# Internet sexual offending: overview of potential contributing factors and intervention strategies

The number of Internet users globally has skyrocketed to 6,930 million in 2011 constituting 30.2 % of the world population and continues to grow day by day (Internet world stats, 2011). For example, from the year 2000 to 2011 internet use grew 480.4 % (Internet world stats, 2011). As Internet accessibility and use increase, more and more people are turning to it for sexual purposes. Sex is the number one topic searched on the Internet (Schnarch, 1997; Cooper, 1999a) accounting for 69% of spending on the Internet (Blue money, 1999, as cited in Griffiths, 2000). In addition, Ropelato reported that in the year 2007 on average 2.5 billion emails per day were pornographic (Ropelato, 2007) with 72 million Internet users visiting pornography Web sites monthly (Ropelato, 2007).

This dramatic increase in the use of the Internet for sexual purposes could be a sign of things to come. As younger generations feel more comfortable with computers and become used to obtaining sexual gratification online, the proportion of Internet sex offences will most certainly continue to rise. The fact remains that Internet sexual offending is becoming progressively more common in our society. More and more cases of Internet related sexual offences are being reported in the media, such as violent sexual crimes following online encounters (BBC News, 2003); the collection, production and reproduction of child pornography (Sydney Morning Herald, 2007a); and using the Internet for grooming children for sexual purposes (Sydney Morning Herald, 2007b). It is alarming that one in five children aged 10-17 reports having received a sexual solicitation over the Internet (Nordland & Bartholet, 2001). In addition, increased numbers of referrals to sexual offender programs for individuals who have accessed child pornography on the Internet has been reported in the literature (Burke, Sowebutts, Blundell, & Sherry, 2002).

This article examines the impact of Internet problematic behaviours on the potential for recidivism in the population of online sexual offenders. It argues for specialised treatment for these offenders and provides an overview of approaches that are currently used to treat problematic behaviours that may also be applicable to the treatment of Internet sexual offenders.

## The Internet as a facilitator of sexual offending

This growth in the use of the Internet for deviant sexual purposes has been attributed to what has been termed the 'Triple "A" Engine': Accessibility (at all times, anywhere), Affordability (as cheap as a phone call or postage), and Anonymity (the perception that one's identity is concealed and the false believe that users are untraceable) (Cooper, 1998). We believe that otherwise controlled deviant sexual impulses when manifested in cyberspace place individuals at greater likelihood of sexually offending as factors inherent in the Triple A Engine increase the chances of the individual acting upon these impulses. Indeed, for anyone who has ever been curious about illegal sexual behaviours, the Internet provides a private, anonymous and inexpensive way to explore them.

There is support in the literature for this notion that the Internet allows for more marginally deviant driven individuals to engage in illegal sexual behaviours who would not normally engage in such activities. McLaughlin (2000) reported that as a result of a 3 year law enforcement project in the United States, a group of over 200 Internet child sexual offenders were arrested with most of them being labelled 'entry level' offenders. That is, most of these offenders had not had any prior contact with law enforcement or had any known illegal contact with children. Similarly, in an evaluation of law enforcement investigations in which police officers posed as

juveniles online to catch sexual offenders, Mitchell, Wolak, & Finkelhor (2005) reported that these investigations accessed an offender group that appeared somewhat less deviant in terms of adult sexual behaviour and arrest history. Burke et al. (2002) report that individuals who access child pornography on the Internet are generally 25-50 years, better educated with higher intelligence, are more likely to be employed and to be in a relationship compared to individuals who commit hands-on sexual offences against children, and that they generally have no prior criminal background. Indeed, research conducted by Byers (1998; as cited in Quayle, Erooga, Wright, Taylor, & Harbinson, 2006) shows that many 'normal' people do engage in sexual fantasies that if acted upon would be perceived as deviant. It is possible that in a number of instances, the Internet may provide a medium for the enactment of such deviant sexual fantasies, which otherwise would remain latent.

While accessibility and affordability make it easier to explore deviant sexual behaviour online, probably the most significant factor that facilitates the enactment of deviant sexual fantasies on the Internet is anonymity (Putnam, 2000). Particular noteworthy is the argument put forward by Finkelhor (1984) that the overcoming of inhibitions is a precondition that must be met before someone can sexually offend against a child. The feeling of anonymity provided by the Internet is believed to ease external inhibitions and fears (Joinson, 1998) allowing for the individual to overcome interpersonal difficulties which in turn facilitates the expression of deviant sexual behaviours. In essence, the cloak of anonymity and a separation from physical reality facilitates deviant sexual behaviour online.

