

## **Beyond the Fear of Cyber Strangers: Further Considerations for Domestic Online Safety.**

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*The meteoric rise in the domestic use and popularity of the Internet has been accompanied by growing concern and interest in aspects of online safety from relevant professionals, researchers, and the mass media. However, there has been a tendency for the majority of this consideration to gravitate towards the issues of sexual abuse and inappropriate sexualised behaviours online. This paper draws attention to other and less well-known areas of potential risk and harm for the domestic Internet user. In particular, ostracism, viruses and external control, prejudice, cults, rejection and relationship breakdown, disinhibition, social disengagement and time displacement, addiction, and social impact on domestic interpersonal dynamics will be discussed in brief. It is the intention of this paper to contribute to a broader and more encompassing appreciation of all the risks that domestic Internet users are potentially exposed to.*

The issues of sexual abuse via the Internet, such as paedophilic recruitment and grooming of underage people, sexual exhibitionism, the delivery, trading, and requesting of illegal sexually explicit materials (pictures, videos, live video feeds etc), and even the misappropriation of online game characters for sexualised reasons, has been given much attention in the academic, professional, and general arenas of society. And this should be so. However, there is a relative paucity of knowledge with respect to other risks and dangers related to being online, and in order to encourage a wider and more encompassing range of safe Internet behaviours, a number of other areas of possible risk ought to be addressed further and investigated.

It must be made clear at this early stage that this paper in no way diminishes the importance of efforts to reduce and eliminate sexual abuse via the Internet. Rather, it is the intention of this paper to draw attention to often misunderstood or overlooked areas of online safety, and further reinforce endeavours to make being in cyberspace a safe and secure experience for people of all ages, genders, ethnicities, religions and sexualities.

It is now estimated that 90% of Internet usage occurs within the home (Lenhart, Rainie, & Lewis, 2001). However, the word 'home' may be misleading, as it is dangerous and diminishing to imagine a stereotypical home as being 'Mum, Dad, and Children'. Thus, for the purposes of this paper, it might be more helpful, inclusive and appreciative of diversity, to think of Internet safety with respect to the 'domestic' situation.

Traditionally and saliently, the Internet has received much 'bad press', both from the academic world and the popular media. Society seems to hold a fascination with the darker side of Internet usage. This fear is not unusual, and is commonly associated with emerging technologies. Gackenbach and Ellerman (Gackenbach, 1998) draw parallels between the advent of the radio and the Internet. Both technologies were developed for military use, but found their way into the public sphere, where they quickly became

difficult to limit and control. Initially, many feared that the radio would severely diminish levels of literacy, and would make the public vulnerable to political propaganda messages. Likewise, there may be a public 'fear' of the Internet, and although caution is usually a healthy perspective to take on a new technology, in the case of the Internet, the focus of fear has tended toward sexual abuse and inappropriate behaviour, when there are other areas of concern for those interested in promoting Internet safety.

The following is a brief discussion of 7 areas of potential risk to Internet users. Brevity and space restrictions prevent a more in-depth investigation into each area, and as such, the primary intention of this paper is to raise awareness to these risks. Although some of these areas may seem familiar, all are worthy of further research and consideration in terms of threats to domestic online safety.

### *Ostracism*

Cyberspace can be very inclusive. Internet users can easily join a myriad of groups and organisations, and can immerse themselves in chatroom conversations with any number of people. However, just as easily, people can be excluded or ostracised from interactions with others in cyberspace. The effects of being ostracised (excluded in the presence of others) has been well associated with feelings of sadness, anger, diminished self-worth and esteem, depression, loneliness, frustration, invisibility, helplessness, self-blame, and psychological and physiological ill-health (for a more comprehensive description of affects and sources, see Williams, Cheung and Choi, (2000)).

Williams et al (2000) conducted online research into the effects of cyberostracism. Participants in their studies were induced to believe that they were part of group game in which three people tossed an object to each other (the game was text based, rather than visual, with a written description of the toss appearing on the screen). In fact, only the participant in the experiment was 'real', and the other two players were computer generated. The experimenters manipulated the frequency of which the 'other players' tossed the object to the participant (67%, 33%, 20% or 0% of the passing of the object). Results found that participants who had been ostracised in the game reported an increase in negative mood, feeling bad, having less control, and a loss of sense of belonging in subsequent tests. Also, those who had been ostracised quit the game much earlier than others.

