A virtual academy of polydrug use: Masters, novices and the art of combinations

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Abstract

Aims: Information technology has become an essential part of drug culture, providing a platform for lay knowledge concerning drug use. Due to the co-effects of different substances, making substance "combos" requires advanced skills to enhance pleasures and manage risks. In this study, we focussed on Finnish and Swedish online discussions as a context for learning and sharing experiences of combining substances. **Methods:** Taking influences from positioning theory, we used qualitative methods to map what kinds of mutual interactive positions related to the expertise in polydrug use online discussants take and how these positions are negotiated and reformulated in the online setting. We reflect these results through Howard S. Becker's theory of social learning, according to which becoming a drug user is a process that occurs in interaction with other users, as the beginners need a model and advice from experienced users in order to claim their place in the users' community. **Results:** In online forums, users discuss the risks and pleasures of combining drugs – on the one hand, in relation to different situations and, on the other hand, in relation to different competence positions. This occurs by asking for advice, presenting one's knowledge,

challenging others, repositioning oneself, defending one's position or proving one's competence. **Conclusion:** Online discussion forums constitute a kind of virtual academy where knowledge of the pleasures and risks of combining substances is produced and circulated, and where experienced masters mediate their expertise to less experienced novices.

Negotiating drug knowledge in online forums

The Internet has become a primary source of increasingly extending lay health information (Cline & Haynes, 2001). Based on user activity, the Internet questions and challenges former knowledge hierarchies (Manning, 2014), for example, it sometimes results in struggles over expertise in health and criticism of the health professions (e.g., Ziebland, 2004). Furthermore, the Internet also enables participation in discussions in cases when physical distance would be an obstacle to meeting face to face (Barratt, Allen, & Lenton, 2014). Thus, it can be argued that the meaning of "community" has changed, as physical space is expanded by virtual space (Murguía, Tackett-Gibson, & Lessem, 2007).

Drug users also interact online. Research has shown that the Internet has become an essential source of information about drugs and drug use (e.g., Barratt, Lenton, & Allen, 2013; Manning, 2014; Murguía et al., 2007; Walsh, 2011). It provides a platform for sharing experiences surrounding the production, mediation and circulation of drug knowledge, enabling the reconstruction of power relations around drug knowledge and thus operating as an alternative to traditional authorities. In this context, Boyer, Lapen, Macalino, and Hibberd (2007) talk about "innovative users" who experiment with new drugs and then mediate their experiences to other users through the Internet. However, the virtual environment of drug knowledge can be understood not only as a celebration of drugs and experiences of being high but also as a

terrain of vernacular harm reduction, as the ideas and conceptions of drug-related risks are shared by users on the Internet (Davey, Schifano, Corazza, & Deluca, 2012; Soussan & Kjellgren, 2014). Consequently, information shared in online drug communities can have a multifold impact on contemporary drug use (Rosino & Linders, 2015).

Previous studies of online drug communities have focused on discussions around a single substance, for example, cannabis (e.g., Månsson, 2014; Månsson & Ekendahl, 2013) or DMT (Rosino & Linders, 2015); around the non-medical use of prescription drugs (Rönkä & Katainen, 2017); or around new psychoactive substances, also known as "NPS", "legal highs" and "designer drugs" (see Davey et al., 2012; Duxbury, 2015; Soussan & Kjellgren, 2014). The aim of this study was to focus on how users create, mediate and circulate knowledge about combining multiple substances (polydrug use) and how users employ current information technology for these purposes. This focus is expected to involve a logic related to combinations of substances that may portray current types of drug-use skills in a more realistic manner. Studies on NPS have emphasised the importance of users' experience in knowledge production due to the fact that the features of these new substances may be largely unknown. Duxbury (2015, p. 6) calls this kind of information creation "a marginalized form of citizen science". Interestingly, this coincides closely with polydrug use since there is an obvious lack of information about the effects of the combinations of different substances. We are

especially interested in how online discussions function as a context for learning and sharing experiences of polydrug use in Finnish and Swedish online forums.

Polydrug use is a general term describing a wide variety of substance-use behaviours; for example, it can be categorised with regard to the timing of the ingestion of multiple substances. A rough dichotomy of concurrent and simultaneous polydrug use has been applied in many studies (e.g., Schensul, Convey, & Burkholder, 2005). In this study, we define polydrug use as the mixing of two or more substances at the same time or in temporal proximity. While polydrug use is found to be associated with poorer physical and mental health and various social problems (e.g., Kelly, Chan, Mason, & Williams, 2015; Roth et al., 2015), current knowledge is very limited about different patterns of substance combinations, the intentions of users and social processes leading to polydrug use. At the same time, research shows that there is an upward trend in the prevalence of polydrug use (EMCDDA, 2014; Martin, 2008), seen in both recreational use (e.g., Measham & Moore, 2009; Quintero, 2009) and in problem use (e.g., Gossop, Marsden, & Stewart, 2002).

