Will Silk Road unravel prohibition? Internet content regulation, public drug websites and the growth in hidden internet services

Monica J. Barratt
National Drug Research Institute, Curtin University, Melbourne, Australia
m.barratt@curtin.edu.au

Abstract

Drug-related content has been historically targeted by governments for censorship, both in traditional formats (e.g., books, films) and online. In this paper, I explore internet content regulation from a drug-policy perspective by describing the potential impacts of censoring public drug websites and the parallel growth in hidden internet services. The proposed Australian internet filter would block websites that ‘depict, express or otherwise deal with matters of… drug misuse or addiction’ and/or ‘promote, incite or instruct in matters of crime’. My PhD research found that websites that would likely be blocked by the filter contributed positively to harm reduction. Large moderated public forums helped people access more comprehensive and relevant information than was available through their offline networks. Blocking these websites is likely to drive drug discussion underground. Additionally, the rising popularity of corporate-controlled ‘walled gardens’ (e.g., Facebook) and proprietary operating systems (e.g., iPhones, iPads) may also drive drug discussion further underground. In response to these trends, online drug marketplaces like Silk Road have emerged as hidden internet services, which are not affected by internet filtering. The inability for any government to regulate Tor websites and the crypto-currency Bitcoin poses a unique challenge to drug prohibition.

Will Silk Road unravel prohibition? Internet content regulation, public drug websites and the growth in hidden internet services

The internet is often understood as a democracy-building technology that offers voiceless people the chance to be heard in a public arena (Leaning, 2009). The civil uprisings in the Middle East and North Africa in 2011 demonstrate how internet-enabled devices can facilitate democratic expression even for people living under restrictive regimes (Al Sharekh, 2011). Yet, around the world, nation states are attempting to implement greater regulation of internet content (Akdeniz, 2010; Koumartzis & Veglis, 2011). Drug-related content is one domain that has been historically targeted by governments for censorship (Jaehrling, 2010), both in traditional publication formats (e.g. books, films) and the internet. The internet has facilitated the sharing of detailed drug-related information and alternative drug policy options by people who are able to remain relatively anonymous (Barratt, 2011; Murguía, Tackett-Gibson, & Lessem, 2007; Walsh, 2011). Depending on how authorities categorise these materials, they may be subject to censorship due to their potential to instruct in or incite criminal activity. Additionally, the rising popularity of corporate-controlled ‘walled gardens’ (e.g., Facebook) and proprietary operating systems (e.g., iPhones, iPads) also restricts the scope of online drug discussion (Arthur, 2012; Grim, 2010). In this paper, I explore internet content regulation from a drug-policy perspective by describing the potential impacts of censoring public drug websites and the parallel growth in hidden internet services, including the anonymous online drug marketplace Silk Road.

The internet and democratic action

As well as being understood as a tool for consuming information and buying products, the internet has been hailed as a tool for spreading democracy. The internet is generally understood as “a media form that specifically affords opportunities for the restoration of democracy or of resistance” (Leaning, 2009, p. 105). Leaning locates this claim within two contrasting philosophical frameworks: liberal democratic and radical democratic. Within a liberal democratic framework, the mass media is considered to have a key role in critiquing the activities of the state and guarding the interests of the citizens, while the public sphere is seen as a site for the legitimate expression of opinion. The internet is seen to offer an opportunity for non-institutional and non-corporate individuals to add their voices to public life. In contrast, the radical democratic position contends that, rather than critiquing the activities of government, mass media actually serve to legitimate and reinforce the state and that the public sphere systematically disallows minority and alternative voices. From this perspective, the internet can be a radical media only if “it affords true anti-systemic action, the articulation of contrary identities and the production of media content outside the normal spheres of action” (Leaning, 2009, p. 106).

Leaning cautioned against non-critical acceptance of the internet as inherently democratising, yet shows how its use in particular circumstances may enable radical democratic action. The internet appears to offer ordinary people a tool through which they
can consume, produce and disseminate information that may run counter to dominant discourses, in contrast to traditional forms of mass media where content is centrally produced and distributed to a mass of media consumers. This trend towards the merging of producer and consumer/user has been defined as ‘produsage’ by Bruns (2006). Key examples of produsage that have been facilitated by internet use include Wikipedia, a collaborative online encyclopaedia that anyone can edit (Fallis, 2008), and the open source software movement that promotes free rather than proprietary software (Bretthauer, 2002).

