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The Use of Discord Servers to Buy and Sell Drugs

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Abstract

The focus of current research on social media drug markets is the use of mainstream platforms such as Facebook, Snapchat and Instagram. No research currently exists examining how lesser-known social media platforms may facilitate online drug supply. This paper presents the first analysis of the use of the social media platform Discord to buy and sell illegal drugs. The study utilizes observational data and qualitative interviews with Discord drug market participants in New Zealand, including sellers and a drug server administrator ($n = 12$). Our findings demonstrate that the Discord platform, which was initially established for gaming, is also being used to facilitate drug transactions. Discord is used to establish local drug selling groups called "servers," which can be joined by accessing an "invite-link." The advantages of Discord drug servers cited by interviewees included competitive prices and the ability to greatly expand local seller and customer bases beyond pre-existing personal networks. However, accessibility, server size and management varied considerably between drug servers, giving rise to a range of issues and concerns. We use drug market typologies based on theory of "open" and "closed" markets to understand how "lower tier" and "higher tier" Discord drug servers provided different buying and selling environments. "Lower tier" drug servers were generally characterized by greater ease of entry, larger size, higher rates of opportunism among participants and variable server management. Conversely, "higher tier" drug servers typically involved tighter market entry controls, more active server management and were generally smaller in size. The emergence of Discord drug servers illustrates how the evolution of social media platforms presents their users with new spaces that can be adapted to function as drug markets and the tensions that may emerge during the process of learning to buy and sell in a new social media space.

Keywords

online drug supply, social media drug markets, drug market theory

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Introduction

Contemporary social media refers to a diverse range of internet-based platforms that facilitate connection, communication and cooperation between people and groups via the making of and engagement with accessible user-generated content (McCay-Peet & Quan-Haase, 2016). Examples of social media range from social networks such as Facebook (Ellison et al., 2007) and instant messaging tools such as Facebook's Messenger and Whatsapp (Swart et al., 2018), to photo- and video-creation and sharing platforms such as Instagram, Snapchat (Alhabash & Ma, 2017), and Tik Tok, or "meta-communities" such as reddit (Moore & Chuang, 2017). The adoption of social media platforms to buy and sell illegal drugs is an emerging trend worldwide, enabled by the diversity and fluidity of the contemporary social media landscape (Demant et al., 2019; Moyle et al., 2019; Oksanen et al., 2021). The basic function of social media drug markets is similar across different platforms, which serve a connective function between buyer and seller, facilitating the organization of a trade. The actual exchange of goods and money occurs largely via in-person pick up or delivery (Demant et al., 2019; Moyle et al., 2019).

Studies to date have focused on the use of popular, mainstream social media platforms such as Facebook, Snapchat, Instagram, Whatsapp, and encrypted chat apps like Wickr and Telegram (Bakken, 2020; Blankers et al., 2021; Demant et al., 2020; Demant et al., 2019; Moyle et al., 2019). Understanding of how lesser-known social media platforms may facilitate the buying and selling of illegal drugs remains limited. Broadening our understanding of how different social media contexts can function as illegal drug markets is particularly important given that different platforms present their users with unique features and online risk and reward environments in which drug trading can take place. Given the proximity between social media drug markets and their local, offline counterparts, different platform environments and features may also influence how offline drug exchanges are carried out and to what extent buyers and sellers are at risk of negative outcomes such as robbery, rip off or arrest. In turn this may have considerable implications for harm reduction initiatives targeted toward individuals engaging with these settings and the kinds of policy settings governments adopt to manage digitally facilitated drug markets.

Consequently, this paper presents the first investigation of the use of the social media platform Discord to buy and sell drugs. We use drug market typologies based on theory of "open" and "closed" markets (May & Hough, 2004) to explore the ways in which Discord features are adapted to facilitate drug trading. We consider how variation in levels of drug market openness, size, and security features impact buyer and seller experiences, such as the risk of robbery or exposure to police.

Social Media Drug Markets: Existing Research

At present there is a small literature on the use of social media to buy and sell illegal drugs (Bakken, 2020; Bakken & Demant, 2019; Barratt et al., 2021; Demant et al., 2020; Demant et al., 2019; Moyle et al., 2019; Oksanen et al., 2021). Existing studies highlight the convenience of buying and selling drugs via mainstream social media platforms, coupled with fast delivery services, low barriers to entry and ease-of-use, and inbuilt security features such as self-deleting messages (Demant & Bakken, 2019; Demant et al., 2019; Moyle et al., 2019). Bakken (2020) has examined how illegal drug sellers in Facebook drug selling groups "signal" trust to prospective buyers. Oksanen et al. (2021) found that social media is the most commonly used means for young people to purchase drugs online in both the U.S. and Spain. Similar trends have been found in New Zealand where the use of social media for drug purchasing has also been linked using commercial types of drug seller (van der Sanden et al., 2021). Two recent articles explore innovative digital drug market trends combining different platforms on the dark- and surface web. Childs et al. (2021) study explored the use of the surface website *LeafedOut* as a means of connecting local illegal cannabis buyers and sellers in Melbourne, Sydney and Brisbane, with

transactions often completed via encrypted apps. Additionally, Barratt et al. (2021) analyzed the use of the darknet/encrypted app hybrid platform Televend, which lets vendors manage sales via the darknet using a "shopbot," which interfaces with customers making purchases via the encrypted app Telegram.

The Discord Platform

Launched in 2015, and originally developed as a voice-calling app for gamers, Discord allows users to create private or public online communities, or chat rooms—called "servers"[1]—to message, video- or voice-call with anyone who has received an "invite-link" to join (Discord, 2021c). Servers comprise a series of customizable "channels" in which server members can chat or call others. Establishing a server is simple and streamlined, with server creators (hereafter termed administrators) able to customize server layout, channels, security, and member behavior via a series of in-built server controls and permissions (Discord, 2021b, 2021c). Discord is pseudonymous, although it does require user accounts to be tied to a valid email address, and private messages between users are HTTPS encrypted rather than end-to-end encrypted, as on Whatsapp for example (Mozilla Foundation, 2020). The platform is available for desktop as well as smartphone.

In recent years there has been a large-scale expansion of Discord's user base, and the company has rebranded itself under the slogan "*your place to talk"* as a platform for communities of all types, particularly during the COVID-19 pandemic (Brown, 2020; Pierce, 2020). As of October 2021, Discord is hosting over 19 million active servers and 150 million monthly users globally (Discord, 2021a). The platform's recent growth in popularity, as well as its range of customizable user affordances, has seen the company struggle to control the proliferation of illegal content and misuse of server infrastructure ("Nelly," 2021; Pierce, 2020). Discord servers have been used by hackers and carders to buy and sell stolen data and spread malware (Brewster, 2019). "Far-right" racist and anti-Semitic content has also been disseminated on the platform (Brown, 2020; Glaser, 2018) and it has been linked to child-grooming cases ("Child abuse images being traded via secure apps," 2019). However, the company has remained largely silent on the topic of illegal drugs and Discord's most recent transparency report makes no explicit reference to its servers being used as drug markets ("Nelly," 2021).

In New Zealand, the use of Discord servers as local drug markets has been the subject of recent media coverage (Cornish, 2020; Harris, 2021; McKenzie, 2020), with references made to high levels of drug availability, violent "gang" assaults, and an increasing shift toward a commercialized local drug market. A recent survey of New Zealanders who use drugs (van der Sanden et al., 2021) identified the use of Discord for drug purchasing, with 9% of social media drug purchasers reporting using Discord to buy drugs in the previous six months, well behind Facebook (60%), Snapchat (48%), and Instagram (20%). Discord drug servers are generally set up to function as regional or city-specific marketplaces where drug sellers advertise openly to a network of buyers, much like the market dynamic identified in Facebook drug selling groups by researchers in Scandinavia (Demant et al., 2019). According to media reports, Discord drug servers have emerged as a particularly popular feature of the retail level drug market in New Zealand's capital city Wellington (Cornish, 2020; Harris, 2021), but servers have also been observed for other NZ cities and regions, as well as documented by media in South Australia (James, 2021).

Drug Markets and Online Drug Supply in New Zealand

Geographic isolation and small population centers play an important role in shaping drug accessibility and availability in New Zealand (Wilkins et al., 2018). These attributes contribute to a market division between drug types where there is active domestic manufacture and high availability—such as cannabis and methamphetamine—and those typically imported and where availability is less certain, such as MDMA and LSD. Historically, "street drug markets" have not been a substantial feature of drug

selling in New Zealand, with the exception of "tinny" or drug houses where private residences operate as semi "open" drug markets for cannabis purchasing (Wilkins et al., 2005). The Illicit Drug Monitoring System (IDMS), an interview-based survey of regular drug users in New Zealand's major cities carried out annually from 2009 to 2016, found that cannabis and ecstasy/MDMA are most commonly purchased from "private house" locations, followed by purchasing from an "agreed public location" (Wilkins et al., 2017). However, IDMS respondents reported increasing drug purchasing from the "internet" (dark web, social media or other), particularly in relation to MDMA-type substances, with "internet" purchasing rising from 0% in 2009 to 15% in 2016 (Wilkins et al., 2017). More recently, van der Sanden et al. (2021) found that purchasing from "social media" is common for purchases of cannabis and ecstasy/MDMA in New Zealand (24% and 13% respectively). Research of online drug supply in New Zealand has been limited to date, although anecdotal media reports claim rates of darknet purchasing are increasing (Morrah, 2018), and that the use of social media for buying and selling is "increasing" (Dillane, 2019; Marshall, 2021).