Paradoxically, the same feeling of anonymity that renders an individual more likely to engage in deviant sexual behaviours also serves to decrease the resistance and inhibition of potential cybersexual victims thus increasing their vulnerability. Reduced inhibition renders potential victims more likely to reveal themselves emotionally much faster than in the offline world (Griffiths, 2000). Internet users tend to disclose more of their emotions and their opinions facilitating a 'virtual bond' between the offender and the potential victim. Moreover, potential online sexual victims are unable to look for and detect signs of insincerity that are typically conveyed in face-to-face interactions (Young, Griffin-Shelly, Cooper, O'Mara, & Buchanan, 2000) leading to an enhanced perception of trust (Griffiths, 2000) thus increasing their vulnerability.

The combination of lower inhibitions and fears with increased potential victim vulnerability makes the Internet of particular importance for those who have difficulty obtaining desired sexual experiences, such as individuals presenting deviant sexual fantasies. Not only can potential victims be found more easily but deviant sexual behaviours can be expressed in the privacy of one's own home, without the stigma that would accompany it in the real world and with a belief that they can avoid apprehension.

It is also true that it can be argued that allowing sexual offenders to use the Internet for sexual gratification of their deviant sexual fantasies may prevent contact offences. However, as pointed out by Quayle (2006, et al., p. 61) the interaction between an offender and the Internet provides an opportunity for fantasy escalation, leading to a possible 'leakage' between online and offline activities as the Internet may serve to desensitise the user to the offence theme. It is also plausible that as the use of the Internet for sexual gratification escalates, the individual will become desensitised to one type of activity and move on to gradually more deviant sexual behaviours.

Once the online offender makes contact with a potential victim, even a very brief encounter can have disastrous consequences in relation to sexual offending as a sense of intimacy can be built unnaturally fast in cyberspace (Greenfield, 1999; Carnes, 2001). In addition, the Internet is believed to induce a trance-like state in which the individual becomes completely immersed in the virtual world (Griffiths, 2000) allowing for escalation of fantasy and imagination. This immersion in virtual realities/fantasies allows the offender to depersonalise their Internet sexual victims making them to fit the offender's own deviant internal fantasies irrespective of the victim's actual attributes and characteristics in real life. It is true that in online sexual crimes involving cyberstalking, a crime in which the attacker harasses a victim using the Internet, it is common for the stalker to have never set eyes on the victim, not having any basic knowledge about the victim such as age, gender or ethnicity (Bocij & Macfarlane, 2003).

In addition, as in a large proportion of Internet sexual crimes the victim is not seen, once a sexual offence takes place the online sexual offender may experience the illusion of the offence being victimless 'I'm not hurting anyone' is a typical response (Schneider, 2005).

## Perpetuation of deviant cybersexual behaviour

An individual's search for the ultimate sexual experience in cyberspace may follow the same pattern as gambling. Like the 'big win' in gambling, the ultimate sexual encounter may not always take place, being more likely to occur intermittently. Online sexual behaviour is then likely to become established by operant conditioning (Putnam, 2000). Operant conditioning consists of the reinforcement by reward or by punishment - when negative reinforcement patterns are encountered. As one cannot predict when the desired sexual experience – and hence positive reinforcement – will take place, Internet sexual experiences provide reinforcement in a variable-ratio

schedule reward system (Putnam, 2000). Not knowing when the desired reward will be delivered is the most powerful addictive pattern that exists, potentially facilitating the failure to resit sexual impulses despite their potentially negative consequences.

Research supports the addictive potential of online sexual experiences. In a study that assessed the predictive power of various Internet applications on the development of compulsive Internet use (CIU) Meerkerk, Van Den Eijnden, and Garretsen (2006) reported that using the Internet for sexual gratification was the most important risk factor for the development of CIU. Huberman (as cited in Griffiths, 2000) also showed that, as opposed to ordinary online users who click once or twice and leave the Web site, those who enter Internet sex sites click up to 200 times suggesting that there is, indeed, an element of compulsion related to the use of online sex materials.