This study aims to improve our understanding of the creation and communication of knowledge about polydrug use in online settings. We are especially interested in what aspects forum users bring forward when they communicate about substance combinations (instead of about single substances). In addition we want to examine whether knowledge concerning this particularly risky and complex type of drug consumption differs from that of other drug-related knowledge shown in earlier research.

Discussing "combos" on Finnish and Swedish websites

In drug slang the term "combo" signifies the intentional mixing of drugs with the aim of attaining a particular desired effect. As the expectations of the "high" vary, both between individuals and situations, there exist endless ways to blend different kind of substances (e.g., Schensul et al., 2005). Optimising different nuances of pleasure by means of different substance combinations requires a certain expertise and pharmacological awareness. Furthermore, since substance combinations might be risky due to the unpredictable co-effects of different substances, the mixing of substances requires distinct knowledge so as to avoid those risks. For these reasons, we explore what kind of knowledge of the risks and pleasures of polydrug use is shared in online discussion forums. As far as we know, this kind of online sharing of the competence to make drug combos has not been studied earlier.

Quintero and Bundy (2011) distinguish between different websites where drug-related content may be discussed, for example with a focus on drug-use prevention, harm reduction or drug control. Generally, these kinds of websites are sponsored by a public authority or some other institution. In addition, there are websites maintained by individuals. Our analysis is based on two online forums following different principles. The Finnish Addiction Link, and particularly its sub-forum called Sauna (http://www.paihdelinkki.fi/keskustelu/viewforum.php?f=1), has been the most popular site dealing with the latest topics on substance abuse and the addiction scene in Finland. The website is provided by an NGO, the A-Clinic Foundation, which is a pioneer in Finnish online drug discussion. The A-Clinic Foundation is the biggest provider of alcohol and drug treatment services in Finland. The foundation has also put a lot of emphasis on preventive work, and the idea of the Sauna forum is to promote a harm-reduction policy by offering possibilities for users to share risk information related to drug use. Originally we intended to focus the study only on Finland, but due to our collaboration with Sweden, data from a Swedish discussion site were included in our exploration. The Swedish forum, called Flashback, with its sub-forum Droger (https://www.flashback.org/f3), is

currently the largest online message board in Sweden. The Flashback forum is politically uncommitted and founded on the idea of freedom of speech.

The forums chosen for this study represent the most popular sites of discussion on drug use in each country. Despite some differences, both websites have similar rules that users are expected to comply with. The moderator will remove messages that contain intimidation, harassment, criminal activity (such as selling or buying drugs) or an invitation to such activity, advertising or the infringement of copyright. Similar websites are found around Europe. The goal of our study is not to make comparisons between Finnish and Swedish online discussions but, rather, to focus on the common features of those discussions.

Social learning of drug use

Drug-use practices have to be learned. In his classic article "Becoming a marihuana user" Howard S. Becker (1953) describes the social learning process involved in starting to experience pleasure from smoking marihuana. According to Becker, individuals will only be able to use marihuana for pleasure when they first learn the technique required to smoke it so that it produces the wanted effects. The second stage of the process is to learn to get a high, which requires that the individual learns to recognise the effects caused by marihuana and connect them with its use. Third, they have to learn to find those sensations enjoyable, as in the beginning the sensations might not be automatically pleasurable. To acquire the concepts that make learning drug use possible, the beginner needs to participate in groups in which marihuana is used (Becker, 1953, 1963).

While Becker presented his social learning theory of marihuana use a long time ago, it has maintained its accuracy and is repeatedly applied to new topical areas. For example, Athey, Boyd, and Cohen (2017) utilise it in their study of medical cannabis users, and Pawson, Kelly, Wells, and Parsons (2016) apply it

in their study of prescription pill smokers. Rosino and Linders (2015), who analysed conversations within an online community of DMT users, have developed the social learning theory outlined by Becker so that it can be applicable in studies of virtual communities. Most importantly, they propose a supplementary stage to Becker's model that both precedes and permeates all the other stages. This additional stage, "learning to communicate and comprehend knowledge and interpretation", relates to the distinctive aspects of online settings by emphasising written communication, modes of articulation, technological proficiency, and community norms and argot (Rosino & Linders, 2015, pp. 730–732). As Halbert and Kotarba (2007) also demonstrate, drug subcultures – described by Becker as occurring in a physical environment and in face-to-face encounters – can now also operate in virtual environments (see also Davey et al., 2012; Rosino & Linders, 2015; Soussan & Kjellgren, 2014). This also holds for polydrug use since, as in the case of a single substance (like marihuana or DMT), creating and enjoying drug combos includes social learning based on access to advice from experienced users.

