EXHIBIT 2

International Journal of Drug Policy 24 (2013) 524–529

Contents lists available at ScienceDirect

International Journal of Drug Policy

journal homepage: www.elsevier.com/locate/drugpo

Research paper

'Surfing the Silk Road': A study of users' experiences

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ARTICLE INFO

Article history:
Received 12 April 2013
Received in revised form 24 July 2013
Accepted 30 August 2013

Keywords:
Silk Road
Internet
Displacement patterns
Closed drug markets

ABSTRACT

Introduction: The online drug marketplace called '*Silk Road*' has operated anonymously on the '*Deep Web*' since 2011. It is accessible through computer encrypting software (*Tor*) and is supported by online transactions using peer to peer anonymous and untraceable crypto-currency (*Bit Coins*). The study aimed to describe user motives and realities of accessing, navigating and purchasing on the '*Silk Road*' marketplace.
Methods: Systematic online observations, monitoring of discussion threads on the site during four months of fieldwork and analysis of anonymous online interviews ($n = 20$) with a convenience sample of adult '*Silk Road*' users was conducted.
Results: The majority of participants were male, in professional employment or in tertiary education. Drug trajectories ranged from 18 months to 25 years, with favourite drugs including MDMA, 2C-B, mephedrone, nitrous oxide, ketamine, cannabis and cocaine. Few reported prior experience of online drug sourcing. Reasons for utilizing '*Silk Road*' included curiosity, concerns for street drug quality and personal safety, variety of products, anonymous transactioning, and ease of product delivery. Vendor selection appeared to be based on trust, speed of transaction, stealth modes and quality of product. Forums on the site provided user advice, trip reports, product and transaction reviews. Some users reported solitary drug use for psychonautic and introspective purposes. A minority reported customs seizures, and in general a displacement away from traditional drug sourcing (street and closed markets) was described. Several reported intentions to commence vending on the site.
Conclusion: The study provides an insight into '*Silk Road*' purchasing motives and processes, the interplay between traditional and '*Silk Road*' drug markets, the '*Silk Road*' online community and its communication networks.

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Introduction

The proliferation of web-based retailing of drugs within contemporary cyber drug markets is of increasing public health and law enforcement concern (Corazza et al., 2011; Corazza et al., 2012; Solberg, 2012; Davies, 2012; Forsyth, 2012). Cyber drug communities are increasingly innovative in their capacities to retail and market drugs, provide information for users regarding drug sourcing mechanisms, advice around optimal use, and host discussions around popular choices, experiences and harm reduction practices (Wax, 2002; Gordon, Forman, & Siatkowski, 2006; Griffiths, Sedefov, Gallegos & Lopez, 2010; Davey, Schifano, Corazza & Deluca, 2012). Widespread drug product availability is fuelled by novel drug trading sites such as '*Black Market Reloaded*', '*The Armory*' and the '*General Store*' (Christin, 2012), with the most well known online drug marketplace called '*Silk Road*' operating anonymously on the '*Deep Web*' since February 2011 (Chen, 2011; Norrie & Moses, 2011). The '*Deep Web*' is accessible through Tor anonymising software which encrypts computer IP addresses (Tor Project, 2011). This software supports online transactions using a non-government-controlled peer to peer anonymous crypto-currency called '*Bit Coins*' which is indexed to the US dollar to prevent excessive inflation or deflation (Bitcoin, 2011; Davis, 2011; Christin, 2012). Technical barriers involved in learning how to use Tor software and transact with '*Bit Coins*' heighten its appeal to consumers and complicates law enforcement tactics. '*Silk Road*' has been described as '*a certifiable one-stop shop for illegal drugs that represents the most brazen attempt to peddle drugs online that we have ever seen.*' (Schumer, 2011). At the time of writing in late 2012, close to 200,000 registrations and 199,538 forum posts were recorded on '*Silk Road*' forum statistics (*Silk Road Forums*, 2012). The site has over 24,400 drug related products for sale which includes cannabis, ecstasy, psychedelics, opioids, stimulants, benzodiazepines and dissociatives (Christin, 2012; Barratt, 2012).