Indeed, Internet addiction, a common clinical disorder, appears to have increased significantly over recent years with 'cybersex addition' being identified as a powerful subtype of Internet addiction (Young, 1997). Cybersex addicts are believed to find themselves in the Internet induced trance-like state becoming completely immersed in viewing and interacting with sexual material. It has been reported that cybersex addicts spend 15–25 hours per week online viewing and interacting with such materials (Cooper, Delmonico & Burg, 2000, as cited in Putnam, 2000). It is true that anecdotal accounts support the view that cybersex can be addictive. An undercover online investigator reported that commonly she may log on to sex-themed chat rooms and return 15 hours later to find the same people at the same site (Gammage, 2007). However, evidence goes beyond anecdotal accounts. An online survey conducted by Cooper et al. (2000) found that 1% (n = 96) of respondents were 'cybersex addicts.' That is, they reported spending 11 hours per week or more on sexual activity and obtained a score of two standard deviations above the mean on the Kalichman Sexual

Compulsivity Scale (Kalichman, S C, & Rompa, D, 1995, as cited in Cooper et al., 2000). Given that 17.8 % of the world population uses the Internet the total number of cybersex addicts must logically have reached significant proportions.

Of great concern to clinicians are the claims that a proportion of Internet sexual offenders may, indeed, be addicted to the online criminal behaviour (Griffiths, 2000). Considering that some types of Internet sexual offenders have been found to have a history of excessive Internet use, in excess of 12 hours a day (McLaughlin, 2000), the role of compulsive Internet use on offending behaviour may go unnoticed and consequently unaddressed in correctional centres where access to the Internet is restricted. However, once Internet offenders are released back into the community easy accessibility to the Internet could easily trigger back the operant conditioned behaviour.

In addition, continuous pairing of sexual behaviour with computer use is also likely to lead to classical conditioning with simple exposure to computer related stimuli being likely to result in sexual arousal (Putnam, 2000). Even in situations where the offender does not intend to use a computer for deviant sexual purposes, stimuli related to computer use are likely to lead the individual to experience the physiological response of sexual arousal. The desire to act out deviant sexual fantasies may therefore be triggered by simple exposure to computer related stimuli. A self-reinforcing cycle may then be developed and maintained by the presence of both classical and operant conditioning (Putnam, 2000). These observations highlight the importance of employing strategies for extinguishing conditioning in treatment provided to Internet sexual offenders.

## Impact of the Internet on typical predictors of sexual offence recidivism

Meta-analyses have identified a number of predictors of sexual offence recidivism (Hanson & Bussière, 1998; Hanson & Morton-Bourgon, 2005). These predictors of recidivism are generally organised into the following areas: intimacy deficits; social influences; attitudes tolerant of sexual abuse; general self-regulation deficits; sexual self-regulation. It is also possible that excessive use of the Internet may facilitate recidivism among sexual offenders by negatively affecting some of these characteristics associated with sexual recidivism. Indeed, Cooper, Putnam, Planchon, and Boies (1999b) reported that in a study of Internet users 22% of participants had engaged in online sexual pursuits that had jeopardised at least one important dimension of their lives. Below we look at some ways Internet problematic behaviours may affect these predictors.

# **Intimacy deficits**

Research supports a role for intimacy deficits in sexual offending (Marshall, 1993; Ward, Hudson, & McCormack, 1997). Lack of emotionally intimate relationships with adults is believed to place offenders at greater risk of recidivism (Hanson & Bussière, 1998). That is, one's propensity for sexual deviancy is related to inability to establish interpersonal intimacy.

It is possible that excessive use of the Internet may facilitate recidivism among sexual offenders by negatively affecting sexual offender's ability to initiate and maintain meaningful relationships in their lives. It has been established that when online sexual activity becomes problematic it can lead to withdrawal from family relationships and potentially divorce (Quittner, 1997, as cited in Griffiths, 2000). Research shows that heavy Internet users gradually spend less time with real people in their lives (Griffiths, 2000). In addition, partners of cybersex addicts report feeling

'hurt, betrayal, rejection, abandonment, devastation, loneliness, shame, isolation, humiliation, jealousy, and anger as well as loss of self-esteem' as a consequence of their partners' behaviour (Schneider, 2000, p. 38). Indeed, Young (1998a) in a study of 'internet addicts' found that 53% of 396 case studies involved relationship problems with marriages and intimate dating being disrupted due to Internet use.