Interestingly, qualitative feedback from participants showed that although the actual 'game' itself was very basic, and that no information was given about the other 'players' (who were known only by a colour nickname e.g., 'purple'), participants developed identities and genders for the other players, and complex reasonings for their own exclusion. For example, one participant reported "Surely green is trying to appear nice with purple . . . I assume he 'wants' to 'please' her and disregard my feelings about her!" (p752). Thus, it would appear that some participants exhibited complex coping strategies, as well as efforts to personify unseen others, and that they did not take the situation at 'face value', but rather became very involved in creating a 'reality' for it to rest within.

Williams and Zadro (1999, in Williams et al 2000) reported that from an interview based study of long term victims of the ‘silent-treatment’ (a form of ostracism commonly experienced within a relationship) that one woman who reported being in a ‘master-slave’ relationship with a man in cyberspace, said that the ‘worst thing’ that he could do to her if she did not comply with his requests for debasing acts, was to reduce his communication to monosyllabic answers to her comments, and then cease responding at all. The woman reported a severe decrease in her self-esteem as a result of this treatment.

Williams et al furthered their findings by extending the study to include a post tossing game task in which the subject believed that they were a member of a new group of six people who had to select the correct answer for a visual puzzle. This was designed to test the participants’ willingness to conform to this new group, for after a few easy puzzles, the rest of the group (which of course was not real and was computer generated) began to unanimously get the answer wrong. Results found that participants who had been ostracised in the first task were significantly more likely to conform to the incorrect puzzle answer offered by the rest of the group in the second task. The implications of these findings are far reaching with respect to safety on the Internet. Not only might people who are excluded from others in cyberspace suffer adverse psychological and physiological affects, but also their behaviours in other groups might be affected. If those who have been ostracised are more willing to suppress their own correct judgments in order to conform and be affiliated in new groups, it might be assumed that they are more vulnerable to the pressures of others, and might be particularly sensitive to the antisocial tendencies of some online groups and religious cults (discussed below), against what would be there typical (pre-ostracised) sense of judgment.

Williams, Govan, Croker, Tynan, Cruickshank, and Lam (in press) investigated cyberostracism both in a virtual ball toss game, and also in a chat room scenario, and compared their findings with offline social ostracism. They reported that while both forms lead to significant decreases in a victim’s mood, sense of belonging, control, self-esteem and the sense of having a meaningful existence, there are subtle yet important differences between Online and offline ostracism. Their research found that cyberostracised individuals’ self-esteem and perceptions of control were not diminished to the same extent as occurred in their face-to-face experiments, and that cyberostracised participants in their laboratory-based experiments reacted in more provocative ways, making significantly more comments (often barbed and sarcastic) than socially ostracised participants (Williams et al term this as ‘virtual bravado’). Cyberostracised participants were also noted to talk out loud (although they were alone in a room with a computer), lean back on their chair, get up and move around, and persist in trying to stay in the conversation for longer than did socially ostracised participants.

The implications of these finding suggest that being cyberostracised might lead to physical as well as psychological distress, and might manifest itself in disinhibited behaviours (virtual bravado), discussed below.

### *Viruses and External Control*

Computers linked to the Internet are especially vulnerable to invasion and damage by viruses and malicious programs. Some of these programs are designed to damage their host computer by deleting critical programs, some investigate information that is stored on the computer, stealing passwords and credit card numbers, and then emailing them to another website, and others interfere with email programs and attach copies of themselves to outgoing email messages. Some viruses allow others to control the computer from an external venue, rendering the computer open for theft of material or vandalism. It is important to remember that virus victimisation is not always just random or 'luck of the draw', people use viruses deliberately against others.

It appears that concern about online security differs according to the age cohort of the user. Rossignac et al (1999) surveyed 1482 Internet users about how concerned they were with online security, and found that the percentage of participants who reported being 'very concerned' about their online security increased with age (38% of 11–20 year olds, 47.5% of 21–25 year olds, 53.7% of 26–50 year olds, and 52 % of those over 50)

My own present interview based research into online friendship (not yet published), found that young people who use the Internet are sometimes the victims of deliberate virus attack. One young woman who had been the victim of such an attack said...