Drug Market Typologies and Technology

Eck's (1995) geographical model of offline illegal markets provides a framework for our analysis of Discord drug servers. Eck differentiates between drug markets comprised of personal networks and those consisting of strangers, arguing that the latter are more closely tied to particular offline geographic locations, given the absence of personal networks to connect buyer and seller. Appropriate geographic locations will tend to be familiar to both buyer and seller (or at least appear secure to both parties), facilitate communication, and typically concentrated in one area (Eck, 1995). When it comes to social media, Bakken and Demant (2019) have suggested there may be merit in considering different platforms as "*separate entities*" (p. 256) in relation to their function as drug markets—a perspective we adopt in our analysis of Discord drug servers.

Distinctions between drug markets comprised of strangers or personal networks are commonly referred to as the drug market typologies of "open" and "closed" (Coomber, 2015; Hough & Natarajan, 2000; May & Hough, 2004), or alternatively "public" and "semi-public/private" (Bakken & Demant, 2019; Sandberg, 2012). "Open" drug markets are characterized by larger size, high accessibility and high visibility, while "closed" markets (e.g., social supply or private houses) are smaller, less accessible, less visible, and lower risk (Eck, 1995; Hough & Natarajan, 2000; May & Hough, 2004).

Digital technologies, such as the mobile phone, have played a central role in facilitating the shift from "open" to "closed" markets within the retail level of the drug market (Barendregt et al., 2006; Curtis et al., 2002; Dorn et al., 2002; Hough & Natarajan, 2000). However, distinctions between these typologies are increasingly complicated by technological innovation, which presents people who buy and sell drugs with a new and consistently evolving "geography" in which to manage the risks of participation in an illegal market. For example, cryptomarkets, known colloquially as darknet markets (Barratt & Aldridge, 2016), are often large in size, and trust between anonymous network members is generated and maintained via a comprehensive online reputation system and third-party dispute resolution (Bakken et al., 2018; Przepiorka et al., 2017). Aldridge and Décary-Hétu (2016) suggest cryptomarkets can be considered "anonymous open" drug market structures, representing a combination of "open" and "closed" market features. The "anonymous open" cryptomarket allows sellers to openly advertise their products, transact with strangers, and transcend local market constraints, while anonymity protects them from many of the "traditional" pitfalls associated with this type of "open" market dynamic in offline drug market contexts, such as risk of physical robbery or violence from other market members. Additionally, the anonymity of cryptomarkets allows participants to transact "openly" without being identified by police (Aldridge & Décary-Hétu, 2016).

Social media platforms lend themselves to a diversity of social functions and relational contexts. Researchers in Scandinavia suggest social media drug markets can be conceptualized along a

continuum ranging from "public" (i.e., Facebook selling groups, dealer profiles on Instagram or Tinder)—characterized by open advertising and transactions with strangers, through to "semi-public" (i.e., seller's using Snapchat to advertise to a small group of buyers), and "private" (i.e., one-to-one exchanges on messaging apps), both of which generally involve transactions within trusted networks (Bakken & Demant, 2019). Given what is currently a small body of research exploring the emergence of social media drug markets, there remains considerable scope to explore how levels of drug market openness function within and across different platforms and local market contexts.

In this article we explore how one platform—Discord—facilitates different buying and selling dynamics within the context of New Zealand's retail level illegal drug market. We draw on theory of illegal drug market typology outlined above to understand how the Discord platform acts as a unique "geographic location," facilitating a variety of drug market dynamics based on differing levels of market openness. We discuss how Discord drug servers that were higher in market openness increased buyer and seller vulnerability to drug market harms such as robbery or violent altercations, adulterated or fake drugs and exposure to law enforcement. Conversely those that were more "closed" offered greater protection to their members from these risks while also facilitating the potential for a beneficial, competitive trading environment. To conceptualize this drug market variation in a platform-specific way, we use the terms "lower tier" and "higher tier" to distinguish between different drug server types based on ease of entry and drug server accessibility.

Studies describing evolutions in drug market structure provide an important means of understanding drug market characteristics and related harms, as well as resulting trends in drug use. This in turn feeds into the development of policy, harm reduction initiatives and police responses.

Method

The emergence of Discord drug servers for the buying and selling of illegal drugs was investigated using a combination of anonymous online interviews with people who use Discord drug servers and observational data collected as part of a broader mixed methods project examining the use of social media drug markets in New Zealand.

Synchronous online chat interviews (Barratt, 2012) with 12 Discord drug market participants were carried out from August 2020 to September 2021. The interview schedule was semi-structured and developed based on a comprehensive literature review and an earlier large-scale quantitative survey of social media drug markets (van der Sanden et al., 2021). A semistructured approach was chosen to allow for adaptability across a wide range of different app types and market roles, as well as to facilitate interview flexibility and responsiveness to novel behaviors and experiences (Brinkmann & Kvale, 2015). Topics included in the interview schedule were how and why specific apps are used to purchase/sell drugs, broader patterns of non-drug related social media use, and perspectives on physical safety and drug quality when using a given app to purchase/sell drugs.

To encourage frank and open disclosure by interviewees, the interviews were carried out via the anonymous encrypted chat-app "Wickr Me" (referred to as Wickr throughout the paper). It was assumed participants would feel more comfortable about sharing their experiences via direct anonymous messaging (Barratt, 2012). Wickr has previously been used in research with social media drug sellers internationally (Demant et al., 2019), as well as with surface web cannabis sellers and buyers (Childs et al., 2021).

Participants were recruited using a targeted approach (Watters & Biernacki, 1989). The study was advertised on New Zealand specific subreddits, and in Facebook groups related to drugs such as cannabis or psychedelics and dance music genres often associated with specific types of drug use (Forsyth et al., 1997). Hard copy adverts for the study were also physically distributed at a dance music festival in Auckland and the advert was posted online via the New Zealand drug checking service *Know Your Stuff* social media pages (Facebook, Instagram, and Twitter). In order to participate

respondents had to be aged over 16 and have used social media to buy and/or sell illegal drugs in New Zealand. Interviews were completed online over several hours, or in some cases over several days (due to breaks between ongoing messaging), with the longest interview taking five days to complete. The median length of interview transcripts (chat logs formatted into word documents) was 9 standard pages, with the shortest being 7 pages and the longest 18. Participants were offered a supermarket voucher as reimbursement for their time.

In total, 12 participants with Discord drug server experience were interviewed, five of whom also took part in a follow-up interview via Wickr approximately six months after their initial interview. Follow-up interviews were aimed at further developing the research team's understanding of social media drug markets by providing an opportunity to clarify initial interpretations, as well as ask questions on topics that had emerged from interviews with other participants.

Additionally, one of the researchers created a Discord account to join several large Discord servers that were accessible via reddit. One of these was based on the discussion of general national news topics (r/NewZealand), and the other was connected to reddit's r/drugs community. This was done to corroborate basic elements of drug servers reported by interview participants, such as basic server layout and functions.

Partway through the interviewing, one participant shared several invite-links for Discord drug servers in the Wellington region. Three servers were subsequently joined in late October of 2020, and by January 2021 the research team's drug server membership had expanded to seven servers by virtue of drug server invite-links often being shared publicly by other server members. Additional Discord servers were joined based on server size (i.e., upward of 400 members) and the public availability of invite-links. Unobtrusive observation was used in this instance to gain an understanding of the drug server environment as it normally functions, unimpacted by an overt researcher presence (Burles & Bally, 2018; Gibbs & Hall, 2021; Kozinets, 2002). The validity and ethical implications of unobtrusive data collection in online spaces—"lurking"—has been much debated in academic circles (Berning & Hardon, 2019; Ferguson, 2017). Therefore, data collection focused on broad categories of server attributes and no identifying information contained in server posts, such as photographs, phone numbers, or social media details (doxing) of other members, was collected. Moreover, all data were kept on a password-protected university hard drive. Structured observation of all seven Discord servers was conducted from mid-January through to mid-April of 2021. The servers were observed weekly, and screenshots taken based on four principal categories: "server layout," "seller adverts," "seller reviews and buyer requests," and "scamming allegations." In total 570 screenshots were taken during the observation period.

Data were analyzed thematically in NVivo using Braun and Clarke's Six-Step Thematic Analysis Framework (Braun & Clarke, 2006). Development of coding structures and themes combined deductive elements drawn from existing literature with inductive findings generated from the interview data. Initial analysis involved coding interviews by hand based on basic descriptive criteria such as app types used, drug supply connections and seller types, perceived risks and negative experiences, as well as topics of online privacy and elements of recreational drug use such as drug quality and price. Once coded, data were checked cyclically, with codes revised as data collection progressed and analysis developed. Memos were made by the researchers for each "parent code," detailing developments in thinking and referencing interview participants whose experiences were of particular importance to the essence of the code. Screenshots were checked and a small sample of examples from each of the four observational categories coded alongside the interview transcripts to embed the observational data in the analysis.