The use of the Internet for sexual purposes has a negative impact on family relationships even when it is not accompanied by excessive use. It is reasonable to expect partners of those who engage in Internet sexual experiences to feel insecure irrespective of the frequency of the behaviour. It is noted that online infidelity has been claimed to have accounted for a growing number of divorce cases (Quittner, 1997 cited in Griffiths, 2000).

It is also noteworthy that the Internet may hamper the development of skills necessary for initiating and maintaining intimate relationships. Part of sexual development is dealing with complex feelings about identity, sexuality, separation from significant others, etc. When excessive absorption into a virtual world precludes one from having experiences necessary for a healthy psychosexual development, then a deficient developmental processes is likely to occur leading to inappropriate mental or emotional attitudes about sexuality.

Physical contact is a basic human need, a basic element of human intimacy. When relationships become primarily of a virtual nature and physical contact is denied, this immersion in the virtual world may not only hamper psychosexual development but may also aggravate intimacy deficits leading to greater difficulty in establishing meaningful relationships with adults.

It is also noteworthy that loneliness, a criminogenic need commonly targeted in Cognitive Behaviour Therapy for sexual offenders (Beech, Friendship, Erikson, &

Hanson, 2002) has also been found to predict compulsive Internet use (Young & Rodgers, 1998). The combination of the social effective deficit of loneliness with compulsive Internet use may indeed prove to be a potent facilitator of Internet sexual offending.

#### Social influences

Among general criminal populations, the number of criminal companions is one of the strongest predictors of recidivism (Gendreau, Little, & Goggin, 1996). Number of criminal companions is also plausibly related to sexual recidivism. Peers who support sexual deviancy have an impact on offenders' behaviour.

In the 'real world' those presenting deviant sexual fantasies would be reluctant to admit to inappropriate sexual desires due to the stigma that would accompany it. However, in cyberspace the sense of anonymity provided by the Internet and hence desinhibition (Cooper, 1998) allows for individuals to become more open about sexual deviancies. This increased contact with others openly displaying sexual deviancy most certainly serves to validate the offender's behaviour increasing the likelihood of recidivism (Burke, Sowebutts, Blundell, & Sherry).

### Attitudes tolerant of sexual abuse

The literature on sexual offending also supports the notion that attitudes or values tolerant of sexual deviancy are related to sexual recidivism (Dean & Malamuth, 1997; Malamuth, Sockloskie, Koss, & Tanaka, 1991, as cited in Hanson & Harris, 2001). For example, Hanson and Bussière (1998) meta-analysis found a modest positive correlation between deviant sexual attitudes and sexual offence recidivism.

In relation to Internet sexual offending, without a doubt, free access to a cyber subculture in which sexual deviancy is acceptable and encouraged by its members would most likely foster attitudes tolerant of sexual deviancy. Offenders are likely to internalise sexual attitudes portrayed in a cyber culture that encourages and validates deviant sexual behaviour (Young, 1999, as cited in Griffiths, 2000). These distorted attitudes ever present in cyberspace would help offenders to minimise guilt and shame by justifying their sexual deviancies.

# **Sexual self-regulation**

Self-regulation is widely accepted as potent risk factors for the general sexual offenders. As put by Hanson and Harris (2001), 'Impulsive behaviour is so common among offenders that some theorists have proposed that "low self-control" is the essential element of all criminal behaviour' (Gottfredson & Hirschi, 1990).

Poor self-control can also have powerful influence on sexual recidivism among Internet offenders. Those displaying high levels of impulsivity will commit sex offences given the opportunity. Internet sexual offenders are constantly subjected to the potential powerful absorption of the Internet. Theoretically, 24-hour continuous access to the Internet has the potential to stimulate cybersexual crimes among those predisposed to impulsive behaviours. In contrast to hands-on sexual offenders, the Internet sexual offender upon return to the community is able to access any computer site from any location. When confronted with the prospect of immediate reinforced deviant sexual acts in cyberspace the impulsive online sexual offender may not have the skills to enable them to deliberate.

Hence an offender's deficient self-control ability would be further undermined by the ever-present availability of opportunities for access to the deviant sexual theme in cyber space. In addition, as seen above, online sexual behaviour is likely to become established by operant conditioning (Putnam, 2000). Not knowing when the desired reward will be delivered is the most powerful addictive pattern that exists, potentially aggravating deficits in sexual self-regulation and further increasing the likelihood the individual will fail to resit sexual impulses. In animals this pattern is the slowest to be extinguished when the rewards are withdrawn (Schneider, 2005).