Master and novice positions

Online communities establish a forum wherein drug users are free to produce different subject positions (Barratt et al., 2014). As the parties in drug discussions on Internet sites do not know each other, they need to make their own positions visible. Indeed, participants in an online community assess each other's level of experience and knowledge on the grounds of self-presentations performed primarily through text (Rosino & Linders, 2015). Moreover, in a virtual community, one needs to reproduce one's position(s) continuously due to the situational nature of the interaction.

In the analysis, we explore what kind of knowledge related to the pleasures and risks of combining substances is produced and reproduced in online forums and how the interactive positions are expressed and negotiated in

relation to this knowledge. In doing this we are influenced by positioning theory. Harré and van Langenhove (1999) consider the concept of positioning to be a more dynamic alternative to the concept of social role. In a conversation, speakers always adopt a position that is linked to some storyline. The positions vary according to the storyline and thus an individual can adopt several positions. We are particularly interested in positions that deal with the storyline of the social learning of drug combinations in the online context. We investigate the positions merely in this specific interaction without any aim to evaluate what the users' competence and knowledge of drug combinations would be in an offline context or in some other storyline. In this sense the positions we identify and analyse here express the user's situational identities in the online interaction. As the initial positions may sometimes be challenged and repositioning may occur, fluid positionings are inevitable in coping with varying situations (Harré & van Langenhove, 1999). Finally, we explore the production of competence in making substance combos when seen through the lens of social learning. We do not strive to describe online discussion in the different stages of the social learning process, as do Rosino and Linders (2015), but focus on the setting for social learning that the production and expression of different positions provide.

Research questions

1. How is expertise built in online communications related to polydrug use (e.g., Barratt et al., 2014; Duxbury, 2015; Manning, 2014)?
2. How is expertise related to positions of interaction, pleasures and risks (Harré & van Langenhove, 1999)?
3. What type of environments for social learning of polydrug use do the studied online communities provide (e.g., Rosino & Linders, 2015)?

Data and method

Both in the Finnish forum Sauna and in the Swedish forum Flashback, the discussion threads that concern polydrug use were typically opened with a view to discuss some specific drug combination, for instance combining opiates and cannabis. However, in this study we were interested in the threads that specifically concerned the term "combo". In addition to that, we narrowed the data to concern when the term combo was used in the thread title. As both discussion forums can be searched, we entered the keywords "komb*" and "comb*" in the search tool so as to identify those threads that deal with this term at a general level. This search was conducted on 25 March 2015 and resulted in 40 threads. From these 40 threads we removed those containing fewer than five messages, as they were clearly less popular discussion openings. After that, our final data consisted of eight threads (comprising 452 messages) from the Sauna forum and 23 threads (comprising 374 messages) from the Flashback forum (see Appendix 1). Most of these threads deal with pleasant and unpleasant experiences of combining drugs, whereas some threads have a neutral approach to drug combos. Among all the discussions that take place in these forums, the threads included in our data represent a limited portion. However, the rigorous analysis of the data sample selected for this study is adequate to enable the saturation of the dynamics of competence positioning and social learning, thus revealing the more general nature of the interaction that occurs online where drug combinations are discussed.

The data were captured as Word files, eventually comprising 214 single-spaced Microsoft Word pages. This material was analysed by applying the social learning storyline outlined by positioning theory. All of the threads included messages that fit into the social learning storyline, such as asking for advice or proving expertise. Other storylines were also recognised, such as showing empathy or making fun of the topic, but these were excluded

from our analysis. It turned out that each thread could include several separate debates from which common themes were "pleasure seeking" and "risk avoidance". These themes dominated the online discussion of drug combos.

We noticed that in their interaction with each other, forum users tended to adopt more or less novice and master positions. By means of these positions, the users expressed to other interaction parties how experienced drug combo users they were in the issue at stake. The distinctive feature of novices is that they present themselves as persons with no or very little experience of making drug combos. Typically, they openly ask for advice from experienced users. Masters, in turn, claim to have a lot of experience and knowledge of combos. They express great insight into different combos and they keenly demonstrate their expertise and competence. These masters tend to teach the other discussion parties how to manage different combos. However, the boundaries between these two positions were not always clear and were rather in constant movement. Due to this, we then analysed the discussion threads by examining how and through what kinds of strategies the positions were produced, expressed, negotiated and reproduced.

After the analysis based on positioning theory, we reflected on and interpreted the results from the wider point of view of social learning of combining substances, especially in an online context.