The research team has opted to retain original language used by participants in the interview excerpts presented below. Slang terms are clarified in non-italicized parentheses.

This research received ethics approval from Massey University Human Ethics Committee Southern A (Application code: SOA 20/22).

Findings

Demographics

Of the 12 interview participants who used Discord for the purposes of drug buying or selling, nine only used the servers to buy, while two used them to buy and sell, and one had experience as a server administrator as well as with buying and selling. The median age of the sample was 21.5 years (IQR = 19–25.5), with the youngest interviewee aged 18, and the oldest aged 39. Five interviewees identified as female and seven as male. Three interviewees were from the Auckland (New Zealand's largest city), three from Otago (a largely rural region in New Zealand's South Island), with the remaining seven located in the Wellington region (New Zealand's capital and third largest city).

The Basic Elements of a Discord Drug Server

Observation of Discord servers used as drug markets revealed a range of commonalities in structure and function. The Discord drug servers examined were all specific to the Wellington city and region, however interview participants also cited membership of New Zealand-wide or South Island drug servers. Members of these drug servers could order drugs from sellers located around the country. The drugs would then be sent by post with payment made via bank transfer or cryptocurrency. However, both the observational and interview data indicated this type of arrangement was relatively rare, with drug transactions organized via Discord's private messaging system typically completed via in-person pick up or delivery, with payment in cash.

Drug server sizes differed considerably, with some servers accommodating thousands of members and others no more than 30. Of the Discord drug servers observed, the largest had almost 3,500 members at the time of joining, while the smallest had just over 400. However, interview participants cited membership of considerably smaller drug servers, some of which were "seller-specific" drug servers used by individual sellers to advertise and connect with only already trusted buyers, in contrast to the open marketplace function of their larger counterparts. Based on observational and interview data the most common drug type sold via Discord drug servers was cannabis (i.e., flower, mentioned by 10 interviewees—$n = 10$), followed by MDMA powder ($n = 7$), psychedelics (i.e., LSD and magic mushrooms, $n = 6$), and pharmaceuticals (i.e., benzodiazepines, painkillers, study drugs, $n = 5$). Many servers included a "server rules" channel specifying what was and was not permitted on the drug server. As well as including threats to ban members if they were violent or scammed others, "rules" usually specifically banned the sale of more "serious" drug types such as methamphetamine and heroin. However, methamphetamine in particular was highlighted as still widely available via private message, and in some cases was traded openly (see "ice" channel in Figure 1).

Figure 1 provides an example of the typical elements of a drug server layout. Channels are generally separated by drug-type, and additionally by advertising and requests, or by delivery method (i.e., drop off, pick up). Most servers also contain channels enabling buyers to leave informal reviews or "vouches" for sellers and their product (Figure 1, "shout-outs"), as well as for reporting scams or robberies by other server members (Figure 1, "ripoffs-complaints").

Figures 2 and 3 represent examples of the typical structure of seller advertisements in these environments. Advertisements include information on the product type(s) available, weights and prices, and delivery options, such as whether and where they are available for physical drop offs. Most advertisements include photos of the product, and more recently reagent test results for drug types such as MDMA (see Figure 1). Cannabis adverts will generally also specify whether a product is grown indoors or outdoors and may specify strain. Adverts are typically reposted almost daily until the product is sold and the same adverts are used by sellers to advertise in multiple different drug servers.

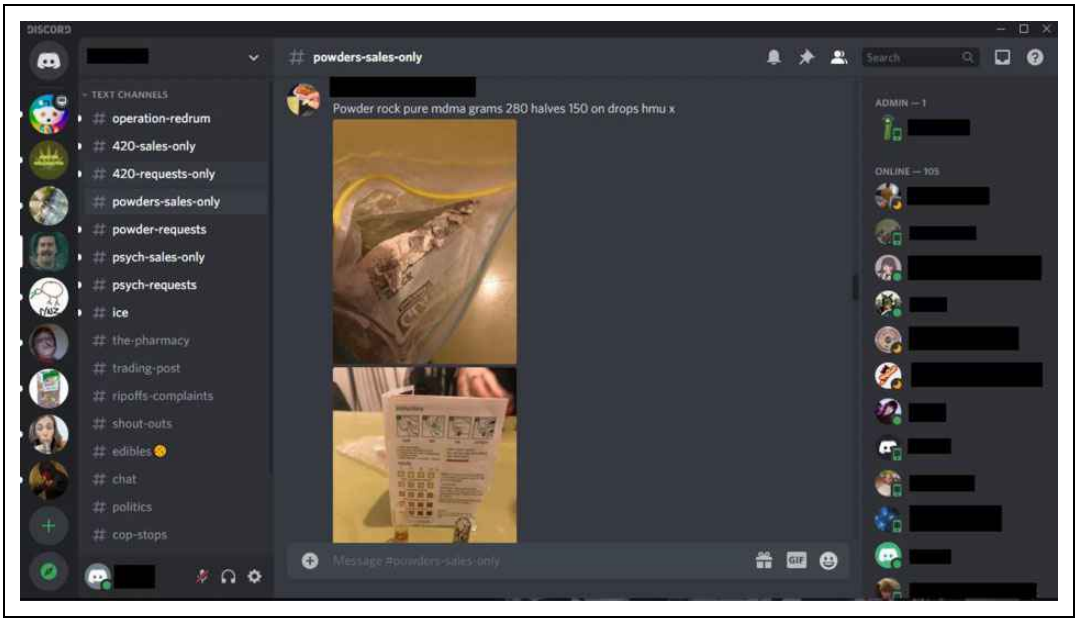

Figure 1. An example of how a drug server is typically laid out.

Motives for Using Discord

Many interview participants were already familiar with the Discord app from prior experience using the platform for online gaming, chatting with friends, or accessing communities related to their hobbies ($n = 7$). However, the majority of participants ($n = 8$) used Discord "mostly" or exclusively for drug buying or selling. This highlights that Discord drug servers were considered an innovative and convenient means of locally sourcing drugs, as evidenced in the quote below:

> You pick your dealer and product, send them a private message and the majority of the time they deliver to your door . . . the first time I used discord and made an order, it was at my house within ten minutes. (**P7**—Buyer, M39, Wellington)

Along with the convenience of delivery options, interviewees emphasized the choice of products, which were often available in larger amounts and at what were perceived as lower prices (Moeller et al., 2021) compared to what they could access via existing contacts by virtue of the greater number of sellers and therefore competition between Discord sellers:

> I found it much easier to secure ounces as there are many sellers. Another factor was the supply, not many ounce dealers I knew did delivery but many do on the Discord (server). I was also able to find dealers who lived nearby so I could pick up from them. (**P14**—Buyer, M22, Auckland)
>
> Larger diversity, many sellers seem to have several options to pick from. I've also found it to have better prices than other options. Having all the sellers together and showing their products and prices seems to make it much more competitive. (**P23**—Buyer, M23 Otago)

Interviewees often cited having previously sourced drugs casually via friends and social connections, or from sellers who were often out of stock or sold expensive, lower quality drugs. As a result, many joined Discord drug servers for the easier access provided to a wide variety of different drug

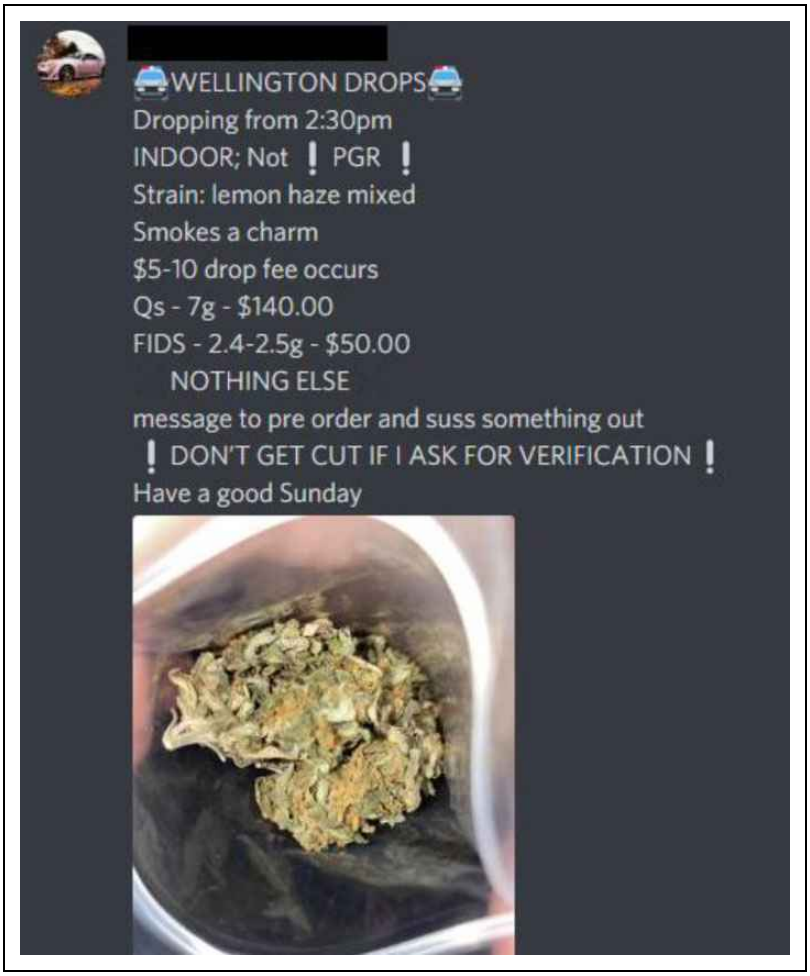

Figure 2. An advert for cannabis posted to a drug server including information on strain, weights available, and additional charges for drop offs.

types not so readily available in their own networks. Several younger interviewees identified Discord drug servers as their first experience of buying drugs independently from commercial sellers ($n = 4$). The presence among the interviewees of novice drug purchasers citing relatively low levels of stable or satisfactory drug access via their own networks provides an indication of both the attraction and accessibility of Discord drug servers for this group.