## **General self-regulation deficits**

Apart from difficulties related to sexual self-regulation, a sexual offender may also experience difficulties with general self-regulation. When self-regulation mechanism is deficient sex is often used as a regulatory mechanism to provide an escape from negative emotions and everyday problems.

Indeed, negative emotions and stress are implicated in sexual recidivism being acknowledged as common triggers for sexual offending (Pithers, Beal, Armstrong, & Petty, 1989). However, what actually appears to predict sexual offence recidivism is the mechanisms sexual offenders use for regulating their emotional and sexual feelings (Hanson & Harris, 2001).

There is some evidence in the literature supporting the notion that deviant sexual behaviour is often used as an emotional self-regulatory mechanism. Studies demonstrate that sexual offenders are most likely to engage in deviant sexual fantasies following stressful events (McKibben, Proulx, & Lusignan, 1994; Proulx, McKibben, & Lusignan, 1996). Of great importance to our understanding of Internet sexual offending are the findings that negative emotional states are common precursors to reoffence (Pithers, Kashima, Cumming, Beal, and Buell, 1998; Hanson and Harris, 2001) and that sexual offenders are more likely to have deviant sexual fantasies when

they feel the most upset (McKibben, Proulx, & Lusignan, 1994; Hanson and Harris, 2000).

The sexual gratification Internet users experience online also serves to provide an emotional or mental escape from negative emotional states, this, in turn, further reinforces compulsive online sexual behaviour (Young, 1998b). In addition, it is also possible that life events resulting from dysfunctional Internet use such as potential family and peer problems, loss of employment, or exacerbation of psychological problems may contribute to enhance negative emotions caused by daily life stressors. Aggravation of negative emotional states is then likely to lead the individual to seek more potent online sexual gratification to temporarily remove these unpleasant feelings making him/her more vulnerable to re-offending. Indeed, this cycle of reinforcement of internal sexual gratification can be very powerful. The offender may then find himself/herself in an online high-risk behaviour cycle in which negative emotional states trigger deviant sexual fantasies and compulsive Internet use for sexual gratification which in turn facilitates continued Internet sexual offending.

An Australian example of the compulsive use of deviant cybersex to regulate negative emotions was reported in the conviction of a New South Wales crown prosecutor for downloading child pornography. He based his defence on the claim that he was looking at child pornography because of an Internet addiction (News, 2007a). He argued that downloading child pornography was a compulsion similar to gambling that was caused by a depressive illness (News, 2007b).

In instances where the Internet sexual offender has identified excessive Internet use as a trigger to deviant sexual behaviour and is actively trying to manage and control it, once he/she engages in excessive Internet use, he/she most likely will experience what is known as the abstinence violation effect (Marlatt & Gordon, 1985; Ward, Hudson

& Keenan, 1998). The guilt and negative affect that result from the discrepancy between the individual's self-image as someone who no longer engages in excessive Internet use and the subjective feelings of loss of control may further contribute to the individual pursuing deviant Internet sexual behaviour as a way of coping with such negative emotions.

Moreover, if as indicated by current studies that the population of Internet sexual offenders includes a significant proportion of 'marginally deviant' driven individuals (Mitchell et al., 2005; McLaughlin, 2000), one would expect some of these individuals to experience negative emotional states as a result of their deviant sexual behaviour, i.e. negative post-offence feelings. Indeed, Schneider et al. (2005) points out that what is so hard to understand about cybersexual disorder is that individuals may act out in ways that they themselves find 'disgusting', ways that are 'against their own ethics and principles' (p.128). Again, the sense of shame that may result from these experiences may lead the individual to continue compulsive use of the Internet for sex as it temporarily removes such unpleasant emotional states.

Also, employment status, a measure of lifestyle stability which is also implicated in self-regulation and consequently sexual offending (Hanson & Harris, 2001), can be affected by inappropriate Internet use as those who use the Internet at work for sexual purposes are at greater risk of dismissal. In a survey of 1,500 companies more than 30% of companies reported having terminated employees for inappropriate use of the Internet (Websense, 2000, as cited in Case & Young, 2001). In addition, excessive internet use may also lead to the development or exacerbation of psychological problems (Beard, 2005), another factor that may be implicated in sexual offending (Craig, Browne, Stringer, & Beech, 2005).