Ethical considerations

Our research project as a whole was approved by the Ethical Committee of the National Institute for Health and Welfare, Finland, on 30 August 2012. Moreover, the use of the Sauna forum was approved by the A-Clinic Foundation, Finland, on 14 March 2013. To protect the discussants' identities, neither pseudonyms nor any other direct or indirect personal details are used in the data excerpts.

Results

Before we address the negotiations of competence positions, we describe the situational nature of varying forms of knowledge regarding the pleasures and risks of combining substances. In the data excerpts we do not take a stand on the discussants' gender since in their pseudonyms gender was not apparent in all cases. In each debate the discussants are numbered separately, always starting from number 1 (e.g., D1 = Discussant 1). A clarifying vocabulary for the slang terms, abbreviations and brand names of substances is found in Appendix 2.

Specifying the situational nature of the pleasures and risks of substance combos

The pleasures and risks of combining substances are linked with the situationally varying motives to consume drugs. The forms of knowledge pertaining to differently defined expectations for pleasure were especially circulated in threads where online discussants shared their most pleasurable combo experiences. The next excerpt is from a very popular thread entitled "The best combo?", which included a total of 192 separate messages.

> **Excerpt 1**
> It's hard to say which combo is the best. It'd make more sense to ask in what situation. Slightly different cocktails for Fridays and Mondays . . .
> PARTY COMBO: XTC & THC (+ a speed bomb to keep you going)
> CHILL COMBO: Morphine & THC
> WORK COMBO: Speed & Rivatril
> NATURE TRIP COMBO: LSD & THC
> BLACKOUT COMBO: Oxycodone/gamma & Sirdalud
> FINAL COMBO: Substance X & overdose . . .
> (Sauna forum, Finland)

As comes out in the citation, the type of pleasure is not only based on the pharmacological effects of drugs but different sensations are sought for different needs and situations, for

example for partying, relaxing, working, self-discovery (nature trip) and escapism (blackout). The writer of the excerpt purports to have competence to manage a wide variety of pharmacological co-effects as well as how they can be applied in different situations, maximising pleasure. The last line of the citation, "final combo", illustrates that the dosage also matters. That is to say, combining substances requires advanced skills; unskilled combining may lead to fatal consequences.

The following excerpt, Excerpt 2, illustrates the potential risks of combos more profoundly. The discussant shares her or his experiences of different situations in which the risks have been actualised. The excerpt is from the thread "Your most idiotic combo" that was also among the most popular topics (63 separate messages) discussed in online forums.

Excerpt 2
150 mg Nitrazepam + 75 mg zopiklon + some Stesolid and Xanor + half a bottle of whiskey = Destroyed an apartment and eventually passed out in the entrance hall.
1100 mg dexofen + some citodon + 45 mg zopiklon + hash and some liquor = Puked like a dog and remained sitting 4–5 hours at the telephone, struggling hard to breathe and ready to call 112.
GBL + dexofen = Probably very close to death.
Speed + DXM = Got double withdrawal like no other.
GHB + alcohol = Woke up in a police car and later at the emergency department.
Iktorivil + alcohol = Woke up at the emergency department without my coat and with two teeth hit out.

(Flashback forum, Sweden)

The variety of the knowledge concerning the risks of substance combinations is well displayed in this citation. It also represents the mutual harm-reduction practices the users mediate in online forums: in this case, warning others about risky combinations. The risks are often connected to the unpredictable co-effects which may result in losing one's consciousness or even in death. The combination may also lead to aggressive and destructive behaviour by the users themselves or may lead to users being assaulted by others. Furthermore, unsuccessful combinations may cause nausea and other unpleasant and scary physiological symptoms and with some combos withdrawals in particular appear to be unendurable. The excerpt above also implicates the risks of control policy (ending up in a police car).

Negotiating the pleasures and risks of making combos

In the online communities where making drug combos are discussed, the participants react to each other's messages by asking for and giving advice, and by questioning, challenging, teaching, learning and sharing knowledge. The following four excerpts from online discussions are illustrative examples of this. On the one hand, they illustrate the variety of negotiations regarding competence positions, but on the other hand, they bring out the variation in the data, including the different characterisations given for the pleasures and risks of combining substances. Along with the analysis, we show how online forums function as platforms for social learning of combining substances.

In the beginning of the following excerpt, D1 names combos that she or he finds pleasurable and through this expresses her or his mastery of various different drug combinations. The master position is produced by listing five recommendations for suitable combinations, based on the user's experience – clearly not for beginners.