"Higher Tier" and "Lower Tier" Drug Servers: Invite-Links and Server Membership

The Discord servers could be joined via a temporarily valid invite-link sent by an existing member, or in some cases posted publicly to other drug servers. Invite-links were also reportedly accessible via drug-related communities on platforms such as reddit. The majority of interviewees reported receiving invite-links to join Discord drug servers via their social networks, with many invite-links circulated widely within local networks of young people via messaging platforms.

On joining a server, a new member was generally required to "verify" themselves to the server administrator to "prove" their legitimacy. In most servers this consisted of a time-stamped image

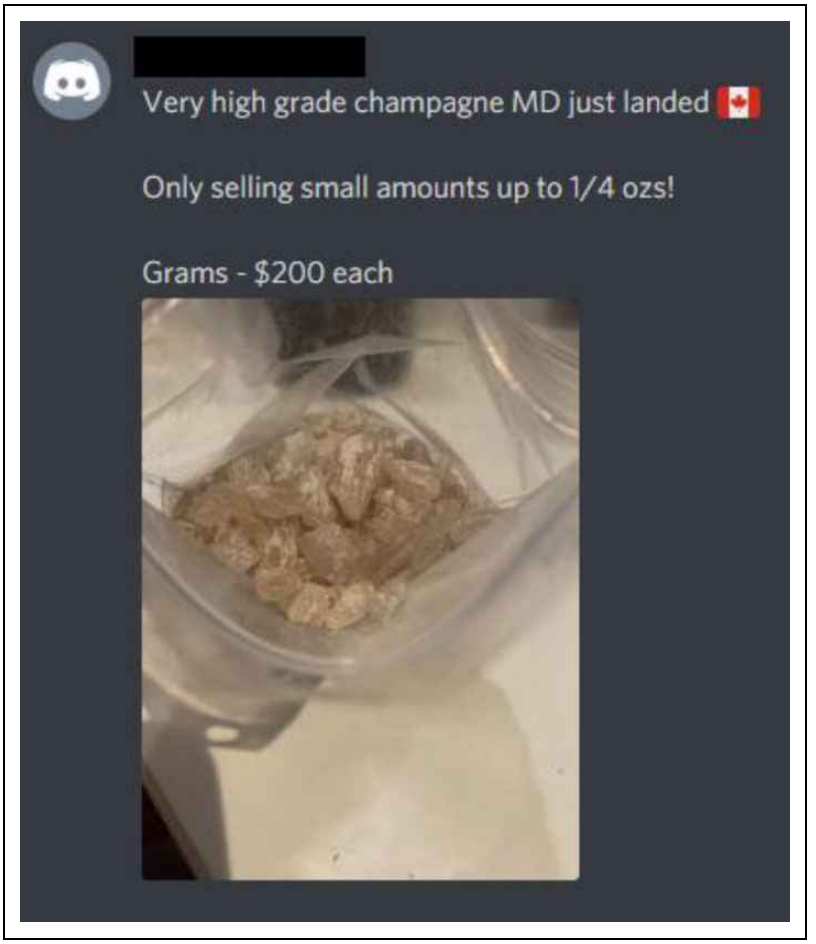

Figure 3. A more basic advert for imported MDMA.

containing used drug paraphernalia and/or drugs as well as a piece of paper specifying username, date, and market role. However, interviewees highlighted that membership of some drug servers required additional verification measures, such as screenshots of successful trades with known sellers, or in some cases the submission of an anonymized ID such as a driver license to establish date of birth. New members were often only given access to a "welcome" channel prior to receiving verified status, at which point they could access the wider server. Similar practices have also been reported in other online drug markets, such as Facebook drug selling groups where new group entrants may need to prove they are "drug wise" by answering questions set by group administrators (Demant et al., 2019). On the cannabis website *LeafedOut* buyers and sellers often sent each other selfies before a transaction to establish trust (Childs et al., 2021).

Server administrators set out and regulated the verification process on their respective drug server using Discord's inbuilt permissions functions, which allow them to set and assign customized roles to server members to control how they can interact with the server (Discord, 2021b). Verification procedures therefore tended to vary from server to server, ranging from rigorous through to completely absent. For example, the server shown in Figure 1 did *not* require verification to view or post in server

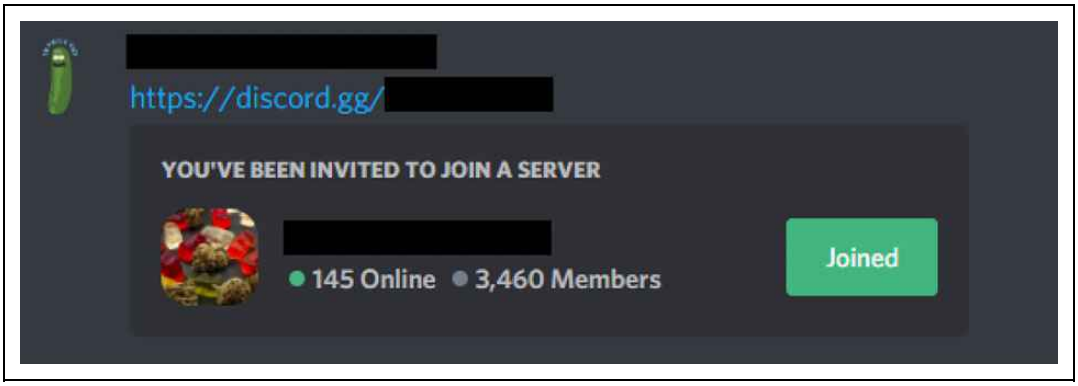

Figure 4. An invite-link for a large drug server posted to the main chat of another drug server.

channels and the research team joined it via an invite-link posted to another drug server. Only one of the drug servers joined required verification to access the selling channels.

Drug server administrators determined the degree to which invite-links could be freely shared, and who could share them. In general, drug servers with limited controls around the sharing of invite-links were easier to access, and larger in size. We term drug servers with these attributes "lower tier" by virtue of their higher openness and low barriers to entry (Bakken & Demant, 2019; Eck, 1995). On "lower tier" servers, invite-links to new servers were routinely shared on existing servers (Figure 4), or requested publicly by members, facilitating the expansion of membership to many different drug servers at a given time (see also Bakken & Demant, 2019). For example, among the interviewees, membership ranged from 1 through to 40 different Discord drug servers, with a median of 5 (IQR = 1.5–17.5):

> There's hundreds of them so there's always new people on different servers . . . I'd say 40ish (servers) I mean there's always new ones popping up here and there, some just fizzle out. (**P29**—Buyer/seller, M19, Auckland)

While the ability to continuously locate new buyers and sellers by joining additional Discord drug servers was cited as a key advantage of their use, many interviewees also noted considerable overlap between different server populations:

> I would see them post in a server called something like "welly sales" and then join another group later called like "drugz wellys" (not real names lol) and see they were selling there too. (**P6**—Buyer, F19, Wellington)

Notably, encountering the same members across different servers was not perceived as problematic among interviewees. In fact, several emphasized the overlap between drug server populations as a useful means of assessing the legitimacy of other members, particularly sellers:

> Usually before I buy from someone I'll click their profile and it'll say how many mutual servers we're in. That number is usually about 5 or 6. (**P10**—buyer, M21, Wellington)

In cases where server membership is more selective, server administrators often combine tough verification requirements with heavy restrictions on inviting new members. Interviewees indicated these restrictions could take a variety of different forms, such as permitting only certain server members to send invite-links (i.e., verified sellers), capping the number of invite-links members could

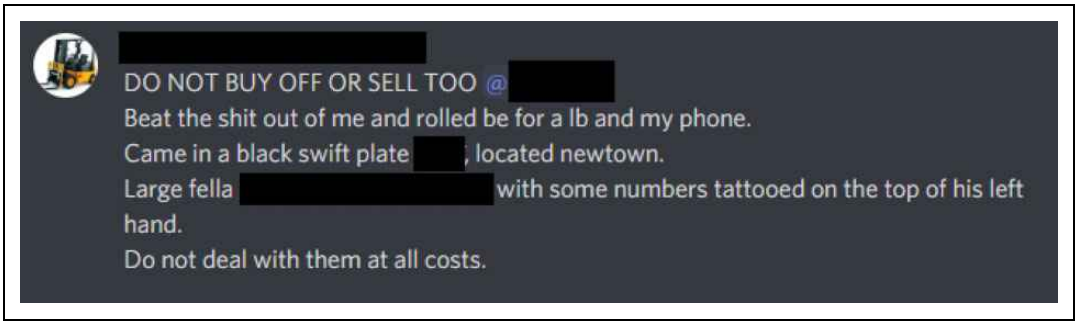

Figure 5. An example of a seller post in a drug server's "scam" channel letting others know they were robbed during a trade.