Christin (2012) has reported total '*Silk Road*' vendor revenue as approximately 1.9 million US dollars per month. Vendor

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http://dx.doi.org/10.1016/j.drugpo.2013.08.011

authenticity and opportunity to operate their services on '*Silk Road*' are controlled by the site through the purchasing of new vendor accounts through auctions to the highest bidders. '*Silk Road*' operates similarly to '*Ebay*' in terms of its professional dispute resolution mechanism, use of vendor and buyer ratings to assist in transaction decision-making, buyer feedback on quality of products, transactions and speed of dispatch, and hosting of member discussion forums (Barratt, 2012). Vendor and buyers are mandated by the site to use the '*Escrow*' system, which facilitates the accurate calculation of commission fees, and assists in dispute resolution between vendors and buyers (Christin, 2012). Transaction anonymity is facilitated by '*tumbler*' services of dummy and single use intermediaries between buyers and vendors (Christin, 2012). However, although the '*Escrow*' system appears effective in policing the site, vendor reliability and its transactions, transactions can also occur out of '*Escrow*' (i.e. directly between a vendor and buyer) with little recourse for dissatisfied consumers. Of interest is the dynamic and closed nature of the site. Christin (2012) has reported that a majority of vendors visible on the site disappear within three months of market entry, with most items available for less than three weeks. Vendors can choose to switch operation to '*stealth*' mode whereby they connect with their established customer base by invitation (i.e. '*stealth*' and '*custom listings*') and via out of band private messaging. '*Whitewashing attacks*' similar to the familiar '*goodbye suckers*' response from street drug dealers who decide to retire or move on, and '*rip off*' their customers when dealing their final batch have been observed on the site, where a vendor creates an excellent reputation and subsequently exits, leaving a large number of paid but un-dispatched orders (Feldman, Papadimitriou, Chuang & Stoica, 2006). Shipments of products are reportedly disguised by use of vacuum sealed '*professional looking*' packages, and use of false names and postal addresses (Christin, 2012; Van Hout & Bingham, 2013).

At the present time, research on '*Silk Road*' is limited to investigative site monitoring work by Barratt and Christin (resp) and a single case study (Van Hout & Bingham, 2013). User experiences and the realities of '*Silk Road*' as contemporary virtual drug marketplace remain an under researched topic. This research builds on these earlier studies and presents findings from the first successful attempt to access the site and interact with its members. The study aims to describe the motives, perspectives and purchasing experiences of '*Silk Road*' users using a virtual ethno-pharmacological approach to discover how the '*Silk Road*' marketplace operates, consumer appeal, processes and experiences within the '*Silk Road*' community, and presence of potential displacement patterns between web and street drug markets.

Methods

Ethical approval for the project was granted at Waterford Institute of Technology, Ireland. The study involved online observation, discussions with members and online interviews with a convenience sample of participants agreeing to complete a series of open ended questions via a private messaging system supported by '*Silk Road*'. This approach was chosen in order to facilitate participant '*talk back*' at their convenience, and with full anonymity (Bakardjieva & Feenberg, 2001). Fieldwork for the study lasted four months. Prior to commencement of data collection, the research team practised use of Tor, Bit Coin and private messaging on '*Silk Road*' in order to achieve a certain level of competence.

Following best practice protocols for online research (Barratt & Lenton, 2010; Mendelson, 2007; Murguía & Tackett-Gibson, 2007; Sixsmith, Boneham & Goldring, 2003), the research team requested permission from the website administrator to undertake the fieldwork in the form of systematic observation of the site, the posting of discussion threads, and invitation to partake in anonymous online interviewing. Message board recruitment of '*Silk Road*' site members was utilized. Requests to partake in the research were posted by the research team, along with information around the research objectives, informed text based consent, guidelines for acceptable behaviour in the discussion threads, and online referral options, should participants experience difficulties relating to their substance use.

