Searching For Unlawful Carnal Knowledge

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ABSTRACT

Search engines are often used for leisure related search tasks, to find online shops, games, music, movies, celebrity gossip and even sex. While these activities can be broadly considered as entertainment, I shall focus on discussing the different *Sexual Information Needs* (SINs) of users. This unexplored area of Information Retrieval (IR) research considers a variety of search tasks related to sex: from looking for romcoms, to finding a date, to downloading pornography. Here, I outline seven *not-so-deadly* SINs that users try to satisfy on the web. I then discuss how addressing these SINs as part of a response to the query "entertain me" would maximize user satisfaction.

1. INTRODUCTION

According to Van Halen (1984), "everybody wants some, how about you?". While this song and its lyrics are entertaining, it reminds us that sex is an underlying carnal need. As a result, sex is used to grab our attention [4] and often features in entertainment from titillation to stimulation. So if a user were to type in "entertain me" to a search engine or goes online to be entertained, then there is a high likelihood that they would be interested and entertained by something sexy and sex related [1].

When it comes to searching the web, numerous query log studies have shown that query terms related to finding content of an illicit and sexual nature occur with relatively high frequencies. In [2, 3], it was shown around 8-10% of queries were sex related; indicated by query terms such as "sex", "free", "pictures", "naked", "nude", etc. This shows that many web search engine users are interested in being *entertained* by sexual content, *a priori*. The response of the web search engines to such queries is usually web sites that are predominately pornographic in nature and content (i.e. sites that display explicit x-rated multimedia content). However, despite these observations, little research has been conducted that considers these types of sexual information needs[1]. But, with so many searches of this type, it is clear that users are interesting in finding such content, so it is time to abandon the taboo status associated with discussing sex and sex related search topics. And, to consider such

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[1]However, at the SIGIR 2006 Workshop on evaluating exploratory search systems, Marshall suggested that it was only a matter of time before a "porn" based evaluation track was proposed and run at a forum like TREC. Perhaps, the time is now?

needs in a scientific and objective manner within the remit of Information Retrieval. Thus, this paper aims to start the discussion on searching for sex.

2. SEXUAL INFORMATION NEEDS

Typically queries which contain terms indicative of sex or sexuality are considered to have one kind of intent, i.e. to find pornographic material. While this is perhaps the most dominant sexual information need. There are, however, many other types of sexual information needs that users may have - these range from satisfying curiosity, fantasies and romance, to fulfilling basic, carnal desires. Consequently, the classification or rating of such material will range from parental guidance (PG) and general audience (12+) to adult and X-rated (18+). Also, the types of resources required to fulfill the different sexual information needs will vary considerably, from multimedia content (video, picture, audio, dvds), to text (i.e. books, stories, etc), to products and paraphernalia, and invariably to people (either in real life or via live video links). To try and distinguish between the different types of sex based searches, I have formulated a number of different types of sexual information needs that users may have - and then discuss how they related (or not) to being entertained.

Titillation - The suggestion of sex is often too alluring to dismiss and advertisers often take advantage of this desire. Content that hints at sex, beyond advertisements, is usually music and the associated lyrics, and in particular, the related music videos. For example, the Britney Spears video clip, "Hit me baby one more time" is a prime example of sexual innuendo, which resulted in innumerable queries being submitted to search engines so that users could see a scantily clad Spears dressed as a school girl performing in a suggestive manner. Content suggestive of sex may seem harmless, but it is likely to lead to other types of SINs.

Awareness - This SIN stems from a curiosity about finding out about one's own body, about the bodies of the other sex and learning about sex. For many teenagers (and nowadays even younger children) the desire to find out about such things is part of growing up. To satisfy this need, educational content is often created and supplied. It is usually drawn, described and discussed appropriately for the particular age ranges (as supported by sites like http://www.sexetc.org/ which is a magazine about sex for teenagers) - but sometimes curiosity will lead users to other darker SINs.

Romance - The search for romance is often undertaken by females, though not exclusively, and is generally related to escapism and fantasy (i.e. the need or want of an ideal

love affair or happily ever-after story). The kinds of content which aims to satisfy such a need is usually romance novels (from vendors like `millsandboon.co.uk`) where suggestive proses titillate the reader (i.e. "her loins were burning with desire as she caressed his throbbing member...".). Other types of content that also try to address this need are movies that are of the romantic comedy (or rom-coms) genre. These movies aim to entertain and try to satisfy the needs of both female and male viewers.