send, or suspending the ability to invite new members altogether. One interviewee explained their preference for using this type of server:

> High security. Generally smaller. Must be invited by verified dealers. Have to show pictures of gear (drugs) to get in and have been on Discord a while. Some will only let you in if you're on another tight server . . . Generally have more stuff, better prices and larger amounts . . . The others are bigger, mostly weed and expensive gear and filled with noobs (inexperienced buyers/sellers). Dodgier too. (**P25**—Buyer, M27 Wellington)

The drug server described above provides an example of what we term "higher tier" Discord drug servers, which display higher levels of drug market closedness (Eck, 1995; May & Hough, 2004). Entry into "higher tier" drug servers is dependent on existing connections to known sellers on Discord, or alternatively cultivated via participation in other drug server communities and ongoing interactions with other community members (Holt et al., 2009). As a result, "higher tier" drug servers are more difficult to enter for younger novice drug buyers, who often participated in "lower tier" servers where invite-links are more easily accessible. The ease of access characteristic of many "lower tier" drug servers, and the large size of resulting markets means that participating buyers and sellers may be at higher risk of falling victim to opportunistic behavior such as rip off, robbery and occasionally assault.

"Undesirables": Opportunism in a Drug Server

Opportunistic behaviors such as scams and robberies were alleged to be commonplace by many interview participants who were members of "lower tier" drug servers:

> The seller I thought was legit, turned out to be a scammer actually. (**P1**—Buyer, F19, Otago)
>
> Got hit over the head with a baseball bat last year a buyer turned up with his mates at night for a deal and rolled me for everything I had during quarantine (COVID-19 lockdown) . . . Stuff like that happens every week on the servers. (**P29**—buyer/seller, M19, Auckland)

Figures 5 and 6 provide examples of standard posts to a Discord drug server's "scam" channel to alert other users of unreliable sellers, buyers, and products. Based on observational data, most posts to "scam" channels concern the purchasing of "fake" or underweight drugs (Figure 6), or reports of cash, drugs, and phones stolen during a trade (Figure 5). Interviewed drug server members often linked the presence of "undesirables" on a Discord drug server to some of New Zealand's patched gangs and their prospects, a perception echoed in the New Zealand media (Cornish, 2020). Confirming these allegations is beyond the scope of this study, however gangs have previously been identified as playing a role

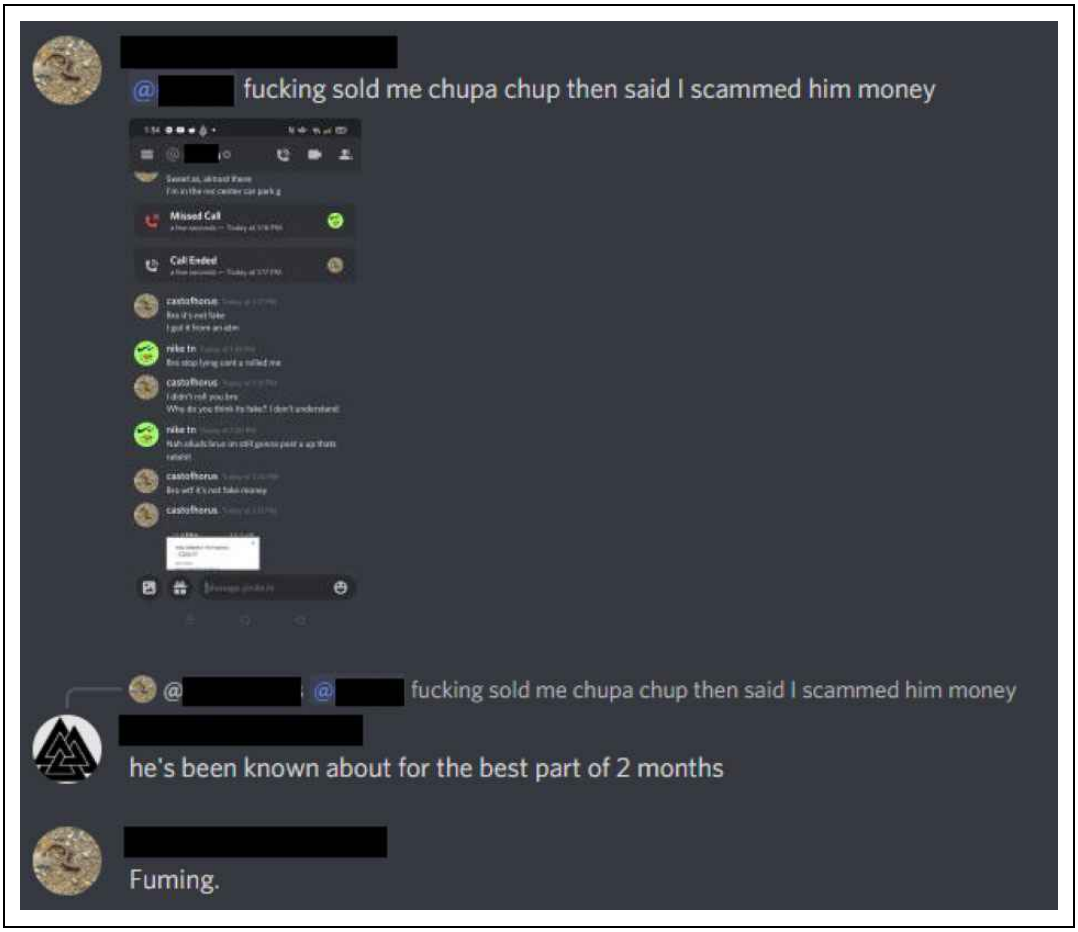

Figure 6. A typical example of a buyer being scammed into paying for fake product and using screenshots of private messages as evidence. The responding member states that this is a known scam account.

in New Zealand's retail drug markets, particularly for drug types such as cannabis and methamphetamine (Gilbert, 2013; Savage, 2020; Wilkins et al., 2018).

Allegations of scam behaviors often included the tagging of the member in question and the sharing of screenshots of private messages as "proof" (as shown in Figure 6). However, the ease with which usernames can be changed and new servers joined make it difficult to identify scammers. Server members disproportionately relied on informal trust-building mechanisms, such as the practice of asking for "vouches" (Figure 7) from other server members (see also Bakken & Demant, 2019; Childs et al., 2021), or staying informed about ongoing scam allegations across multiple drug servers (see Figure 6). These dynamics resulted in individual server members being seen as responsible for their own safety in these settings:

> I've also seen people complaining a lot about getting scammed or rolled and they post screenshots but a lot of the time the accounts they were buying from weren't verified, are only on that one server or whatever so it's kinda like what were you thinking. (**P10**—buyer, M21, Wellington)

Figure 7. Examples of informal "vouches" provided for Discord sellers.

The provision of "vouches" was discretionary (Figure 7), and any member could effectively "vouch" for another irrespective of prior transactions. Drug server members could either post "vouches" or ask for "vouches" from other members, a two-way communication feature that several interview participants found useful as a means of determining who to buy from and sell to. However, the observational data highlighted what at times appeared to be a messy system, where messages were not always responded to. Sifting through "vouches" and following ongoing scam allegations across different servers was cited as time consuming by some interviewees, highlighting what in many "lower tier" drug servers could be the considerable individual "legwork" involved in learning the best ways to avoid being ripped off or robbed when using Discord to buy and sell (Kowalski et al., 2019) in the absence of robust platform infrastructure and institutionalized means of engendering trust between market participants.

In comparison, interviewees with membership of "higher tier" drug server cited relatively low concern about exposure to "undesirables" or scamming behaviors by virtue of tighter controls on server entry. Interviewees often cited the importance of a robust verification process for legitimate server members as an important way for a Discord drug server to create some clarity around which sellers and buyers were reliable. However, some interviewees in "higher tier" drug servers also cited the use of other features intended to create a more stable representation of reputation among members. One such feature incorporates the use of Discord "bots" (a range of customizable, command-based AIs that allow server administrators to automate server management tasks) to create a more formal construct of seller reputation:

> It's a discord bot which gives a user 1 point. This bot has commands such as ".rep @username" which gives users the ability to give a point to a seller. The bot can also display a 'leaderboard' ranking server members based on these points. (**P14**—buyer, M22, Auckland)

The extent to which such features are incorporated into a Discord drug server, as well as whether scamming and robberies proliferate among market participants, highlights the importance of server administration and management to the success of a drug server and the safety of server members.

Drug Server Management

The presence of server administrators on Discord drug servers adds elements of third-party management to this environment, in a manner somewhat reminiscent of cryptomarkets (Moeller et al., 2017). Foundationally, server administrators are responsible for determining the level of drug server openness, and how Discord features such as "roles" and "bots" will be used to manage member behavior. However, both the observational and interview data highlighted considerable ambiguity around the role of Discord drug server administrators in relation to local offline drug markets, as well as their motives for managing a drug server:

> Sometimes they don't appear to sell. Maybe they're selling to the dealers but sometimes I struggle to see what they get out of it . . . to be honest that part is a mystery though. (**P25**—buyer, M27, Wellington)

In some cases, the market role played by drug server management appeared relatively clear-cut, particularly in cases where server administrators could be seen advertising in drug server channels—as was the case in three of the seven observed drug servers. Similarly, ex-drug server administrator (P15) referenced themselves as part of a "group of sellers" collaborating to build several Discord drug servers.

