their sexual attitudes and behaviors (15, 16). The main reasons that motivate young people to consume pornography are curiosity, stimulus to masturbation, new knowledge and dating, exposure and exploration of (virtual) sex, and protected sexuality. Even if the great majority during cognitive and volitional age present no pathological consequence, in some cases it may engender low motivation to search for real sex, reduced desire, total fulfillment of multimedia sex from masturbation, and reduced interest in real sex because of a gap between what is possible and how much is being fantasized instead.

In this study, we considered pornography consumption by young Italian males attending high school, and evaluated some possible consequences of this habit. Italy represents a particular cultural, social, and religious context where sex has often been considered a forbidden topic, which makes our findings all the more interesting. First, it was found that all students had access to the Internet, and most of them (86%) did so daily. The average duration of each session was 1 h for 33.4% and 2 h for another 34.2%. Considering the already low physical activity of young people, all this time spent at the computer represents an additional risk factor for the tendency to be overweight. Meanwhile, 1163 students (77.9%) declared pornography consumption and of them, 570 (49%) did so less than once a week while 93 (8%) did so daily. Although our data did not allow us to postulate an addictive behavior, and even if that 8% represented the smaller percentage, we have to seriously study this phenomenon in order to understand the possible consequences of pornography consumption on the social and sexual lives of young people. An additional factor must be to focus on the need for proper education on web usage as well as sexual health and sexuality, and the elapsed time spent on porn sites. In fact, it is alarming that 353 (30.4%) students remained, on average, connected for over an

2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	1–5	6–10	11–15	16–20	21–30	>30
Never	83	124	41	39	16	7	19
Less one a week	75	146	164	62	43	37	43
More one a week	15	72	183	101	94	67	61

Figure 2: Relationship between porn site attendance and average number of masturbation per month.

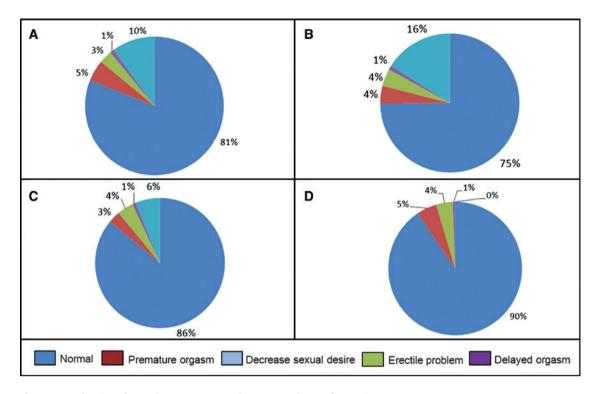


Figure 3: Evaluation of sexual responses according to attendance of porn sites.
(A) The whole group of porn consumers, (B) more than once a week porn consumers, (C) less than once a week porn consumers, (D) not porn consumers.

hour to pornographic sites for each session. It is also interesting to note the perception of pornography on the part of the visitors. In fact, it is always stimulating for the majority (59%), but it can become habitual (21.9%), reduce the sexual interest towards the outside world (10%), or even become addictive (9.1%). Already, these preliminary data show how pornography plays an important role on the sexuality of young people.

Moreover, Figure 2 correlates the frequency of porn content vision and the frequency of masturbation. Although there is no significant difference, it is clear that there is a higher frequency of masturbation among those who most often are addicted to pornography; however, it is not clear whether this is the cause or the consequence. On the one hand, pornography could be a support for masturbation; on the other hand, by reducing interest in real sex, pornography could lead to masturbation. Furthermore, virtual sex is faster, safer, less tiring, and can satisfy even the most particular fantasies, and thus, if those who use it do not know how to control themselves, it may happen that sexuality with support of multimedia becomes dominant with respect to real sexuality and takes on characteristics of addiction and obsession.

Finally, the evaluation of sexual response according to attendance of porn sites is very interesting. The main

alterations were erectile problem, premature orgasm, delayed orgasm, and decreased sexual desire. The total number of abnormalities was 14% among moderate porn consumers (less than once a week), which rose to 25.1% among regular consumers (more than once a week). Even if we need more data to confirm them, these findings suggest an important role of pornography in influencing sexual habits and activities among young males.

In conclusion, pornography should be considered from the social, cultural, and health perspective. In our opinion, it is necessary to educate young males toward a safe and responsible use of the Internet and its content. In fact, if confirmed, our data show pornography as a potential health problem in terms of addiction, paraphilia, and sexual disorders. Moreover, we cannot pretend that there is no problem of sexual exploitation and child pornography. Therefore, public education campaigns should be increased in number and frequency to help improve knowledge of pornography-related issues of adolescents and parents.

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