This decentralisation of power through internet usage has also been identified by medical doctors who describe how patients consult online information about health conditions and are no longer reliant on the doctor as the sole expert (Eysenbach, 2008). The decentralisation of power and democratisation of information was also described by Bakardjieva (2005) in her ethnography of how people used the internet in their everyday lives. Most of the people she studied had “become lay researchers willing to make informed decisions on matters of daily life and were aware, thanks to the Internet, of the wide range of alternatives available” (p. 194). Online networks also appear to be more useful for gaining new information than physical-community networks, within which social ties are more closely bound (Boase & Wellman, 2006; Wellman & Gulia, 1999). Although increased participation in public spheres is enabled by internet technologies, Leaning’s critique warns us to not assume that such participation will necessarily be part of radical action. The capacities of the internet are contingent on societal factors that constrain and enable actions that may contribute to increased participation, power and democracy across citizen groups, including drug users.

The regulation of media content in Australia

Under current Australian law, both traditional and online content can be refused classification. Lumby, Green and Hartley (2009) list the types of content, which include ‘instruction on drug use’. The definition of refused classification in the Classification (Publications, Films and Computer Games) Act 1995 (Cth) is broad and relies on an evaluation of whether the material would ‘offend against the standards of morality, decency and propriety generally accepted by reasonable adults’. Media that ‘depict, express or otherwise deal with matters of… drug misuse or addiction’ and/or ‘promote, incite or instruct in matters of crime’ may be refused classification, subject to the extent to which they would ‘offend reasonable adults’. These laws indicate that print publications, films, games and online content deemed to instruct in or promote drug use can be currently banned in Australia. For example, the book *E for Ecstasy* (Saunders, 1993) was seized by Australian customs due to its drug-related content (Saunders, 1997), and *PIHKAL: Phenethylamines I have known and loved* (Shulgin & Shulgin, 1992) was also refused classification in Australia (“Expert opinions”, 1997).

In the context of drug prohibition prior to the mid 1990s, many authors who publicly disseminated drug-use instructions did so without identifying themselves in an effort to avoid negative legal and social consequences. For example, instructional materials in cannabis cooking, growing and use were published pseudonymously in the late 1960s and
early 1970s, including *The super grass grower’s guide* by ‘Mary Jane Superweed’ and *The hashish cookbook* by ‘Panama Rose’ (Jaehrling, 2010), while in the 1980s, ‘Uncle Fester’ published the infamous *Secrets of methamphetamine manufacture*, which is now in its 9th edition (Fynes-Clinton, 2009). Not long after the public began using the World Wide Web in the mid-1990s, media reports of websites distributing detailed instructions in drug use began to surface (Jenkins, 1999). Early use of the internet progressed in a largely unregulated fashion, and during this time, many websites that provided detailed instruction in drug use were created (Murguía, Tackett-Gibson, & Willard, 2007). The internet has facilitated drug-related publication through: enabling anonymous publication; offering the capacity to host sites in countries with less restrictive censorship laws yet still make content available in other countries; and the relative ease and low entry barriers of maintaining websites and participating in collaborative online projects and communities.

While it is still easier to publish online than in print, increased government regulation of internet content and increased use of proprietary websites and devices have reduced the ease by which instructional drug-related content can be published online. The Australian government has proposed legislation mandating that Internet Service Providers (ISPs) block all websites hosting refused classification content (Bennett Moses, 2010). According to the Australian Communications and Media Authority (ACMA), refused classification content includes ‘child abuse and child sexual abuse material, depictions of bestiality, material containing excessive violence or sexual violence, detailed instruction in crime, violence or drug use, and/or material that advocates the doing of a terrorist act’ (ACMA, 2011, emphasis added). Presently, online content that is brought to the attention of the ACMA can be refused classification, but only websites hosted in Australia can be issued with a notice forcing them to shut down. Website owners can easily bypass these laws by hosting their websites in other less restrictive countries. Under the proposed legislation, ISPs would be required to block all websites that meet the definition of refused classification (Bennett Moses, 2010). Although this policy has been promoted as a method of reducing access to child pornography, independent reports assessed that the legislation could also be used to block drug harm minimisation websites (Crawford & Lumby, 2011; Lumby, et al., 2009).