In "lower tier" drug servers, the caliber of drug server management could be highly variable, or entirely absent leading to a proliferation of "abandoned" drug servers. Server members alleged that many "lower tier" drug servers are run by gang affiliates, or alternatively highlighted the presence of official gang servers distinguishable by openly signaled gang patches and the sale of drug types such as methamphetamine:

> Some have a (gang) patch as the server image and are overtly gang related. Some are more stealth (discreet) but defs got heavy gang connections among admin . . . Or meth GBL, h (heroin) . . . stuff like that for sale. It doesn't take a rocket scientist but again I avoid them so don't examine them too hard. (**P25**—buyer, M27, Wellington)

The above quote reflects how the Discord drug server members interviewed used a diverse range of factors to assess the quality of server management to make judgments about the legitimacy of the drug server as a whole. This practice in turn helped to inform them about the nature and credibility of individual members, and therefore also the risk of using a drug server to buy or sell. Spreading membership across different drug servers—particularly in "lower tier" server environments - was therefore an important means through which buyers and sellers learnt to navigate a highly variable drug market environment by assessing drug server features indicative of a more robust level of server management:

> Generally, after joining the first few (servers), the moment I joined (another) one, I would start judging what I thought of it from its members (any familiar ones) and verification were key parts I looked for . . . I found servers which participated in encouraging harm reduction I trusted more. And servers with a proper tallied seller rating also helped. And lastly just active admin/ general chat/ discussion channels. (**P23**—buyer, M21, Otago)

The shroud of mystery often surrounding server administrators and feeding into the proliferation of "abandoned" or questionably managed servers can be linked to the low technological barriers to establishing a drug server using the Discord platform. Interviewees, including buyers, highlighted the

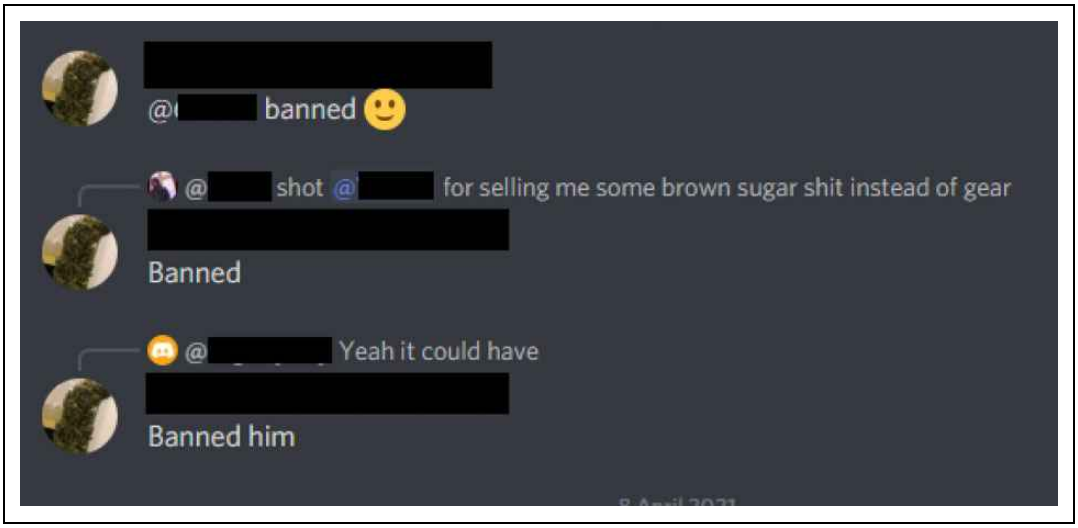

Figure 8. A server administrator publicly responds to scam allegations to let server members know which scam accounts have been banned.

discrepancy they perceived between the ease of establishing servers and the difficulty of managing the resulting community, particularly for servers with large memberships:

> Setting up a server is really easy, it's the maintaining it, keeping an eye on the messages, etc, that seems to be the hard bit . . . I've seen servers set up and pretty much anyone can enter, at some point they've realized that they've set the thing up wrong, offered it to someone else to look after and set up another server with better security measures. (**P7**—Buyer, M39, Wellington)
>
> Up here (Auckland), most vendors knew each other at least in passing. Down there (Wellington) it was less the case, and when stuff like gankings (assaults/robberies) from gang prospects happened it was really difficult to unpack who was letting who in and how they kept getting back in. (**P15**—ex-server admin/seller/buyer, F31, Auckland)

As a result of the workload of managing a larger server, many administrators also recruit moderators, and may take steps such as suspending the ability to invite new members when servers become too large. Four of the seven Discord drug servers observed had administrators who actively policed the markets (Figure 8), and interviewees who were members of well-managed servers cited feelings of safety when transacting in an effectively policed drug market:

> I have a much better sense of security with the Discord server since it's a marketplace. There are moderators who take safety and security seriously and will sometimes temporarily stop new people to enter if a seller is compromised. I generally don't have any safety concerns. (**P14**—Buyer, M22, Auckland)

The potential for Discord drug server management to sustain lower risk, moderated selling environments in the form of "higher tier" drug servers contrasts with the characteristics of "lower tier" drug servers where server management appeared to struggle to keep pace with opportunism and scams. In "lower tier" environments server features like seller verification and active administrators were not robust enough to manage the resulting market without the added security of controlled server entry and invite links. Choices made by drug server administrators around controlling server entry and accessibility also play a pivotal role in levels of drug server visibility and risk of arrest or exposure to police.

Visibility on a Drug Server

The accessibility of many "lower-tier" Discord drug servers and the visibility arising from the high-profile victimization associated with some offline transactions meant the threat of police infiltration was perceived as high by many interview participants, particularly those involved in selling or managing the servers:

> The threat of police infiltration is real—a whole bunch of people who trap (sell) thru the servers have been caught and imprisoned in the short period since I started. (**P15**, ex-server admin/seller/buyer, F31, Auckland)

This sentiment contrasts with those of interviewees citing membership to "higher tier" drug servers, where strict entry controls and a more networked server structure prevented the entry of unvetted members. On several of the "lower tier" drug servers observed, members of the community were often seen updating one another on the presence of local police checkpoints (Holt et al., 2008). Though police were acknowledged as a threat, server members—particularly buyers—were quick to place themselves as "small fish" of little interest to police:

> I'm always cautious but in reality I never buy in bulk, and even if I did get caught nothing that bad would happen. (**P33**—Buyer, F18, Wellington)
>
> Ah not really who cares in the long run I don't have any photos of myself on the accounts and it's not like government authorities would give a shit about one guy dealing. (**P29**—Buyer/seller, M19, Wellington)

Notably, an overlap between the use of Discord for other, social purposes alongside drug server memberships meant that several interviewees purchased drugs via Discord profiles they had previously used for non-drug related purposes. As a result, some interviewees realized they had been unintentionally sharing personal information via integrated Spotify links or usernames. Issues such as this indicate what appeared to be a relative lack of user awareness around online security measures, and precisely how much information they might be sharing with third parties in these settings.

Discussion

Discord drug markets are a new trend in New Zealand social media drug markets. Discord drug servers appear to offer seller contacts to younger and novice drug buyers who may not otherwise have these connections in their personal networks (Demant & Bakken, 2019). They provide a competitive local drug market with pick-up and delivery options and considerable choice of product and sellers. In the New Zealand context, the Discord drug server model is reflective of the "uberisation" of retail drug markets internationally (European Monitoring Centre for Drugs and Drug Addiction, 2018; Søgaard, 2019). Søgaard (2019) has described this trend as competitive drug market structures encouraging dealers to *"promote services beyond the product itself"* (p. 215), such as quick delivery. New Zealand's small population and geographically isolated drug market (Wilkins et al., 2017) may play a role in enabling unique social media drug market arrangements, given the smaller size of the local market and relatively low levels of drug market violence. Furthermore, the increasing presence and discussion of drug content online and on social media globally (Barratt, 2011) may further encourage the development of unique local online drug purchasing patterns.

Discord drug servers bear similarities to Facebook drug selling groups (Demant et al., 2019), or group chats on messaging platforms such as Telegram (Blankers et al., 2021), which enable similarly competitive selling environments and are typically also "managed" by a group "administrator" who grants access to new members, and where membership of many different selling groups is also commonplace (Demant et al., 2019). Bakken and Demant have termed groups such as these "public

digital markets" by virtue of their typically high levels of openness and ease of access (Bakken & Demant, 2019). However, the ability to customize drug server layout and security features to produce various levels of market openness, coupled with the importance of server administrators in shaping resulting buyer and seller behaviors make Discord a unique drug trading "location" (Bakken & Demant, 2019). Additionally, Discord's association with gaming may mean drug servers are used by different groups of people compared to Facebook, or Telegram selling groups.