“... hacking is easy....program called [program name] makes it super easy ... it let's you see whatever the person you are hacking is doing on their computer screen at that time. You can take over their mouse and keyboard and ICQ, MSN, Yahoo, [messaging programs] etc ... ya need to have the virus before you can get hacked though ... but it can be put into pics people send ya or anything ... lol [laugh out loud]”

Apart from the costly damage to computer equipment, which is often shared by more than one person living in the same domestic situation, and the inconvenience and annoyance of lost computer time, being 'hacked' can be a traumatic and victimising experience that can affect victims psychologically. Although security from virus and hijacking is becoming more topical, Lenhart et al (2001) found that 22% of their sample of 12 to 17-year-old survey participants reported sharing their email/instant messaging passwords with a friend, which suggests that younger Internet users might be more exposed to such experiences than are older users.

Another form of external control can occur in online gaming, in which users develop characters that they use in games and interactions with others. Dibbell (1993) documents a case where a malicious invader took over the online persona of a female player, making the character perform sexual acts. This has been termed as 'cyber rape'. The woman involved was very traumatised by the attack, and the review in literature has led academics to begin to address the possible impact that having a character or 'Alta ego' hijacked and manipulated. However, to date, relatively little has been written on the psychological impact of being victimised by the breach of cyber security.

## *Prejudice*

Users of the Internet can experience and suffer two particular forms of prejudice; firstly from others offline (not on the Internet) who are negative towards users of the Internet, and secondly, from others who are also online.

In my own, yet to be published research, there is evidence of prejudice against those who have online friendships. The study investigated 627 people's attitudes and perceptions of Internet based friendships. Of this sample 220 (40% of those 547 who had Internet access) said that they had personal experience of being in an Internet-based friendship relationship. Of this sub-sample, 25% reported that they had been teased or made to feel self-conscious about having an online friendship (there was no gender difference). Also it is evident that online friendships are seen to be significantly less useful on a day-to-day basis, less useful in a time of crisis, and less efficient for communicating emotion than traditional face-to-face, or telephone based friendships.

Participants in the study, particularly those without personal experience of an Internet friendship, judged characters in a fictional online friendship scenario to be significantly more lonely, and embarrassed, and less proud of their friendship. Such attitudes are not uncommon, and are likely the result of the myth and hysteria that surrounds Internet use. Such negativity, whether in jest (comments about "cyber geeks"), or of a more serious tone (that the Internet is the realm of the socially inept and the "loser") are likely the cause of lowered self-esteem and negative self-concept.

It is well known that the World Wide Web is a very difficult place to censor and control. Therefore, it is of no surprise that some of the material that one may encounter in cyberspace is objectionable and hurtful. Users of the Internet may feel prejudiced and diminished if they encounter material that attacks them or their social grouping. For example there are web sites that support and encourage; homophobia (e.g., <http://www.godhatesfags.com/>), Anti-Semitism (e.g., <http://holywar.org/>), anti-black/non-Caucasian (e.g., <http://www.kukluxklan.org/index.htm>), and many, many more (for a more comprehensive listing of hate groups on the Internet, see <http://www.bcpl.net/~rfrankli/hatedir.htm>).

People who experience prejudice, either online, or from others offline might suffer psychological trauma and distress.

## **Cults**

As mentioned above, there are many groups online who have sites dedicated to changing the attitudes of others to their own particular views. Cults are well represented on the Internet. Perhaps the most infamous example of a cult that recruited on the Internet was the Heaven's Gate cult (see <http://www.mayhem.net/Crime/cults.html> for more information). The cult was well established and also ran an Internet-based company that financed their operations. All forty of the cult members suicided in 1997. Remembering the results from Williams et al's (2000) study that those Internet users who had been cyberostracised were significantly more likely to suppress their better judgments in order to affiliate themselves and conform to a new group, this could mean that such people might be at greater risk of being recruited by an online cult. Witmeyer and Gleser (2002)

consider the effects and dangers of online cults and other groups and state “*Whether it is prurient photographs or the unchecked lure of paedophiles, sexual exposure, for many, poses the biggest Internet threat. But the fears go well beyond sex and pornography*”. They go on to discuss the arguments for and against online censorship of some online groups (but seemingly from an anti-censorship aspect).