In addition to government intervention, the increased use of proprietary websites (e.g., Facebook) and devices (e.g., iPhone, iPad) places restrictions on individual efforts to remain completely anonymous and on the type of content allowable for use on that website or device. For example, both Facebook and Apple have been accused of censorship through removing drug- and sex-related content (Diaz, 2011; Grim, 2010). The increasing popularity of Facebook and Apple products may have reduced freedom of expression on the internet by subjecting content to opaque rules made by corporations (Halliday, 2012).

Notwithstanding these developments, the internet continues to be used as a tool of resistance in the face of dominant pathologising drug discourses (Walsh, 2011). Boyer, Shannon and Hibert’s (2005) ‘innovative drug users’—who learnt drug practices through websites, applied new knowledge, then disseminated it through online networks—offer an example of
folk pharmacologies\textsuperscript{1} produced through online communication. In Tackett-Gibson’s (2008) analysis of discussion about the drug ketamine in a public online forum, group members debated the validity and the meaning of both the drug experiences of other members and the published research about ketamine risk. These drug users developed their own ‘lay person’ evaluations of the risks and benefits of ketamine use, with internet forums providing the means or setting for this to take place. Boyer et al. and Tackett-Gibson’s studies indicate that the folk pharmacologies also occur in online environments and are facilitated by the use of online communication technologies. These peer-reviewed studies are supported by two Australian reports that investigated online ‘party drug’ discussion (Webster, 2005; Whiteaker, 2004). They found that drug-using peers exchanged information and experiences in public online forums, often for the purposes of reducing the possibility of experiencing drug-related harm. Like Bruns’ ‘produsers’, these drug users consumed and produced information in a collaborative fashion, not unlike the online collaborators of Wikipedia and Open Source.

**Use of the internet by drug users**

Most evidence suggests that illicit drug use is increasingly occurring in an environment saturated with internet technologies. About 28% of Australians aged 20 to 29 years and 25% of those aged 18 to 19 years reported the use of any illicit drug in the past 12 months in the most recent National Drug Strategy Household Survey (Australian Institute of Health and Welfare (AIHW), 2011). These young adults were more likely to report recent drug use compared to both younger (14% of 14–17 year olds) and older (19% of 30–39 year olds; 13% of 40–49 year olds) groups (AIHW, 2011). The most recent Australian Bureau of Statistics (ABS) data indicate that young adults, who are the most likely to use illicit drugs, report high levels of internet access: over 94% of Australians aged 15 to 34 years reported internet use in 2010–11 and almost all of this use occurred regularly (either weekly or daily) (ABS, 2011). People who use drugs are also increasingly reporting the internet as an important source of drug-related information (Gascoigne, Dillon, & Copeland, 2004; Johnston et al., 2006). In contrast to this general trend, ecstasy users recruited at dance events in 2006–07 in three Australian cities reported either never (45%), rarely (33%) or sometimes (13%) accessing the internet for drug information (Bleeker et al., 2009).

My PhD research involved engagement with the users, moderators and administrators of 40 internet forums where drugs were discussed in Australia (Barratt, 2011). I recruited 837 drug users who recently participated in online drug discussion to complete an online survey, and 27 of these respondents also completed in-depth qualitative interviews (Barratt, in press). Their median age was 22 years ($M = 23.6$, $SD = 6.2$, range 16–51 years) and 71% were male ($N = 837$). Over the 18 month data collection period (2007–08), I also engaged in online participant observation and saved records of interactions between drug users in public

\textsuperscript{1} A ‘folk pharmacology’ or ‘lay epidemiology’ is a model of drug use knowledge and practices developed by drug users themselves. The development of folk models of pharmacologies is of increased importance for drug users given the lack of formal regulations for safer drug use, the absence of which is the result of the dominance of the pathology model and the associated policy of drug prohibition.
internet forums. To better understand how forums were run, I also approached forum moderators and administrators and engaged them in discussions about how they deal with drug-related content on their websites.

I asked survey respondents whether they had searched or browsed different types of websites or online forums in the past 6 months. As shown in Figure 1, pill report websites were the most commonly reported (82%). Over half of those who reported accessing websites for drug information reported use of Wikipedia (56%), other drug harm reduction websites and forums (56%), and Google or other search engines (54%). Half the sample (50%) reported accessing dance or music websites and forums to obtain drug information. Other website types, including government websites, were considerably less popular. These findings are consistent with Bleeker et al. (2009). The internet users among Bleeker et al.’s more mainstream group who were recruited at dance party events nominated similar websites.