Excerpt 3
D1: 1. Speed + Xanor + booze
    2. Imovane + Sativa pot + codeine
    3. Alprazolam + Stilnoct + booze
    4. DXM + booze
    5. Rivatril + codeine
D2: DXM and alcohol doesn't do it for me. Well, I can't be sure about that, because I just black out. I just lay back and hear a conversation within my head that I just try to follow. The next thing I remember is heading to the toilet to puke.

D3: DXM plus lots of booze spaces you out; I was out of it for 5 hours – physically and mentally off the planet . . .

D1: It was great; it took me right off this crappy planet for eight hours. Actually, during the trip I was pissed in a nightclub and hitting on girls like a friggin' gigolo.

D2: I just don't get why some people think that a total blackout is anybody's idea of fun. Especially if you do it in front of people. At best, it's a neutral experience if you know that you are laying on someone's bed somewhere. Maybe it can be enjoyable, in a self-destructive kind of way. But blackouts really mess with your head – at least in my case.

(Sauna forum, Finland)

When the conversation moves on, it transpires that the list is opposed by other discussants (D2 and D3), especially in regard to the fourth recommendation (DXM + booze). D2 questions the pleasure of a total blackout being perceived as being fun and enjoyable, and through this expresses a position of mastering pleasures. However, D2 restores the consensus by specifying that this is only her or his perception of pleasure, thus clarifying that there are individual differences. D3 supports D2 in this, but otherwise D1's initial position is not questioned.

In this debate, the competence of combining substances is linked to attaining intended pleasure. The content of the pleasure in this citation is characterised as a detachment from reality – getting "out of this crappy planet" – that could be interpreted as replacing everyday worries and negative emotions by flying to another kind of reality in which even dreams can come true (hitting on girls). In contrast, another discussant considered that blackouts "in front of people" were not fun, but rather seen as embarrassing and unpleasant.

The citation does not directly show whether the discussants learn anything from each other. However, the debate functions well as an optional source of learning for those who are following the discussion. For example, users who do not take part in the debate but just read it on their screen get ideas about which substances could be combined when the best combo experiences are circulated in the online forum. Moreover, in interaction with others, beginners or less experienced users are able to learn about the co-effects of different combinations that are, or are not, perceived as pleasurable. Basically, the learning process is similar to Becker's (1953, 1963) that takes place in the offline world: beginners and less experienced users learn the pleasurable effects of drugs from more experienced users. In an online world, however, there might be a greater variety of views available. This is illustrated in more detail in the following discussion from the Swedish forum Flashback.

Excerpt 4

D1: What do you think about the combo of 20 mg 2C-T-4 + a joint?

D2: Could hardly make it worse – cannabis brightens up ALL drugs.

D3: I don't know, I think smoke and speed are no great combo.

D4: Forgot who my friends were once and thought my brother was in the apartment to end my existence. Absolute panic, I promise you; then, after a few seconds, it went past and it was very, very tough and stressful. Terrible. Smoke brightens up all drugs (except speed) if you really don't want to be NUTS, but who doesn't like to be totally dumb and retarded in the head?

D2: But from my experience, if you are used to smoking, then cannabis works well with all drugs. If not, then perhaps it isn't always such a bright idea (LSD can be really tough if you aren't a regular cannabis smoker).

(Flashback forum, Sweden)

In Excerpt 4, D1 positions herself or himself as a novice by asking for the others' opinions on a combo where one element is cannabis. The combo proposed by D1 is unambiguously disapproved of by other discussants (D2, D3 and D4) and the discussion switches to how cannabis works when used in combination with other drugs. In this case too, competence is expressed by referring to expertise by experience, and as D4's comment shows, the pursuit of pleasure may

be ruined if experience is lacking. In the last message D2 takes a master position and emphasises that one's capacity for attaining pleasure depends on regular cannabis use. In this conversation, expertise in regulating pleasure develops into competence at combining cannabis with different substances. This competence is explained by experience of cannabis use. The conception of competence and the positions related to it are continuously reproduced in the debate. D1, who asked for advice, gets to know that attaining pleasure, even from the most challenged combinations, is possible. But, to reach that position, she or he needs to gain more experience of smoking.

As already seen in the previous excerpts, online discussions on polydrug use often refer to bad experiences and the risks of different combinations of substances. Next we will focus more on risk talk.

Excerpt 5

D1: For me the best combo is maybe subutex and diazepam. It gave me a warm and cozy feeling at the same time. I felt warm all over and wanted to wander around the streets, but decided to stay at home and just enjoy the feeling.

D2: I wouldn't recommend a dangerous combo, especially when you didn't say anything about the amounts. Benzos and buprenorphine are not a safe combination right?