Our characterizations of Discord drug servers as either "lower tier" or "higher tier" reflect how drug server openness varied across different servers and the extent to which this influenced levels of opportunism, perceived risk of law enforcement infiltration and sustained the success of drug server trading. The risks of participation in "lower tier" drug servers displayed considerable similarities to "open" drug market typologies (May & Hough, 2004) and were generally characterized by ease of access, larger size, variable server management, and a proliferation of opportunistic robbery and scamming behaviors among members (e.g., Jacques et al., 2014; Topalli et al., 2002). These drug servers generally had few controls on the sharing of invite-links, few verification requirements—particularly for new buyers, and limited use of discord server features such as "bots" or "rep." points. Server administrators often played a less active role in managing "lower tier" drug servers or were entirely absent.

Tighter control and oversight generally characterize "higher tier" servers, where the sending of invite-links was tightly regulated, and server membership was more closely predicated on offline network ties or established trust between server members akin to "closed" drug markets (May & Hough, 2004). Discord servers such as these were generally smaller, with invite links more tightly controlled by server administrators, and sometimes catered to a more "serious," well-connected clientele (Adler, 1993; Bouchard & Nguyen, 2010; Morselli & Tremblay, 2004; Ruggiero & South, 1997). It is notable, that "higher tier" drug servers still afford their users several features more typically associated with "public digital" or "open" drug markets, such as providing sellers with an ability to advertise and sell to a wider range of trustworthy customers than would be the case in fully "closed" or "private digital" markets (Bakken & Demant, 2019; May & Hough, 2004). As such, "higher tier" drug servers used Discord features to extend trust-based local drug connections by combining "closed" or established drug networks. To leverage the benefits of a more "open" drug market structure without putting buyers and sellers at additional risk of opportunism and arrest, Discord drug servers needed to maintain some degree of market closedness. This mixing of different drug market dynamics in the Discord context mirrors the ways in which levels of drug market openness shift in offline contexts in response to threats from policing and violence (Eck, 1995).

The contrast between "lower tier" Discord drug servers comprised largely of strangers and "higher tier" servers based more heavily on some level of established trust between members highlights an incongruity between the *technical* ease of establishing a drug server on Discord, and the difficulty of managing the resulting illegal market. Though conducive to establishing and maintaining "closed" more strongly *networked* drug markets in the "higher tier" drug servers, the question of whether Discord infrastructure is robust enough to formalize trust between large groups of strangers, particularly instances where transactions are completed in person is an important one. This question highlights a core tension within "lower tier" Discord drug servers—though an "open" market dynamic is easily created using platform features, it may not be manageable in a context where buyers and sellers continue to trade in person.

The difficulties involved in managing "open" drug market dynamics on Discord drug servers and the "traditional" risks of in-person drug markets faced by server members distinguishes these environments from "anonymous open" cryptomarkets (Aldridge & Décary-Hétu, 2016). In cases where administrators place tight controls around invite links and use additional Discord features to manage members or create seller reputation metrics, larger drug servers appear to be conducive to some degree of beneficial "anonymous open" market structure. In these cases, Discord servers can be used to

maintain and build trust between members who often do not know one another personally, in a similar but more limited manner to cryptomarkets (e.g., Bakken et al., 2018; Przepiorka et al., 2017). Additionally, due to the variability of drug server management many buyers and sellers continue to transact in drug server environments where third-party protection is either absent or very limited. In these environments members rely on informal mechanisms such as assessing "mutual servers," or "vouches" to make judgments about other members' trustworthiness (Childs et al., 2021; Holt et al., 2009). As a result, there is a considerable learning curve to navigating "lower tier" drug servers "safely," which may place novice buyers or those new to using Discord at greater risk of harms such as robbery, assault or purchasing adulterated drugs.

The high visibility characteristic of "lower tier" drug servers meant many interviewees expressed little doubt that police were already monitoring many drug servers. However, there was a relative lack of concern, particularly on the part of buyers, regarding the danger of police apprehension. This may in part be due to perceptions of anonymity arising out of larger network size (Bouchard & Ouellet, 2011; Kleiman, 1993) and server pseudonymity (Scott, 2004). However, it is likely that these attitudes also likely reflect the climate of normalization that exists around popular recreational drugs, and the role played by online content and communities in perpetuating these perceptions (e.g., Barratt, 2011; Petersen et al., 2021). Perceptions of normalization have been argued as a key factor in both enabling and sustaining "open" drug trading on the surface web more generally (Childs et al., 2021; Demant et al., 2019), and it is likely that this is also feeding into the development of large social media drug markets such as Discord drug servers.

Though the threat posed by law enforcement may be perceived as low among server members, large, "lower tier" drug servers—particularly those allowing for the sale of high risk drug types like methamphetamine—arguably "invite" law enforcement action (Bouchard, 2007; Eck & Gersh, 2000). The rapid rise of Discord drug servers in New Zealand also underscores the potential for social media platforms to continually carve out new spaces in which drug markets can develop. Indeed, Bouchard and Ouellet (2011) suggest that the development of large-scale drug markets may reflect the discovery of an unfilled niche market environment that seemingly poses lowered risks of detection to buyers and sellers. As such, it could be suggested that large, "lower-tier" Discord drug servers may have been the temporary result of an initial "honeymoon" period prior to major law enforcement awareness and action.

Notably, Discord has recently rolled out an anti-harassment AI tool to combat misuse of Discord infrastructure (Hatmaker, 2021; Kastrenakes, 2021). This development, which occurred after the data collection for this study, has resulted in the shutting down of many Wellington Discord drug servers, and disabling of members' accounts—including the research team's account. Events such as this highlight the ways in which measures taken by social media platforms themselves may have greater impact on the operation of social media drug markets than direct action from law enforcement agencies.

The development of Discord's own response to platform misuse may impact the future of the Discord drug server construct as it exists in New Zealand. However, cumulatively, many of the dilemmas and issues facing members of larger, "lower tier" Discord drug servers (Cornish, 2020; Harris, 2021; McKenzie, 2020), may have similarly impacted the long-term viability of "lower tier" drug servers as buyers and sellers opt for more stable, low-risk local trading arrangements. Participants cited making use of more reliable "seller-specific" drug servers, which function as "semi-public" drug markets where one seller advertises to a closed group of trusted buyers (Bakken & Demant, 2019). Furthermore, large, well-managed drug servers may also continue to exist on Discord, or shift to other, more secure platforms, with their members citing consistent drug quality, professional customer service, and the cultivation of a sense of "community" as benefits reaped from their drug server involvement.

Limitations

Our observation of selected Discord servers and in-depth interviews of a small number of Discord drug market participants over a number of months are not intended to provide a complete picture of these markets. Rather the study provides an exploratory "snapshot" of these emerging drug markets, identifying key themes and questions for further investigation, as well as attempting to place social media drug markets in the wider context of illegal drug market structures.

We have endeavored to ensure that the complexity and variation of the drug server environment is reflected in our study. It remains unclear to what extent Discord drug servers are being used in other countries, and how the structure and function of these servers may in turn differ from those we have described in New Zealand. Consideration of the use of Discord drug servers across different country contexts, or in relation to other illicit products, is an avenue for further research.

Conclusion

This paper presents the first exploratory analysis of the use of the social media app Discord to facilitate drug trading. Discord drug servers present a novel way for buyers and sellers of illegal drugs to connect and facilitate drug transactions in their local geographical areas. However, buyer and seller experiences using Discord drug server markets varied based on levels of drug server openness, size, and management, creating a separation between what we have termed "lower tier" and "higher tier" Discord drug servers. The high visibility and rates of opportunism characteristic of many "lower tier" drug servers underscored an imbalance between the ease with which "open" drug market structures can be facilitated using the Discord platform and the difficulty of managing buying and selling between strangers when transactions remain rooted in a local, in-person transactional context. Adapting social media platforms for the purposes of drug trading may not always be simple or streamlined; rather each "new" platform presents a distinct environment that repackages many of the "traditional" challenges and constraints of illegal markets. Our paper helps to conceptualize how social media technology may lend itself to the enablement of different drug market structures and how these may be adapted over time by their users. This is particularly important given that quickly transforming social media technology and software will continue to facilitate evolving drug buying and selling practices in the future.

The Discord example points to the potential for exposure to increased drug- and drug market-related harms as part of this process of learning to use a new social media drug market. The accessibility, novelty and convenience of purchasing drugs through Discord came at a cost, particularly to younger, novice buyers, and low-level sellers, who are most likely to take part in more open "lower tier" drug servers and therefore at higher risk of exposure to scams and adulterated substances, or physical violence. These risks are notable given that many of the transactions largely involve small amounts of drug types such as cannabis and MDMA (van der Sanden et al., 2021). The openness of "lower tier" Discord servers may provide a valuable platform to engage with vulnerable groups about drug risks and provide harm reduction information (e.g., Davitadze et al., 2020).

As new iterations of social media drug markets continue to emerge, we suggest there is increasing need to prioritize broader policy changes that help counter the risks of unsafe products and seller violence and that reduce young people's need to potentially engage with high-risk illegal drug market situations to purchase or sell small amounts of drugs. We suggest that decriminalization and legalization are powerful tools that may help in presenting young people with feasible alternatives to using social media drug markets. Without broader policy change it is likely that young people will continue to use these spaces for small-scale drug trades and grapple with the heightened risk of harm that may accompany them.