Figure 1. Websites/forums searched or browsed for drug information in the past 6 months (N = 778)

**Harm reduction through online drug discussion**

Almost all survey respondents (88%) had read or participated in online discussion for the purposes of reducing harm. This category included ‘learnt how to use drugs more safely’ and ‘learnt how to avoid bad experiences with drugs’. A similar proportion of the sample (80%) reported reading or participating in online discussion for the purposes of enhancing effects.
This category included ‘learnt ways to enhance drug effects’ and ‘found out about new ways to get high’. Only 20 respondents who reported seeking information to enhance effects had never engaged in harm reduction. This group represented just 3% of all respondents who had ever tried to enhance drug effects through online research. These results indicate that internet forums play an important role in harm reduction practices by reaching people who seek to enhance their drug experiences.

According to the qualitative interviews, the main advantage of using online forums to discuss drugs was accessibility. For example, ‘collective responses’ were given more weight than the opinions of individuals when gathering information (e.g., ‘if it’s online, you’re more likely to get a collective response’). The benefits of online drug discussion were often set in contrast to other sources of drug information such as friendship groups, which were usually described as limited by lack of expertise (e.g., ‘Online you can talk to a diversity of people... offline you generally get to talk to some pretty ignorant people’). The importance of accessing other drug users was also mentioned (e.g., ‘Here are people who have also been through what I have’). Accessing a wide variety of people, experiences and opinions was also highly valued (e.g., ‘I could talk to guys in pubs all my life and still never find one person who’s heard of 2C-B’). The other advantage of the internet for discussing drugs was perceived anonymity of accessing the information and interacting with people online. Interviewees described how online drug discussion protected them from divulging their own use of drugs to people in their everyday lives, whom they believed would be more likely to pass negative judgement or stigmatise them (e.g., one interviewee said he would be ‘scared of people judging’ if he were seen ‘walking into’ a ‘centre in the street with all this info’).

In terms of which drug practices were affected by online drug discussion, I classified interviewee responses into eight categories (from most to least popular): (1) trying new drug types; (2) dosage; (3) content and purity; (4) combining and mixing; (5) settings of use; (6) methods of use; (7) preparing and extracting; and (8) drug sourcing and access. Consistent with concerns that some authorities have about the internet, most interviewees discussed discovering drugs they had not heard of through the internet, (e.g., ‘It’s definitely taught me about some more obscure drugs which has led me to find them and try them’). Typically, interviewees described finding out about new drug types online as a trigger for their curiosity, although there were also cases where interviewees described avoiding particular types of drugs after researching them online. Only three of 27 interviewees mentioned finding out about how to access drugs online.

All public internet forums I accessed were moderated, usually by volunteers. In some cases, moderators aimed to ensure that content reflected a harm reduction ethos of moderate and informed drug taking, while in others, any drug discussion that involved instructions or personal admissions was prohibited (e.g., ‘if someone just wants to get high or looking for a quick buzz they get called out pretty quickly’). Moderators also referred forum users to trusted information sources or invited experts (ambulance officers, drug educators) to answer drug-related questions. Forum rules also prohibited people using the forums to source drugs and people who did so were usually warned or banned from using the forums.
Potential impacts of blocking public drug websites

Numerous popular international drug websites are likely to be refused classification under the proposed Australian internet filtering policy. Pillreports.com contains information about the content and purity of pills sold as ecstasy, as well as stories from users about their experiences and interaction between users that could be classified as instructional or promotional. Drug harm reduction websites, including Erowid.org and Bluelight.ru, contain explicit instructional materials, including instructions developed by drug users about the most effective and safest ways to consume drugs, and personal narratives detailing drug experiences designed to assist and educate other drug users. These international sites are not currently affected by Australia’s classification system. If the proposed ISP-level filtering system was adopted using the current definition of refused classification, these sites could be added to the blacklist.

Such action could have negative consequences. Instructional drug discussion and information is likely to further move from public to private channels of communication. Most Australians will have limited or no access to: archives of peer-generated drug information, anonymous social support, official rules and social norms that regulate discussion, and wide and varied voices not otherwise accessible through real-world networks. Furthermore, blocking websites where people discuss drug use will hamper efforts to monitor drug users in order to produce interventions that are responsive to new drug trends. This action will also remove the possibility of engaging with online communities to produce better public health outcomes (see Barratt & Lenton, 2010).