D1: Jesus Christ! I popped about five 10 mg diap pills and went outside with some friends. Then I came across a little line of subutex, and why not, when we're talking about just a little? Sure, I know about the dangers, but tiny amounts like that don't hurt. Some people screw up repeatedly, some don't.

D2: There's no harm in mixing subutex and diazepam, or if you're on Tramal and booze. (It's only your own health you're playing with and everyone has to take the rap for their own actions.) But you shouldn't rant about the dangers of combos if you're talking up ones that are just as dangerous.

D1: Talking things up? When was I talking things up – I just gave my opinion? What's talking up and what's not?

(Sauna forum, Finland)

In Excerpt 5, positions are produced by means of risk awareness related to substance combinations. When representing her or his most pleasurable combo experiences, D1 meets open and strong opposition from another discussant (D2). The conversation escalates into a reproof, based on the ways in which the risks of making combos should be managed and avoided. In this debate, risk awareness works as a weapon in the battle of competence, and D2 exploits this weapon in attempting to challenge D1's position. However, D1 defends her or his position by requiring a more careful definition of what is really "talking things up".

Albeit the competence positions are made up leaning on the risk definition, pleasure is also given a definition as being a "warm and cozy feeling". Pleasure does not arouse further negotiation about competence but is displaced by negotiation of risks, which is instead given various different meanings. First, the pharmacological risks of benzodiazepines and buprenorphine are acknowledged. The combination is defined as unsafe. Second, the risk negotiation focuses on the amounts of the substances: "tiny amounts don't hurt". Next, risks are morally evaluated when D1 is advised not to recommend a risky combo to other forum users. Finally, competence is linked to controlling the risks. This comes out in D1's reply where she or he divides users into those who "screw up repeatedly" and those who do not. By this D1 produces her or his master position by means of a sharp categorisation. In other words, competence related to risk awareness and management is constantly reformulated with varying content and master positions are reproduced along with that.

From the perspective of social learning, for new users the most significant message of the conversation is that in addition the actual risks of the (possibly lethal) co-effects of different substances, competence is the capability to control risks and the moral orientation towards them. These unwritten rules and norms are instruments in negotiating positions. Albeit being separate from the pharmacological consequences of substance combinations, they

should not be ignored when claiming a place within users' online communities (cf. Becker, 1953, 1963; Zinberg, 1984).

An example of a moral obligation to avoid unnecessary risks can be easily found also in the Swedish forum.

Excerpt 6

D1: Iktorivil + GHB + speed + E + weed + alcohol. Had been driving a bloody race for 2 days and wanted to get to the liquor store before they closed. Jumped into a mate's car and drove off...drove into a ditch at 130...My mate said later that he thought he was sitting on his sofa at home playing Colin McRae rally when he was actually driving the car with me beside him...Can't remember anything myself, except that after the car had turned over four times I managed to crawl out of the car and went kicking the grass in the field, looking for my hat. But I've never owned a hat in my life...later on the ambulance personnel got me under control enough to get me to hospital!

D2: Haha, that was the funniest thing I've ever read. You should write a trip report about the whole event.

D3: Perhaps tragicomic at most. Personally I don't think that irresponsible drunk drivers are especially funny.

D1: I'm the first to agree with you...the most idiotic thing you can do is to get behind the wheel when you are off your head...but that was what happened and I don't believe any of us can grasp what we really did...

(Flashback forum, Sweden)

In Excerpt 6, D1 shares her or his combo experience without taking any clear competence position and, rather, aiming to entertain other forum users. D3, however, turns the discussion into a negotiation of competence by paying attention to the risks and, through this, appoints a novice position to D1 and especially to D2. Followed by this, D1 needs to adjust her or his position to this new storyline in order to save her or his place in the community. She or he is forced to deny the "funny" part of her or his story and

comply with D3 to prove her or his competence in this new setting as a risk-aware user.

Risk in this case is defined clearly as a moral issue. Drugged driving is produced as objectionable and irresponsible behaviour, and the competence positions are expressed according to that. Thus, the risk dimension by no means relates to the pharmacological risks of the combination in question. Instead, responsible behaviour while intoxicated is set as a criterion of competence. Similarly, the positions of the discussants change when the storyline changes, moving from entertainment to avoiding and managing risks, and the discussion parties position themselves differently in relation to each other. The statement that was originally meant to achieve fame by entertaining the audience is repositioned as an indicator of incompetence in risk awareness.

Although as a whole this conversation is not about combining substances per se, it reveals the certain interactional rules that new users need to learn and internalise in this specific community. The moral structures that build on risk awareness determine the competence positions of the members of the community. This lesson was concretely learned: in the last reply D1 realises the existence of these moral structures and hurries to take her or his previous words back.