## Cybersex as an impulse control disorder

The Internet provides an escape from negative emotions and everyday problems just like all impulse control disorders do, such as alcohol abuse or illicit drug use (Orzarck, Voluse, Wolf, & Hennen, 2006). It has been argued that cybersex compulsivity or addiction involves most of the same cognitions and behaviours as other forms of more well known addictive or compulsive behaviours, such as alcohol abuse and pathological gambling sharing similar diagnostic criteria (Orzarck et al., 2006). Interestingly enough, those who have had serious gambling problems with poker machines report that these machines also induce a trance-like state, known as 'the zone' (Holmes, 2007), bearing striking similarity to compulsive Internet use. This similarity between dysfunctional cybersex and other compulsive and impulse control disorders, especially gambling, may have implications to the development of intervention strategies for reducing recidivism among Internet sexual offenders.

In the course of their treatment outcome study, Marques, Weideranders, Day, Nelson, and van Ommeren (2005) conducted a comparison between treated subjects who were or were not intoxicated at the time of their instant offence and found that treated subjects who were intoxicated when they were offending had a significantly lower subsequent recidivism rate (12.1%) compared to treated subjects who were not intoxicated while offending (28.6%). This suggests that the provision of substance abuse treatment was an effective element of their programme. Similarly, we expect that a programme that promotes effective management of Internet use may indirectly reduce rates of online re-offending.

It has been claimed that treatment modalities developed from treating other addictions are applicable in treating problematic cybersex behaviours (Ozarck and Ross, 2000). Simple methods of treatment already exist in areas of addictions and

compulsive and impulsive behaviours that could be adapted to the treatment of Internet sexual offenders.

## **Treatment strategies**

The continuous availability of the Internet with the prospect of immediate reinforced deviant sexual behaviour may render offenders vulnerable to Internet sexual recidivism, especially if they do not possess skills that would enable them to deliberate. Internet sexual offenders may need to be equipped with skills and capabilities necessary for protecting themselves from high-risk situations in the unique online environment. Although treatment offered to sexual offenders appears to reduce rates of re-offending, it is reasonable to argue that providing Internet sexual offenders with such skills will further reduce the risk of re-offending.

Given the pervasiveness of the Internet in modern society, total abstinence of computer use is not likely to be the best approach for Internet sexual offenders. It is true that the Internet is now a well established part of everybody's life and it is reasonable to believe that learning to use it responsibly and appropriately may reduce Internet sexual offenders' likelihood of re-offending.

In any intervention for online sexual offenders, it is important to recognise that The World Wide Web may perform important functions in the offenders' lives and that not every online sexual offender will be in a state of readiness to give up high-risk Internet behaviours that render them more vulnerable to re-offending. Hence Internet sexual offenders may benefit from programmes designed to facilitate movement through the change process. Offenders may need assistance to make the choice to use the Internet appropriately and to realise that it is possible to use the Internet without engaging in potentially harmful behaviours. As in the treatment of other problematic

behaviours, offenders would profit from having their awareness raised about the consequences of maladaptive Internet use in order to secure commitment to change or to maintaining appropriate use. The myth of anonymity needs to be effectively disproved and the consequences of engaging in high-risk online sexual behaviour made salient with law enforcement operations aimed at monitoring the Internet fully covered and discussed. This should include the creation of the Virtual Global Taskforce – a collaboration between Interpol and law enforcement agencies in Australia, Britain, Canada and the United States against online child sex abuse.

Clinicians may also choose to use psychometric instruments to assess the appropriateness of the offender's Internet use and to discuss the results with the client. In addition, online sexual offenders will need to assess the role of the Internet on their own sexual offending. Being aware of the underlying patterns of Internet use that may lead to illegal sexual behaviours can make intervention strategies more effective and help predict approaching offending behaviour. After identifying high-risk Internet behaviours clinicians may expect the offender no longer to engage in such behaviours. The emphasis then may need to be shifted to equipping the offender with behavioural and cognitive strategies that will assist him/her in preventing re-offending.