The sample was restricted to adult participants (over 18 years). Participants were advised that their participation in answering threads or partaking in the online interview was voluntary at all times. Participants were not identifiable by either their personal or '*Silk Road*' screen name, and anonymous communication occurred between the researchers and participants via the site forums and its private messaging system. They were requested not to mention any potential identifiers, and advised that these would be omitted from the final integrated data analysis. Participants willing to complete the online interview via the private messaging system were provided with open-ended questions, and advised to complete these at a convenient time and when not under the influence of mind altering substances.

Data collection occurred in three ways. Systematic online observations of the site involved monitoring the site and forums, using screen shots, and postings relating to the discussion thread. Secondly, discussion threads were uploaded in the form of '*taster questions*' so as to interact with members, and stimulate participant interest and resultant discourse. The research team interacted with participants in order to answer any queries and for uploading of follow up threads. Text arising from postings and screen shots was included in the analysis. Thirdly, the data logged from the anonymous online interviews via the private messaging system formed the final integrated data set. The data was stored on the researchers' computers with double password protection.

The anonymous online interview questions were developed in consultation with extant literature, researcher experiences of navigating the site itself and a unique single case study conducted with a '*Silk Road*' member (author cite). Topics were concerned with participant demographics, drug repertoires, settings and patterns of drugs used, motives for web sourcing of drugs, popular sites for drug related information and communication with other cyber users, '*Silk Road*' user appeal, Tor software sourcing, Bit Coin purchasing, navigation of the site and its forums, interaction within the '*Silk Road*' community, consumer informed decision making and purchasing experiences, risk management and future intentions to use the site.

Analysis was conducted on the final anonymised integrated data set of online observations, discussion threads, postings and interviews. In total, 168 screenshots, 4 threads, 1249 posts and 20 completed interviews were transposed, transcribed and managed using the software program QSR NVivo 8.0 (Qualitative Solutions & Research, 2008). This integrated data set was analysed using a narrative-based analytical method which grouped the data into macro groupings, subsequent themes and appropriate categories. The identified groups, paragraphs and sentences were then broken down into several codes of key incidents, concepts and relationships (Elliott, 2006; Riessman, 2008).

Results

Participants were predominantly male (three females) and in professional employment or tertiary education. Observational data supported the high uptake of professionals on '*Silk Road*'. Participant drug trajectories ranged from 18 months to 25 years, with popular drugs including; cannabis, mephedrone, codeine, cocaine, nitrous oxide, MDMA, 2C-B, ketamine, heroin, LSD, amphetamine,

NBOME, methylone, benzodiazepines, methamphetamine, morphine, PCP, 2C-I, and psilocybin. Patterns of drug use were described as typically recreational and confined to weekend consumption. Several participants described themselves as '*psychonauts*' [1]. Few reported daily drug use.

Online drug sourcing: a light bulb moment?

The majority of participants reported commencing internet drug sourcing and purchasing on '*Silk Road*', with little prior experience of cyber drug retailing prior to 2011. Participants reported finding out about the site '*per chance*' when '*googling*', on national TV programmes, on '*Craigslist*' and in the '*Gawker*' article (Chen, 2011). Several drug sites were described as popular resources for '*Silk Road*' members and included '*Erowid*', '*Bluelight*' '*Shroomery*', *Pillreports*, *Pharmacy Reviewer*, *Gwern* and '*OVDBer*'. These sites along with the '*Silk Road*' forums were observed as useful (despite some comments that product reviews were dated) in providing informative '*trip reports*' and assisting individuals with questions around optimum dosage, lab testing and harm reduction practicalities.

> 'I advocate for harm reduction and the freedom of information for individuals to use substances safely. Websites provide essential information which allows me to make rational decisions about using illegal substances safely'. (Participant 2, Male aged 20–25 years).

Participant reasons for accessing and using '*Silk Road*' appeared centred on the site's anonymity, its member forums, the wide variety of products advertised, its transaction system supported by dispute resolution modes and vendor feedback ratings. Comments were made around user concerns for poor drug quality in their locality and fears for personal safety when buying drugs on the street. Ease of product delivery in the post was described. Observational site data revealed member comments around the avoidance of adverse health and social consequences associated with street drug sourcing when purchasing drugs on '*Silk Road*'. Few participants accessed '*Silk Road*' due to difficulties in securing prescribed anti anxiety or sexual enhancement medication from their doctors.