Therefore, it is important to consider that users of the Internet might be exposed to the psychological tactics of cults online, and that there is the risk that Internet users might be recruited online. This, of course, should be of special concern to parents of young people who use the Internet, and may be more easily influenced.

### ***Rejection, and Relationship Breakdown and Loss***

Internet relationships can develop and become close and intimate very quickly. Likewise, such relationships can end very abruptly, literally with the stroke of a delete key. As with any form of offline relationship, there is always the risk and probability of deterioration and breakdown. The Internet can be used very effectively to decrease or end a relationship with another person. Lenhart et al’s (2001) study of 754 young people between the ages of 12 and 17 years found that 17% of the participants reported having used the instant messaging on the Internet to ask someone out, and that 13% had used instant messaging to break up with someone they were having a relationship with. Also, 57% of the sample reported that they blocked messages from people they did not want to hear from, and 64% have refused to reply to an instant message from someone that they were mad at.

It is logical to assume that, just as offline day-to-day relationships can affect a person’s functioning in their everyday life, so can a person’s cyber relationships. However, as discussed above, in response to negative societal views and stereotypes, many people are embarrassed and self-conscious about their cyber relationships, and thus many are kept secret from others. Lenhart et al (2001) found that 56% of the teenaged sample they surveyed reported having more than one screen name or email address. Of this group, 24% said that one or more of these alternate identities was kept ‘secret’ from others. Lenhart explains how such different secret aliases are used to compartmentalise different parts of online lives. Thus it is logical to assume that many people are having ‘secret’ relationships online, unbeknownst to those about them. Also, it is likely that in cyberspace there is not the same network density (when the people we have relationships also know each other) as is found in offline relationships. It is likely then that there is not the understanding or support available to people who are experiencing relationship related distress or breakdown in a ‘secret’ or network-isolated relationship. For example, a teenager living in a domestic situation might have an intense relationship with someone online. This relationship might not be known to parents/caregivers, and might even be forbidden or frowned upon. If this relationship were to run into difficulty or even end, the typical emotions associated with relationship trauma and loss are likely to spill over into the teenager’s everyday life, yet might not be understood or realised by others about him or her.

Rejection by others is well known to be associated with negative self-concept and diminished self-esteem. Therefore, users of the Internet who are interacting with others, even in a platonic manner, are susceptible to the negative effects of rejection and

relationship deterioration, however, the support and understanding that might be found for those experiencing comparable offline relationship trauma, is not so readily available to those who have relationships on the Internet.

### *Disinhibition*

The Internet provides great opportunity to act in ways in which we would not normally feel comfortable in doing offline. Our identity can be easily veiled and protected from others. Anonymity is a well-known antecedent to disinhibition (the relaxation of efforts to suppress antisocial and undesirable behaviours), and the Internet can afford people either complete anonymity (where a person is not recognisable online) or masked identities (where a person can assume the characteristics of another, either real or fictional). Lenhart et al (2001) found that 24% of teens they surveyed reported that they had pretended to be a different person when communicating online, and 33% had given fake information about themselves to others on the Internet. Some would argue that disinhibition might be beneficial, in that a person can speak their mind without fear of social restraint, gain information that would normally cause embarrassment (e.g. from sexual health web sites), participate in discussions and conversations when averse to doing so in a face-to-face context, experiment with other identities and personas (Gackenbach, 1998) or act in ways that do not conform to gender role stereotypes.

However, there is also the risk that users of the Internet 'regress to primitivism' (Holland, 1996), being overtly aggressive and insulting, (known as 'flaming'), or inappropriately sexualised in the communication with, and harassment of others. Flaming on the Internet is thought to occur four times more often than in face-to-face communication (Dyer, Green, Pitts & Millward, 1995 in Gackenbach 1998). Altenburg (no date available) investigated what he termed as 'online road-rage' amongst a gaming group, and lists some of the ways in which people can aggress against others in a game. For example, players can; crash a game (cause it to end), throw poisoned cookies (send requests for information that contain hidden viruses, such as 'password stealers'), and send Email bombs (that disable the keyboard of the victim).