As seen previously, together with anonymity and affordability, the easy accessibility of the Internet is acknowledged as one of the factors contributing to the expression of deviant online sexual behaviour. Based on the premise that there is a strong correlation between prevalence of behaviours and increased access to the activity (Griffiths, 1999, as cited in Griffiths, 2000) offenders may benefit from encouragement to restrict access to Web sites they have identified as high-risk. They may need to be introduced to software packages that block access to sexually explicit materials as well as materials containing keywords defined by the users and to

Internet Service Providers that also prevent access to adult materials. The benefits of these software packages may need to be made salient not only in terms of inhibiting access to 'high-risk cyberspace' but also as a warning signal when one is beginning to lapse into 'high-risk' online behaviour. Clinicians may need to refrain from persuading the Internet sexual offender to use the software. Instead, as in motivational interviewing (Miller, 1983), it may be more productive for clinicians to seek to evoke this decision from participants themselves.

What must be acknowledged is that like with other compulsive and impulsive behaviours, certain situations and environments where the individual is likely to engage in high-risk Internet behaviours may acquire the power, by the conditioning process, to elicit urges and ideas to engage in high-risk behaviours. This is a phenomenon known as 'cue exposure.' In the treatment of Internet sexual offenders, stimulus control techniques may need to be discussed to reduce the triggers' power to evoke maladaptive Internet use. In addition counterconditioning, replacing one conditioned response with a new, more beneficial conditioned response, may also need to be an integral part of the treatment programme. This would require the offender to plan alternative behaviours that are antagonistic to high-risk Internet use but also meet the needs that inappropriate Internet use may have fulfilled.

Again, software packages that block access to sexually explicit materials can be instrumental in weakening the linkage between the Internet (stimulus) and sexual arousal (conditioned response) which is likely to have been established after continuous pairing of sexual behaviour with the Internet. Once the use of the Internet is no longer paired with sex, computer stimuli will be less likely to trigger sexual arousal making it easier for the Internet offender to resist sexual impulses.

As research shows that compulsive Internet use and sexual offending are correlated with negative emotional states, alternative ways of dealing with stress and other negative emotions must be an integral component of intervention strategies for online sexual offenders. Those who use the Internet to manage negative emotions may lack the skills with which to cope with intense negative feelings so they are likely to cope with them by engaging in high-risk Internet use. This, in turn, renders them more likely to engage in illegal sexual behaviours.

Strategies specific for building Cybervictim empathy also need to be part of intervention strategies for online offenders (Burke, Sowebutts, Blundell, & Sherry). The literature reports that it is common for the Internet sexual offender to demonstrate poor empathy for their victims as they perceive them as just 'virtual' (Schneider, 2005; Griffiths, 2000). Strategies may need to be used to assist Internet offenders to accept that pictures and people in cyberspace are human beings. Cybervictims' accounts and the provision of Internet sexual crime scenarios may need to be used in treatment including scenarios in which the offender uses computer generated images of children. The offender needs to come to the realisation that they are indeed hurting people whenever child pornography is involved. For instance, in the case of computer generated images of child pornography, they need to realise that even if images are computer generated it fuels the demands for more images of sexual abuse of a child, which in turn will lead to more abuse (Quayle et al, 2006).

Given the willingness and the necessary skills to maintain appropriate Internet use, Internet sexual offenders could plausibly go through their entire lives never having gone back to their previous maladaptive pattern of Internet use. However, as is usual in any treatment, relapse prevention will also need to be an integral component of the treatment of Internet sexual offenders. If powerful stressors are present at a critical

time, any person will be more inclined to return to maladaptive patterns of Internet use. Lapses (high-risk Internet behaviours) will need to be discussed in any treatment and seen to be both expected and workable problems (Marlatt and Gordon, 1985) with strategies for recovering from lapses and resuming appropriate behaviours fully addressed and discussed.

It must also be recognised that the Internet has posed new challenges for clinicians treating sexual offenders in general and that the assessment of Internet problematic behaviours requires special knowledge and skills. In addition to the development of intervention strategies specific for Internet sexual offenders, clinicians need to be familiarised with the role of the Internet in sexual offending and introduced to assessment tools for use with this offender group. For example, as Cybersex Addiction is now widely accepted as a clinical disorder affecting a significant proportion of Internet users, clinicians would benefit from assessment tools and skills to enable them to identify offenders whose patterns of Internet use is of a compulsive nature as these offenders may profit from specialised treatment for addiction. Such skills would assist them not only in treating Internet sexual offenders, but also in conducting relevant clinical evaluations and in advising those responsible for law enforcement capably.

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