Discussion and conclusion

The Internet has become a space for disseminating drug information wherein knowledge, practices and new innovations in polydrug use are also shared. In discussion forums, drug consumers meet "innovative users" (Boyer et al., 2007) who experiment with new combos and report their experiences to others. However, the discussion is not confined to celebrating the effects of good combos, it also includes a lot of risk talk (cf. Davey et al., 2012; Manning, 2014; Soussan & Kjellgren, 2014). Information on substance combinations shared in online discussion forums can thus be regarded as "a marginalized form of citizen science", as Duxbury (2015, p. 6) has stated. In this article, we show ways in which online discussion forums

constitute a kind of virtual academy where knowledge related to polydrug use is produced and circulated, and where experienced users mediate their expertise to less experienced ones.

According to our findings, just as in a physical environment, beginners in this virtual community are provided with cues and models from the more experienced users when practicing techniques, pursuing pleasure and avoiding the risks of combining substances (see also Rosino & Linders, 2015). In this process, participants take the positions of masters or inexperienced novices. By means of these interactive positions the users demonstrate and share their knowledge of drug combos. In a virtual environment, this requires constant explicating and maintaining of positions (see Harré & van Langenhove, 1999). This occurs by asking for advice, presenting one's expertise, challenging other participants, repositioning oneself, defending one's position or proving one's competence.

In these negotiations, different perceptions of pleasure and risk awareness are employed as tools and sometimes even as weapons. Attaining pleasure from substance combos requires expertise gained through experience and familiarity with them. Respect for first-hand experience has also been shown to be a general feature in other types of online drug communities (Davey et al., 2012; Duxbury, 2015; Rosino & Linders, 2015). In addition to expertise in the pharmacological characteristics of different combinations, managing pleasure also requires skills in order to create functional combos for different purposes and social situations (such as partying, chilling or working). The analysis also provided insight into the various ways in which risks were conceptualised: besides the consequences of the pharmacological co-effects, such as overdoses or unpredictable behaviour under intoxication, online discussants tended to appeal to legal and moral orders. In other words, the socio-cultural meanings of drug use are produced and reproduced in the online context. In this sense the online discussants behave in line with some well-known studies that have argued that the effects of the drugs are not just determined by pharmacological properties (Becker, 1953, 1963; Gomart & Hennion, 1999; Zinberg, 1984).

Online forums function as an environment for social learning of combining substances where knowledge of benign combos and warning experiences of risky combos are mediated and circulated among users. These forums are also spaces wherein inexperienced users can consult those who have gained competence in the area. The online community also guides beginners in the kind of co-effects that are perceived as pleasurable or not. In addition, the unwritten moral rules of this certain area of drug culture are learned in the negotiation of competence positions. In this regard, the online setting shares similar features with the offline setting explained by Becker (1953, 1963).

However, as a learning environment, online forums provide assets that are not found in offline environments. For example, all information is archived in the forums and can be searched through and applied long after the actual discussion has taken place. Also, the selection of advice and ideas gathered in one place is much more extensive than in offline environments.

One interesting finding is that the learning process of making drug combos also deviates from what Becker described about learning to smoke marijuana, as the users are hardly beginners in drug use. Even in cases when users might have profound experience of single drug use, they might still be novices in combining drugs. Knowledge related to managing combos represents advanced skills and a wide experience of the pharmacology of different combinations. Expertise by experience manifests as a salient factor in claiming authority, but in an online context the expertise is under renegotiation and participants have to adjust themselves to the constantly changing definitions of it. It is also likely that the discussants do not know each other personally. These characteristics imply that when compared to face-to-face interactions, the master and novice positions are more fluctuating, fluid and under suspicion.

Through the revolution of "new media", virtual online communication has grown alongside offline communication, both complementing it and providing an alternative arena for social learning of polydrug use. On the one hand, online drug knowledge may in many cases be preferred in contrast to information gained from offline communities in terms of its gathered width and depth (Barratt et al., 2013). On the other hand, Murguía and Tackett-Gibson (2007) have suggested that many drug users still prefer concrete and trustworthy face-to-face interactions, rather than the Internet, when acquiring drug information. In the end, it is important to recognise that these two contexts for seeking information and social learning of polydrug use do not exist in their own rights, but are intertwined and mutually supportive. They "bleed into one another", as Walsh (2011, p. 62) puts it. Nevertheless, online and offline contexts for drug information each have their own logic of interaction: while the virtual world functions solely upon faceless interaction, many situational factors may be brought more to the fore in the offline world, in face-to-face user encounters. An important topic for future research would be to study how the online worlds of polydrug use, or drug use in general, are incorporated into the everyday life of different drug users.