> 'The "why" is really simple. Prior to using this site, basically every drug I got was a toss up, especially MDMA. Someone mentioned this thing called the Silk Road. It didn't sound real. A couple months later I decided to see if it actually existed. I found it. Took a lot of courage to make that first purchase, but when the mail arrived at my house, I never looked back. Here, drugs are way cheaper and way better. I can't go wrong'. (Participant 6, Male aged 20–25 years).
> 'I first signed up on Silk Road back in 2011, and didn't order anything until May 2012. I now use it because the quality of drugs is so much better. Silk Road provides lab tested substances in which I know the quality. . ..I can make a rational decision on what quantity to use to best minimise harm. You know what you're getting and you can see feedback and honest advice from other buyers of the product. I'll never use a street dealer again. I also feel Silk Road is a lot safer than buying from the street in many ways'. (Participant 13, Male aged 20–25 years).

Silk Road: an online candy store?

Several participants observed that the process of accessing the site via the Tor browser, arranging credit with '*Bit Coins*' and purchasing products on the site was time consuming and relatively difficult. Observational site data recorded that members have technical knowledge around internet security.

> 'I obtain Bit Coins. I won't go into the exact process for safety's sake, but basically I go into a bank with cash, fill out a slip, show absolutely no identifying information, and by the end of the day, I have Bit Coins in my Silk Road account. I then go to the vendor page, add the drug to my shopping cart, and input my encrypted address. Then I confirm the order and I wait. We also use an Escrow system so that vendors can't scam you. So the Bit Coins aren't directly delivered to them until I finalize my order, which I only do once the package arrives. Some vendors require early finalization, but I try not to deal with them'. (Participant 9, Male aged 20–25 years).

Some participants were not willing to disclose information around their purchasing habits on '*Silk Road*'. Others had not purchased yet, and were accessing the site forums for information on products. The remainder with purchase history described a consumer decision making process which involved informed decision making centred on pricing, the reviewing of '*trip reports*', and product detail on '*Wikipedia*', '*Erowid*', '*Pubmed*', '*Google Scholar*', vendor and buyer reputations, benchmarking of 98%+ positive vendor feedback, the privacy of '*stealth modes*', consultative activity on '*Silk Road forums*' and positive product experiences. Many purchasers described sourcing drugs not readily available (especially LSD, high grade methamphetamine and cocaine) and that using '*Silk Road*' broadened their drug consumptive horizons. Buyer loyalty to certain vendors appeared based on experience of several successful transactions, with receipt of quality products. Observational site data revealed member comments on higher prices for certain drug products, in comparison with local street averages in their locality.

> 'The feedback system is revolutionary for a market like this. All my fears about quality are gone. I know what I'm getting and I know that it's good. The Silk Road is a paradise for responsible drug dealers. You have to be patient and you have to be smart to get there and use it. Bit Coin isn't easy to get and use. You have to learn the ropes. But it's totally worth it. It's changed my life significantly'. (Participant 14, Male aged 26–30 years).

The majority reported that using the '*Escrow*' system appeared to protect them against scamming. A few reported products which did not arrive or were intercepted by customs and excise, and experiences of poor quality products. Favourable comparisons were made with online pharmacies dispatching fake and contaminated products. Some described purchasing small '*taster*' amounts of chosen products when the vendor was unknown to them.

Those with purchasing experience commented on the perceived levels of insular trust within the '*Silk Road*' member communities, which assisted them in consumer decision-making and openly contrasted with the unknowns associated with street drug dealing. Participants commented that '*Silk Road*' had for the most part replaced their local street dealer. A few used street and closed market (friends and peer networks) sourcing when waiting for '*Silk Road*' products to arrive.