Developments in the Australian internet filter policy

In 2010, the government delayed introducing the legislation to enable mandatory ISP-level filtering of refused classification content until the scope of refused classification content was reviewed by the Australian Law Reform Commission (ALRC). In February 2012, the ALRC (2012) completed its review of the National Classification Scheme, including within its investigation a consideration of the scope of refused classification. In our submission to the ALRC review (National Drug Research Institute, 2011), we argued for consideration of drug-related content from a public health perspective and showed how online drug discussion engaged in for the purpose of reducing the risks of drug use would be blocked under the proposed filtering policy. The ALRC commissioned a pilot study into community attitudes towards media content and found that content depicting drug use was rated the least offensive by community participants (ALRC, 2012). The ALRC recommended that the scope of refused classification of content that ‘promotes, incites or instructs in matters of crime’ be confined to ‘serious crime’ and that the category ‘detailed instruction in the use of proscribed drugs’ be reviewed altogether. Should the refused classification category remain and if the ISP-level internet filter were to be implemented, they recommend that only content classified into the more serious categories of actual child sex abuse and actual sexual violence be filtered (ALRC, 2012). While the review was underway, the three largest ISPs in Australia implemented a voluntary internet filter that blocks Interpol’s blacklist of the “worst
of the worst” child abuse websites (Taylor, 2012). As recently as March 2012, Communications Minister Stephen Conroy reiterated the government’s intent to implement a mandatory filtering system, but it is unclear how the government will respond to the ALRC’s recommendations to narrow the definition of refused classification (Taylor, 2012).

The regulation of internet content in Australia illustrates the unforeseen intersections between internet policy and drug policy. The classification of books, television and cinema was based on a model where a classification board could read or view the material and make a judgement as to its suitability for specific audiences. Internet content cannot be accurately conceptualised as a one-way communication tool and is therefore much more difficult to classify. A consequence of these attempts to regulate the public internet is movement towards use of private networks and the hidden web.

**Hidden internet services**

Figure 1 showed that private internet forums were seldom used by a sample of internet-savvy drug users in 2007–08. Five years later, drug websites accessible only through the ‘dark’, ‘deep’, ‘invisible’ or ‘hidden’ web are emerging. Hidden internet services can only be reached through the use of clients such as Tor (Tor Project, 2011) that anonymise the IP address of the internet user (the electronic address assigned to each computer on the internet). Tor hidden services are not indexed by search engines nor are they likely to be accessed by novice internet users. The combination of hidden internet services with the emergence of the decentralised international crypto-currency Bitcoin (Bitcoin, 2011) has enabled the building of completely anonymous online marketplaces where illicit drugs are bought and sold across international borders. Tor and Bitcoin are both open source and free to download.

Activity on the hidden web resembles how the internet used to be in the mid 1990s, when there were few internet users and the space was experienced as an ‘unregulated frontier’. Even though the web was ‘public’ in those days, monitoring was less pervasive and search indexing was less comprehensive, therefore people could talk more openly about drugs as described by Jenkins (1999). As the internet has become essential to our everyday lives, governments across the world have sought to regulate the public internet, monitoring is pervasive, and search engines can reveal a large archive of material. The rise of the hidden web can be understood as a response to the mainstreaming of the public web.

Silk Road is the most well-known online marketplace hosted in the hidden web. It was first described by Gawker in June 2011 (Chen, 2011). The front page of Silk Road looks a lot like the websites Amazon or eBay (see Figure 2). Drugs are available for sale under the following categories: ecstasy, cannabis, dissociatives, psychedelics, opioids, stimulants, benzodiazepines and other. Buyers rate sellers and provide comments about the quality of their products, how fast they ship, and their level of professionalism and discretion. Trust in sellers is built on reputation. Silk Road is international in scope, representing buyers and sellers worldwide. Australian drug users and sellers are increasingly utilising Silk Road in
order to bring overseas-manufactured drugs into Australia through the postal system and to
sell drugs from within Australia to other Australian buyers (Ormsby, 2012). While buying
drugs online is not new, Silk Road’s use of encrypted electronic currencies and the hidden
web increase its attractiveness to drug market participants and make it more difficult for law
enforcement to shut down.