While it is common sense to assume and believe that being the victim of such disinhibited behaviours (being flamed or abused) can have a very negative impact on a person psychologically, little is known about the effects that behaviours have on the disinhibited 'flamers' themselves.

We have all at one time or another said something to another person that we wish we had never said out loud. In cyberspace, which is nearly all text based, such comments are 'written in stone', in that they are presented in a way that can be saved and kept for all time. This can be very damaging for others to read, and regrettable for the person responsible. According to self-perception theory (Bem, 1972, in Gackenbach 1998), people conceptualise themselves and their attitudes by observing their own behaviours, thus it is an option for a person who is acting out in a disinhibited way in cyberspace to see themselves as being the same (disinhibited) personality offline, or in other online contexts. This is particularly pertinent when the Internet blurs the lines between work and home, and informal and formal social situations (Kiesler, Siegel & McGuire, 1984). Thus, the opportunity for disinhibited behaviour in one social setting 'seeping' into another in cyberspace can be disastrous!

Feelings of anonymity, coupled with disinhibited 'virtual bravado' (see cyberostracism above), can lead to a feeling of invulnerability. This in turn may lead a person to take risks that they might not consider in their offline lives. For example, a person who assumes they are completely anonymous might 'flirt' more with another person, be more extreme and damaging in their comments within an online relationship, might over disclose personal information which they later regret, or compromise their own technical security by sharing passwords or other personal details.

### *Social Disengagement and Time Displacement*

Two of the most common criticisms of the Internet are that it causes people to spend less time with others offline (disengagement), and that the time spent on the Internet is time 'robbed' from other activities, such as family time and homework (displacement). Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, and Scherlis's (1998) study of Internet use in the home reported that increased use of the Internet was associated with a decreased social circle, both locally and out-of-town, and decreased communications with family members. They also went on to associate Internet usage with increases in loneliness and depression. These findings have been quoted and regaled far and wide, in both academic literature and the media. Yet, the study was fraught with methodological problems and the claims have been refuted and aggressively challenged by others (Silverman 1999, Rierdan 1999, and Shapiro 1999).

In 2001, Kraut and Kiesler, along with others, revisited the remaining members of their original sample group and extended the study. They found that the afore mentioned negative effects of Internet use were not present, and that in fact there was evidence of the Internet's positive effects on social involvement and well-being (Kraut, Kiesler, Boneva, Cummings, Helgeson & Crawford, 2001). This might suggest a 'New Toy' effect, in that initial interactions with a newly introduced home computer or other new access to the Internet, might lead users to temporarily disengage from others while the Internet is novel and/or is relatively difficult to use.

Rossignac et al (1999) investigated the extent to which the Internet was being used in place of other activities in the home. Their study of 3291 Internet users found that on a daily basis 55.4% of the sample reported using the Internet instead of watching Television, 35.6% instead of talking on the phone, 13.9% instead of sleeping, 23.6% instead of exercising, 22% instead of reading, 17.8%, instead of doing household chores, and 8.4% instead of socializing with others (48% reported that they never replaced socialising with using the Internet). The idea that the Internet is being used to replace some activities might be both good and bad news. For example, few parents would mind their children abandoning TV for the Internet, if it was used for educational purposes. It is interesting to see that very few people report missing out on their socialising to use the Internet, and this casts doubts on the views that the Internet leads to social impoverishment.

Regardless of the arguments, there is a risk that people who use the Internet will disengage from others, and will displace time otherwise spent on other activities. This is even more likely to occur if the Internet is new, novel or cheap to access. Such a change in lifestyle might be detrimental and is therefore worthy of further consideration.

## *Addiction*

Recent years have seen a marked increase in interest in the proposition of the existence of net-based social pathologies, and in particular, Internet Addiction. Such interest is in by no means confined to academic perspectives, and there is an abundance of public, and media interest in the idea that the Internet can be addictive and habit forming. A quick look on any search engine will reveal a host of web sites dedicated to the testing, discussion and testimony of Internet addiction.