As Barratt (2011) and Manning (2014) have highlighted, the users of online forums like to present themselves as responsible and risk-aware drug users. Online forums provide a social context for vernacular harm reduction, as earlier studies have shown (Duxbury, 2015; Manning, 2014; Soussan & Kjellgren, 2014). Especially since the co-effects of drug combinations are risky, more lay information on this topic is needed. While sharing knowledge on how to use drugs in a safe way, the combo experts of online forums take informal positions as "public health actors" preventing risky drug use. At the same time, they provide important knowledge for official public health actors to plan well-informed interventions for risky combinations and situations of drug use.

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Appendix 1

The discussion threads selected for the data, the years the threads were opened, and the number of messages

Päihdelinkki [Addiction Link]: Sauna (8 threads / totally 452 messages)

Päihde (tai kombo) jonka olisit mieluusti jättänyt ottamatta [The substance (or combo) you'd rather have passed] (21 messages, opened 2006)

"Komboja" ["Combos"] (192 messages, opened 2006)

Combot.?? [Combos.??] (19 messages, opened 2007)

Paras kombo? [The best combo?] (192 messages, opened 2008)

Kysymyksiä comboista [Questions about combos] (7 messages, opened 2008)

Vaarallinen kombo [Dangerous combo] (7 messages, opened 2009)

Kombo x [Combo x] (8 messages, opened 2012)

Päivän kombo [The combo of the day] (6 messages, opened 2012)

Flashback: Droger (23 threads / totally 374 messages)

Super combo!? [Super combo!?] (12 messages, opened 2005)

Katastrof kombinationer [Catastrophe combinations] (12 messages, opened 2005)

Bästa kombon [The best combo] (12 messages, opened 2005)

Eran mest idiotiska kombo [Your most idiotic combo] (63 messages, opened 2005)

Kombo [Combo] (7 messages, opened 2005)

Bra combo!? [Good combo!?] (23 messages, opened 2006)

Farliga kombinationer [Dangerous combinations] (21 messages, opened 2006)

Råd för min combo ikväll [Advice for my combo tonight] (12 messages, opened 2007)

Bra kombo [Good combo] (9 messages, opened 2007)

Din mest skruvade combo? [Your most twisted combo?] (77 messages, opened 2007)

Hjälp mej med bästa "kombon" för en perfekt fredagskväll [Help me with the best "combo" for a perfect Friday night] (14 messages, opened 2008)

Fin combo? [Fine combo?] (6 messages, opened 2009)

Bra kombo? [Good combo?] (12 messages, opened 2009)

Bästa kombon? [The best combo?] (10 messages, opened 2011)

Farligt eller trevligt kombo [Dangerous or cozy combo] (6 messages, opened 2012)

Droger i kombinationer! [Drugs in combination] (5 messages, opened 2012)

Kvällens kombo [The combo of the night] (23 messages, opened 2012)

The ultimate Combo? [The ultimate Combo?] (12 messages, opened 2012)

Gott och blandat kombo [Good and mixed combo] (5 messages, opened 2012)

Lustig combo? Safe? [Quirky combo? Safe?] (12 messages, opened 2013)

Jävligt skysst kombo [Bloody sweet combo] (7 messages, opened 2013)

Skön kombo [Lovely combo] (5 messages, opened 2014)

Vilken combo tycker du är bäst? [Which combo do you think is the best?] (9 messages, opened 2014)

Appendix 2

Vocabulary of the slang terms, abbreviations and brand names of substances in the data excerpts

2C-T-4 = psychedelic phenethylamine
Alprazolam = benzodiazepine
Citodon = codeine (opioid)
Codeine = opioid
Dexofen = dextropropoxifen (opioid)
Diap = benzodiazepine
Diazepam = benzodiazepine
DXM = dextromethorphan (cough mixture)
E = ecstasy
Gamma = gamma hydroxybutyrate
GBL = gamma butyrolactone
GHB = gamma hydroxybutyrate
Iktorivil = benzodiazepine
Imovane = tsopiclone (sleeping pill)
Joint = cannabis
LSD = lysergic acid diethylamide (psychedelic)
Morphine = opioid
Nitrazepam = benzodiazepine
Oxycodone = opioid
Rivatril = benzodiazepine
Sativa = cannabis
Sirdalud = tizanidine (muscular relaxant)
Smoke = cannabis
Speed = amphetamine
Speed bomb = amphetamine orally
Stesolid = benzodiazepine
Stilnoct = zolpidem (sleeping pill)
Subutex = bubrenorphine (opioid)
THC = cannabis
Tramal = tramadol (opioid)
Weed = cannabis
Xanor = benzodiazepine
XTC = ecstasy
Zopiklon = tsopiclone (sleeping pill)