> 'I only use Silk Road. This type of market significantly lowers the chances of a scam or buying contaminated products. Like Amazon or eBay, I have a market of sellers to choose from and product reviews to satisfy my own requirements before I purchase. A street market in comparison is based on a "take it or leave it" approach which gives no rights to a buyer. This form of regulation ensures safety and harm reduction for the buyer'. (Participant 19, Male aged 26–30 years).

[1] A person who intelligently experiments with mind-altering chemicals, sometimes to the extent of taking exact measurements and keeping records of experiences.

Cyber drug consumerism

All participants described themselves as '*drug connoisseurs*' in terms of the level of their acquired scientific research and experiential drug product knowledge. A general cautiousness toward untested '*novel psychoactive substances*' was evident and appeared to restrict their drug purchasing to common drugs such as cannabis, MDMA, cocaine, LSD, ketamine and heroin which were observed to be safer.

> 'Many unscheduled drugs are being scheduled without inquiry, which may be unfortunate. Illegal drugs may be safer, but their unavailability encourages the proliferation of potentially unsafe analogues and alternatives'. (Participant 20, Male aged 31–35 years).

For those purchasing '*novel psychoactive substances*', product packaging was described as '*research chemicals*', with traditional street type drugs arriving in disguised packaging. Some comments were made that the time investment and concerted effort on the part of the user in having to install Tor, purchase '*Bit Coins*' and use false postal addresses was recognized as potential deterrence for impulsive purchasing and excessive drug use.

> 'I don't think it promotes new users because no one is taking the time and computer-knowledge to come to the 'Silk Road' if they've never used drugs before'. (Participant 1, Female aged 26–30 years).

Varied comments were made around the security mechanisms in place, with some participants concerned for user anonymity in the future, and fears for computer hacking. The majority of participants reported intentions to continue using the site in the future, with several intending to set up vendor accounts.

> 'The browser is not key, the Bit Coin currency is, since that allows global transactions that are very hard to trace, leaving little or no money trail from buyer to vendor'. (Participant 1, Male aged 26–30 years).

The Silk Road online community

Observational data revealed an active online forum community. The usefulness of '*Silk Road*' forums was emphasised in providing information, product and vendor reviews, transaction feedback, forums for harm reduction, tutorials, guides, and book/film reviews. A participant described the site as a '*great community with lots of information*'. Comments were made around member education and know how, with forum participants appearing well read and well informed around drug use, with members sharing advice, stories, experiences and general chit chat. Site forum postings included member support for those requiring assistance in quitting their drug habit.

> 'The community here is awesome. There is a "Drug Safety" forum. The whole philosophy behind the place is that if you want to put heroin in your body, go ahead. But hey, if you want to get off that nasty drug, we're here to help you too. It's not like real life where street dealers might coerce you into keeping your addiction'. (Participant 4, Male aged 20–25 years).

Many comments were made around a perceived sense of belonging in the '*Silk Road*' community. This occurred irrespective of whether members were purchasing or only accessing the forums.

> 'We are a community, and Dread Pirate Roberts is our president in a sense. We're all here to help each other and make our experience as easy-going as possible'. (Participant 3, Male aged 26–30 years).

No participants reported engaging with forum members in real life.

> 'Not in real life, but I enjoy talking to them in Private Messages and on the forums. I like that aspect as much if not more than the actual service Silk Road provides'. (Participant 7, Female aged 31–35 years).

Drug use outcomes and settings

The majority of participants described very positive experiences with products purchased on the site, with comments made around product quality and speedy delivery. Generally, the use of '*Silk Road*' was kept secret and with users confining their consumption to inner circle friendships. This appeared largely due to fears of law enforcement investigation. Observational site data revealed that members strive to protect their anonymity for fear of prosecution. This appears indicative of the high number of recreational users accessing the site.

> 'Using drugs is kind of supposed to be a social thing in my opinion. I want to experience that love and joy and happiness with my friends. It's a great feeling'. (Participant 5, Male aged 20–25 years).

Many participants described using products alone for introspective and psychonautic purposes. Mixed perspectives around potential harm were recorded.