Addiction is not easily or concisely defined, and the term ‘addict’ is often misused and misunderstood. Griffiths (1996b, in Gackenbach 1998) has defined Internet addiction as a *Technological addiction*, being non-chemical, and involving human-machine interaction. Griffiths goes on to list 6 core components of such an addiction. They are; *Salience* (the Internet becomes the most important and dominant activity in a person’s life), *Mood Modification* (the Internet rewards the user with a positive affective experience, e.g., a ‘high’, ‘buzz’ or feeling of escape and tranquillity), *Tolerance* (the amount of Internet required increases in order to gain the same levels of mood modification), *Withdrawal Symptoms* (unpleasant psychological and/or physiological states when the Internet is suddenly reduced or discontinued), *Conflict* (the Internet usage interferes with social interactions and obligations, and/or employment efficiency), and *Relapse* (the tendency for previous patterns of addictive Internet use to be restored, even after long periods of abstinence). It is apparent that Internet Addiction is a serious matter and can greatly affect the lives of those addicted, as well as those around them. Lenhart et. al’s (2001) study of online teenagers found that 76% of the 754 young people aged between 12 and 17 years reported that they would miss the Internet if they could no longer go online. How might these teens react if they were to lose their Internet access, is not really well known.

Ferris (2002) investigates biomedical, socio-cultural, psychodynamic and personality variables that might contribute toward a proclivity for some people to develop an Internet Addiction Disorder (IAD), but reminds us that most people who use the Internet, even in large doses, do not become Internet addicted.

Regardless of differing views held in academia with regard to IAD, the risks of becoming Internet dependant, and the effects and impacts of such a disorder are definitely worth considering in respect to Internet safety.

### *Social Impact on Domestic Interpersonal Dynamics*

The previously discussed risks to Internet safety have largely concentrated on the threats to the safety of the individual Internet user. However, the possible negative effects of Internet usage might also affect others in the same living situation. A person who is cyberostracised, prejudiced, rejected, addicted, disinhibited or disengaged might become sad, depressed, or isolated, which could possibly cause anxiety or communication difficulties for those around them. Also, they might act out in atypical and harmful ways, hurting those who live with them. Breaches of Internet security might mean that others who share the computer also suffer costly repairs or loss of private information.

The introduction of the Internet into a domestic setting has been associated with increased levels of stress (Kraut et al, 1998, Kraut et al, 2001), and using the Internet

itself can be frustrating. Sullivan (2001) tendered the existence of “Search rage”, which is the frustration and anger caused by how long it takes to find information on an online search engine. In his study, Sullivan found that 71% of his 566 participants reported that they became frustrated while looking for information on the Internet, and that it took, on average, 12 minutes for a person to become enraged while trying to find something on a search engine. A personal colleague once said to me that he had to escape his office as he was suffering ‘Load-rage’ – the anger caused by waiting for something to download from the Internet to a personal computer, sometimes without fruition. Such Internet rages are worthy of further investigation.

The Internet in the domestic setting can also be the source of contention and conflict. Lenhart et al (2001) investigated parental and child interactions around the presence and usage the Internet within the family dwelling, and found that 40% of parents reported having had an argument with their children about the Internet. The study’s results also highlighted a discrepancy between how children and their parents viewed the use of the Internet. In the sample studied, 61% of parents reported having set rules about time spent on the Internet, however, only 37% of the teens reported that they were under such rules. 61% of parents reported checking after their children to see where they had been online, only 27% of teens believed this to have occurred. 68% of parents report that they have sat with their children when they where online, only 48% of the teens said this occurred. It is also very telling that 64% of teens and 66% of parents believe that the teen knows more about the Internet than the parent!

Therefore, it is likely that the effects of the Internet are also exposed to those in the same living situation as the actual Internet user. This means that Internet safety becomes a family or group issue. The Internet might cause significant disharmony in the domestic setting.

In summation, it can be seen that people online, and those about them, may be vulnerable to a number of threatening situations. There are likely many more not discussed here. In order to promote online safety, it is necessary to temper Internet users’ enthusiasm with a measure of caution, and this is probably best achieved through making people aware of potential risks and dangers before they encounter them for themselves. In order to educate effectively, Internet research must be ongoing, and more attention must be given to the above-mentioned areas of concern.

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