Erotica - While erotica is often literature or art that is intended to arouse sexual desire, here we consider erotica in the context of products. Specifically, this SIN relates to the devices and products often used to indulge in some fetish or fantasy and/or to stimulate, arouse or enhance sexual desires and pleasures; and so this need ranges from the desire to feel sexy to increasing the sexual desires through fantasy to being sexually stimulated and gratified through some device. So site selling merchandise such as lingerie and sex toys like the infamous rabbit to costumes and devices available from vendors (see `bravissimo.com`, `lovehoney.com` or `annsummers.com`). Of course, nothing says "entertain me" more than whips and chains.

Love - An increasingly common phenomena is to find a partner online to satisfy the need for love and companionship. So rather than recommend videos or products, the resource required is a service to help users find the love of their lives. Sites like `match.com` and `eharmony.com` enable users, usually singles, to meet others based on their profiles, where they are matched "on the deepest levels of compatibility". Core to these sites are recommendation and matching algorithms to find and narrow down the possible partners to a set of potential or ideal partners. Such sites help fulfill a basic desire of most, i.e. to find love. Though often it is used to have fun on the dating scene (and thus to be entertained), without the connotation of being particularly sleazy, or as direct as the next SIN.

Lust - Like the love SIN, the need of the user, here, is more carnal and the desire is to fulfill their underlying basic needs. Sites like `sexbook.com` and `fbook.com` are specifically dedicated to help users find others to engage in various kinds of activities. These range from sending naked photographs to online sex via a web cam to meeting in real life and participating in sexual acts.

Stimulation - Users wishing to be aroused or stimulated by sexual content fall into this last SIN. Thus, pornographic sites are designed to provide illicit and X-rated content for the pleasure of their adult users (assumed to be 18+, and usually male). Such sites provide hardcore pornography including images and shots of people participating in various sexual activities - usually the participants are semi-naked or naked, and may be wearing various outfits or costumes (i.e. stockings, cowboy hats, boots, masks, etc). And will generally include very explicit and close up shots of genital regions, including penetration shots and money shots. There are a large variety and range of types of hardcore pornography, usually classified at the higher level as straight, gay/lesbian, animal, etc. Then more specifically to describe the particular sexual acts or activities (such as anal, blowjob, handjob, etc) and/or the particular participants (such as amateur, blonde, coed, etc)[2].

3. SUMMARY AND DISCUSSION

In this poster, I have presented a number of different SINs. These are very real needs, stemming from carnal desires, that are often either implicitly or rather explicitly posed to search engines to satisfy. However, it is clear that a significant amount of further research needs to be conducted to explore this research area in detail. For instance, different users will have various underlying SINs at different times and the level of complexity required to fulfill the different SINs will also vary. For example, sometimes returning an item within one of these broad categories will be enough to entertain, at other times only a very specific item will do. Also, the demographics of users, i.e. their age, gender, mood and sexual preferences is likely to impact on what is relevant and entertaining. So for a query as broad as "entertain me", it is difficult to satisfy all users, but I would argue that providing items that aim to satisfy at least some of these SINs would be a good starting point. For example, returning items like the latest and most popular titillating music video clips and the latest rom-com movies are likely to be entertaining, relevant and acceptable to most users. However, the latter SINS become significantly more complex and challenging to fulfil, i.e. finding the right erotic product, finding the love of your life, or finding the right kinds of stimulation. This is likely to require the recommendation of dedicated search verticals or portals (like the ones previously mentioned), and for users to be more specific about what will entertain them. Other issues that needs to be examined further are the ethical, legal and moral implications of investigating and supporting SINs. However, these issues are largely down to one's personal preferences, the culture within society, and the laws of one's country. But, one thing is for sure, these issues do not stop the supply, nor the demand for items that satisfy these SINs. One issue particularly relevant to IR research is the trade-off between privacy and personalization. Personalization requires tracking the history of interactions of a user, and building up a profile of their likes and dislikes. However, users are often quite sensitive when it comes to their SINs, and would like to avoid any potentially embarrassing situations where the search engine returns or suggests sex related items at an inappropriate time (i.e. when searching in front of others). In conclusion, SINs have been largely ignored by the IR research community, despite the high volume of queries related to some of the more notorious SINs. However, as I have outlined there are a range of SINs, which present a new set of research challenges that are interesting, complex and important[3].

4. REFERENCES

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[2]For example, see sites like `www.youporn.com` or `www.redtube.com` for detailed classification schemes.

[3]Many thanks to the anonymous reviewers for their expert opinions, helpful comments and positive feedback on this topic.