Figure 2. The front page of Silk Road (March 2012)

Will Silk Road unravel prohibition?

As reviewed earlier, we cannot assume that the internet will necessarily facilitate radical
action (Leaning, 2009). Nevertheless, preliminary analyses of the Silk Road website and
discussion forum provide some evidence of the intent of Silk Road founders to challenge
prohibition, not just in the short-term. In January 2012, Silk Road founder Dread Pirate
Roberts posted the first ‘State of the Road’ address. In this address, he wrote:

It didn’t take long before word got out. Our little hidden market got the attention of
the media and soon the politicians and law enforcement. But Silk Road was never
meant to be private and exclusive. It is meant to grow into a force to be reckoned
with that can challenge the powers that be and at last give people the option to choose
freedom over tyranny. We fundamentally believe that people can thrive and prosper
under these conditions and so far tens of thousands have done so in the Silk Road
market. A revolution has been born. …
So, we’ve had two major challenges to face as Silk Road grows and evolves. One is making our systems tough enough and flexible enough to withstand and win a cyber-war with the most powerful organizations in the world, should they choose to start that war. This is always and ever a top priority. The other is making the market a place where people can quickly and easily buy and sell just about anything without worrying about being attacked by gun toting men in uniforms and thrown in a cage or worry about being ripped off by their trading partner.

While it may be part of the hidden web, there are no attempts by its management to move to an invite-only system or to lock down use of Silk Road. Indeed any researcher or law enforcement officer can access the marketplace and the discussion forums. It appears that Silk Road founders and users believe they have the right formula to evade law enforcement. It is unclear how Silk Road could be shut down, as Tor and Bitcoin cannot be easily regulated and Silk Road is not affected by ISP-level internet filtering. Increased scanning of posted letters and packages may disrupt sales, but this action would be expensive and costly to other legitimate businesses if postal services are slowed.

It can also be argued that Silk Road is a harm reducing intervention. For drug users who would otherwise be engaged with street-based drug marketplaces, Silk Road provides sophisticated information on seller reputations and removes the risk of physical violence. The forum provides an avenue for buyers to share information about sellers who have ripped them off, and in order to maintain their high ratings, well-established sellers are motivated to provide excellent service. The forums also have an area for the discussion of harm reduction, which includes resources aimed at people who wish to reduce or quit consumption of particular drugs. Discussions also indicate that many Silk Road users see their participation in the marketplace as a wider protest against drug prohibition which they believe infringes upon their human rights. Through this frame, we can see Silk Road as an alternative online place where drug users can meet other like-minded people, access drugs in a more controlled setting, and share harm reduction information, creating a kind of online folk pharmacology and online community.

Silk Road and the hidden web call into question the effectiveness and unintended consequences of present attempts to regulate both drugs and the internet. Removing drug markets in one location tends to result in them arising in another location (Aitken, Moore, Higgs, Kelsall, & Kerger, 2002; Kerr, Small, & Wood, 2005). In this example, the mainstreaming and increased regulation of the public web combined with new encryption technologies has resulted in a new kind of drug market and a new kind of alternative place for drug users to exist, in Dread Pirate Roberts words, ‘free from tyranny’. While it is unlikely that Silk Road on its own will ‘unravel prohibition’, it does pose a unique challenge to prohibition and to the global ‘war on drugs’. 
Acknowledgements

This paper updates and expands on material published in our submission to the ALRC inquiry, also republished in the Australian sector magazines Centrelines and Dovetail in 2011, and presented at the Drugs and Young People conference in Melbourne, 2011, and the Drug Policy Modelling Program Symposium in Sydney, 2012. This research was supported by a PhD scholarship awarded by the National Drug Research Institute at Curtin University and the Australian Government Department of Health and Ageing. I acknowledge the support and efforts of the online forum users, moderators and administrators who participated in this project, and thank my supervisors, Professor Simon Lenton and Professor Matthew Allen, for their encouragement and guidance.

References


2 All grey literature can be obtained by contacting me directly.


Webster, C. (2005). *Everything you’ve wanted to know about drugs (but were too afraid to google): An exploration of the information-seeking behaviours of illicit substance users in an online forum* (Honours thesis, Cultural Studies, School of Social Sciences, University of Newcastle, Newcastle, Australia).