> 'Solitary use may be good in that there is less 'egging on' and escalation of dose'. (Participant 16, Female aged 41–45 years).

Dosing of drugs purchased on '*Silk Road*' appeared gauged by the user based on past experiences, '*Silk Road*' product reviews, '*trip reports*' and reviews on '*Erowid*', '*Wikipedia*', '*Bluelight*', '*Drugs.com*' and '*Google Search*' for that product or its nearest analogue. Several participants described using a similar approach to that of Alexander and Ann Shulgin (1991:1997).

> 'If I'm ever unsure, I will take a very low amount (smaller than its nearest analogue) and note how I feel. If I need more next time I take more'. (Participant 1, Male aged 26–30 years).

Negative experiences of drugs bought on the site were few, with those participants describing instances where drug potency caused nausea, vomiting and severe intoxication.

Discussion

The study presents an integrated visual and narrative analysis of data garnered from the '*Silk Road*' website. Given the illicit nature of online drug trading, the chosen form of observational and anonymous online research was deemed most appropriate, as this virtual community is essentially a hidden and suspicious research population, requiring a sensitive and confidential approach. It took time to build credibility and trust on the site. Recruitment bias may exist in the lack of researcher ability to adequately assess whether participants were 18 years or older, and whether participants were under the influence of mind altering substances at the time of participation. Despite this, collecting data via live observation

and inter-personal contact on the online '*Silk Road*' communities, forums and message boards, offers a unique snapshot of '*Silk Road*' member perspectives relating to drug choices, informed decision making processes, group mechanisms and consumer outcomes. The interactive nature of the research was deemed a central feature to the subsequent thread discussions, with the research team tracking and monitoring the discussion thread postings and listening to and engaging with the various discussions hosted on the '*Silk Road*' forums. This was done in order to incorporate variant drug user perspectives and meanings, and maintain the dialogue between participants within an online negotiation process (Mendelson, 2007). Asynchronous interactions between participants were observed during the project timeframe, which optimized the duration, momentum and depth of conversation thread discussions, and which added a richer context to online interview data (Smith & Stewart, 2012).

The conscious decision for users to access Silk Road necessitated computer access and technical expertise, and was observed to contribute to '*responsible*' drug consumerism (Duncan & Gold, 1982; Parker, Williams & Aldridge, 2002). This coupled with time needed to wait for product delivery appears to exclude more vulnerable groupings of drug users (i.e. homeless, opiate dependents). Of interest is that whilst participants appeared to represent themselves as well informed '*drug connoisseurs*', most commenced online drug sourcing with '*Silk Road*'. Members were described as educated and professional, and for the most part confined their drug consumption to recreational and psychonautic purposes [see Leary, Metzner & Alpert, 1964; Shulgin & Shulgin, 1991, 1997; Turner, 1994; Newcombe, 2008). The evident '*responsible*' drug consumer identity as distinct from the member's professional identity (see '*parallel lives*' Moore & Miles, 2004) appeared facilitated by member anonymity and an active '*Silk Road*' community where once entrenched, members protected by screen pseudonyms exchanged information, product and vendor reviews, test reports and conversed freely around their drug use. Prior investigations have emphasised that members are not required to assume a drug user identity in order to communicate about their drug use (Barratt, 2012). Indeed, online forums can create new pseudo individual and group identities by channeling physical and social experiences, establishing psychological connections between members and offering opportunity for social advancement (Robinson, 2007; Fernback, 2007). A collective and innovative '*Silk Road*' subculture consisting of both purchasers and non-purchasers was described. '*Silk Road*' user groups appeared to exhibit behavioural dynamics containing finely spun norms for appropriate and '*member*' valued forms of drug consumption and harm reduction practices ['*positive propaganda*', Laing, 1965; Young, 1971). In this way, '*Silk Road*', as novel technological drug subculture, potentially minimises perceptions of drug related stigma within a communal sense of identification and belonging, supported by distance from previous drug sourcing avenues (Parker et al., 2002; McKeganey, 2010). Of interest is that whilst communicating and seeking assurances around their drug consumption and product choices, members did not seek out associational relations with '*Silk Road*' members in real life.

Whilst their horizon of drug taking appeared expanded due to the vast array of products available, participants on the whole remained loyal to traditional street drugs, with customer portfolios including MDMA, ketamine, cannabis, LSD and cocaine. Purchasing of prescribed medications occurred in preference to online pharmacies for sourcing of anti anxiety and sexual enhancement drugs, with online pharmacies viewed as '*unsafe*'. Participants appeared well versed in reviewing products, but hesitant to purchase untested novel psychoactive drugs. Similar to extant researcher and drug policy views at the time (Rosenbaum, Carreiro & Babu, 2012) these participants underscored the need for scientific research into the pharmacology and toxicity of novel psychoactive substances. Dosing was tentative but informed and gauged on prior drug taking experiences, reviewing of trip reports of similar analogues, and member forum conversations around optimum use, expected experiences and settings. Similar observations have been described in underground drug cultures (Becker, 1963; Tart, 1971, 1972; Lilly, 1972; Zinberg, 1984; Jay, 1999; Miller, 2005). A displacement away from street drug sourcing and its associated hazards (Christin, 2012; Van Hout & Bingham, 2013) was observed, with continued uptake of traditional closed and street market networks when waiting for '*Silk Road*' package deliveries. For the most part, these shifts in drug consumerist behaviours appeared centred in '*Silk Road's*' capacity to potentially ensure provision of quality products within an anonymous network characterized by insularised trust, buyer protection and vendor loyalties. The '*Escrow*' system was viewed as enabling purchasers to avoid scamming and feel more secure when purchasing.

The study is of interest to a variety of stakeholders, including drug policy makers, law enforcement, customs and excise, postal service providers, scientists and researchers, clinical, health and social professionals and those involved in computer security. Risks and harms traditionally posed by illicit open and closed drug markets are replaced by insular online communities interacting within '*Silk Road's*' built in quality of information exchange, anonymity and community consumer supports. One wonders whether these technological drug displacement patterns supported by the '*Deep Web*' are temporary (Hammersley, 2010), with this study on member experiences indicating the presence of '*secondary motivating factors*' for uptake centred around convenience, choice, quality and low risk of criminal sanctioning (Measham, Moore, Newcombe & Welch, 2010). On a positive note, '*Silk Road*' forums, both for purchasers and those who have not yet purchased, appears to act as information mechanism for the promotion of safer and more '*acceptable or responsible*' forms of recreational drug use. Whilst appearing to consist of well informed weekend, recreational and '*psychonautic*' drug consumers, the '*Silk Road*' medium has the potential to radically normalise drug sourcing within its member community. Given the accounts described in this study of user perspectives on the realities of purchasing drugs on '*Silk Road*', its member subcultures offer a viable means of enmeshing safer drug use and encouraging harm reduction amongst a very hard to reach and informed drug using population (Young, 1971; Dorn & South, 1990; Stimson, 1995; Caulkins, Rydell, Scwabe & Chiesa, 1997; Parker et al., 2002; United Kingdom Drug Policy Commission, 2009; Caulkins & Reuter, 2009; Greenfield & Paoli, 2012). The rapid growth of online anonymous drug markets, and logistical difficulties and costs incurred in closing down those located on the '*Deep Web*' highlights the need for shift in focus toward reducing consumer demand and potential harms via site based harm reduction tactics (Kerr, Small & Wood, 2005; United Kingdom Drug Policy Commission, 2009; Bright & Ritter, 2010; Christin, 2012). Equally, the potential increase in vendor accounts amongst those accessing '*Silk Road*' for personal use, and consequent closed market operation in '*stealth modes*' is of concern. Further research is needed to investigate vendor perspectives on these shifts in online drug market activity.

Acknowledgements

With thanks to Monica Barrett for advice around research design, and to the participants in the research without whom it would not have been possible to garner an understanding into the '*Silk Road*' phenomenon.

Conflict of interest

None

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