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Supplemental Material

Supplemental material for this article is available online.

Note

1. Note that the term "server" in the Discord context is the name given to the Discord groups individuals can create and does not denote a separation of computer hardware or software.

References

Adler, P. A. (1993). *Wheeling and dealing: An ethnography of an upper-level drug dealing and smuggling community* (2nd ed.). Columbia University Press.

Aldridge, J., & Décary-Hétu, D. (2016). Hidden wholesale: The drug diffusing capacity of online drug cryptomarkets. *International Journal of Drug Policy*, *35*, 7–15. http://dx.doi.org/10.1016/j.drugpo.2016.04.020

Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media+ Society*, 1–13. https://doi.org/10.1177/2056305117691544

Bakken, S. A. (2020). Drug dealers gone digital: Using signalling theory to analyse criminal online personas and trust. *Global Crime*, *22*(1), 1–23. https://doi.org/10.1080/17440572.2020.1806826

Bakken, S. A., & Demant, J. J. (2019). Sellers' risk perceptions in public and private social media drug markets. *International Journal of Drug Policy*, *73*, 255–262. https://doi.org/10.1016/j.drugpo.2019.03.009

Bakken, S. A., Moeller, K., & Sandberg, S. (2018). Coordination problems in cryptomarkets: Changes in cooperation, competition and valuation. *European Journal of Criminology*, *15*(4), 442–460. https://doi.org/10.1177/1477370817749177

Barendregt, C., van der Poel, A., & van de Mheen, D. (2006). The rise of the mobile phone in the hard drug scene of Rotterdam. *Journal of Psychoactive Drugs*, *38*(1), 77–87. https://doi.org/10.1080/02791072.2006.10399830

Barratt, M. J. (2011). *Discussing illicit drugs in public internet forums: Visibility, stigma, and pseudonymity* [Paper presentation]. Proceedings of the 5th International Conference on Communities and Technologies, Brisbane, Australia.

Barratt, M. J. (2012). The efficacy of interviewing young drug users through online chat. *Drug and Alcohol Review*, *31*(4), 566–572. https://doi.org/10.1111/j.1465-3362.2011.00399.x

Barratt, M. J., & Aldridge, J. (2016). Everything you always wanted to know about drug cryptomarkets*(* but were afraid to ask). *International Journal of Drug Policy*, *35*, 1. https://doi.org/10.1016/j.drugpo.2016.07.005

Barratt, M. J., Lamy, F. R., Engel, L., Davies, E., Puljevic, C., Ferris, J. A., & Winstock, A. R. (2021). Exploring Televend, an innovative combination of cryptomarket and messaging app technologies for trading prohibited drugs. *Drug and Alcohol Dependence*, *231*, 109243.

Berning, M., & Hardon, A. (2019). Virtual ethnography: Managing pharmacological risk and uncertainty in online drug forums. In A. Olofsson & J. O. Zinn (Eds.), *Researching risk and uncertainty: Methodologies, methods and research strategies* (pp. 77–101). Palgrave Macmillan.

Blankers, M., van der Gouwe, D., Stegemann, L., & Smit-Rigter, L. (2021). Changes in online psychoactive substance trade via Telegram during the COVID-19 pandemic. *European Addiction Research*, 1–6. https://doi.org/10.1159/000516853

Bouchard, M. (2007). On the resilience of illegal drug markets. *Global Crime*, *8*(4), 325–344. https://doi.org/10.1080/17440570701739702

Bouchard, M., & Nguyen, H. (2010). Is it who you know, or how many that counts? Criminal networks and cost avoidance in a sample of young offenders. *Justice Quarterly*, *27*(1), 130–158. https://doi.org/10.1080/07418820802593386

Bouchard, M., & Ouellet, F. (2011). Is small beautiful? The link between risks and size in illegal drug markets. *Global Crime*, *12*(1), 70–86. https://doi.org/10.1080/17440572.2011.548956

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brewster, T. (2019, January 29). Discord: The $2 billion gamer's paradise coming to terms with data thieves, child groomers and FBI investigators. *Forbes*.

Brinkmann, S., & Kvale, S. (2015). *Interviews: Learning the craft of qualitative research interviewing* (Vol. *3*). SAGE.

Brown, A. (2020, June 30). Discord was once the Alt-Right's favorite chat app. Now it's gone mainstream and scored a new $3.5 Billion valuation. *Forbes*.

Burles, M. C., & Bally, J. M. (2018). Ethical, practical, and methodological considerations for unobtrusive qualitative research about personal narratives shared on the internet. *International Journal of Qualitative Methods*, *17*, 1–9. https://doi.org/10.1177/1609406918788203

Child abuse images being traded via secure apps. (2019, February 19). *BBC*. https://www.bbc.com/news/technology-47279256

Childs, A., Bull, M., & Coomber, R. (2021). Beyond the dark web: Navigating the risks of cannabis supply over the surface web. *Drugs: Education, Prevention and Policy*, 1–12. https://doi.org/10.1080/09687637.2021.1916439

Coomber, R. (2015). A tale of two cities: Understanding differences in levels of heroin/crack market-related violence—A two city comparison. *Criminal Justice Review*, *40*(1), 7–31.

Cornish, S. (2020, December 14). Gang members robbing and assaulting people using online app to buy drugs. *Stuff, N.Z.* https://www.stuff.co.nz/national/123668754/gang-members-robbing-and-assaulting-people-using-online-app-to-buy-drugs

Curtis, R., Wendel, T., & Spunt, B. (2002). *We deliver: The gentrification of drug markets on Manhattan's lower East side*. U.S. Department of Justice.

Davitadze, A., Meylakhs, P., Lakhov, A., & King, E. J. (2020). Harm reduction via online platforms for people who use drugs in Russia: A qualitative analysis of web outreach work. *Harm Reduction Journal*, *17*(1), 1–9.

Demant, J., & Bakken, S. A. (2019). Technology-facilitated drug dealing via social media in the Nordic countries. *EU Drug Markets Report 2019*. https://www.emcdda.europa.eu/drugs-library/technology-facilitated-drug-dealing-social-media-nordic-countries_en

Demant, J., Bakken, S. A., & Hall, A. (2020). Social media markets for prescription drugs: Platforms as virtual mortars for drug types and dealers. *Drugs and Alcohol Today*, 36–49. https://doi.org/10.1108/DAT-06-2019-0026

Demant, J., Bakken, S. A., Oksanen, A., & Gunnlaugsson, H. (2019). Drug dealing on Facebook, Snapchat and Instagram: A qualitative analysis of novel drug markets in the Nordic countries. *Drug and Alcohol Review*, *38*(4), 377–385. https://doi.org/10.1111/dar.12932

Dillane, T. (2019, October 13). Snapchat 'where most people' in their 20s buy drugs in NZ. *The New Zealand Herald*. https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12275373

Discord. (2021a). About discord. Retrieved June 1, 2021, from https://discord.com/company

Discord. (2021b). Four steps to a super safe server. Retrieved June 1, 2021, from https://discord.com/safety/360043653152-Four-steps-to-a-super-safe-server

Discord. (2021c). Why discord is different. Retrieved March 23, 2021, from https://discord.com/why-discord-is-different

Dorn, N., Murji, K., & South, N. (2002). *Traffickers: Drug markets and law enforcement*. Routledge.

Eck, J. E. (1995). A general model of the geography of illicit retail marketplaces. *Crime and Place*, *4*, 67–93.

Eck, J. E., & Gersh, J. S. (2000). Drug trafficking as a cottage industry. *Crime Prevention Studies*, *11*, 241–272.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, *12*(4), 1143–1168. https://doi.org/10.1111/j.1083-6101.2007.00367.x

European Monitoring Centre for Drugs and Drug Addiction. (2018). *Recent changes in Europe's cocaine market: Results from an EMCDDA trendspotter study*. Publications Office of the European Union.

Ferguson, R.-H. (2017). Offline 'stranger' and online lurker: Methods for an ethnography of illicit transactions on the darknet. *Qualitative Research*, *17*(6), 683–698. https://doi.org/10.1177/1468794117718894

Forsyth, A. J., Barnard, M., & McKegany, N. P. (1997). Musical preference as an indicator of adolescent drug use. *Addiction*, *92*(10), 1317–1325. https://doi-org.ezproxy.massey.ac.nz/10.1111/j.1360-0443.1997.tb02850.x

Gibbs, N., & Hall, A. (2021). Digital ethnography in cybercrime research: Some notes from the virtual field. In A. Lavorgna & T. J. Holt (Eds.), *Researching cybercrimes* (pp. 283–299). Springer.

Gilbert, J. (2013). *Patched: The history of gangs in New Zealand*. Auckland University Press.

Glaser, A. (2018, October 9). White supremacists still have a safe space online. *Slate*. https://slate.com/technology/2018/10/discord-safe-space-white-supremacists.html

Harris, K. (2021, March 7). The chat app young Kiwis are buying and selling drugs on. *NZ Herald*. https://www.nzherald.co.nz/nz/the-chat-app-young-kiwis-are-buying-and-selling-drugs-on/QGDDRKPFXPC67YPH3UG72KZOFU/

Hatmaker, T. (2021). Discord buys Sentropy, which makes AI software that fights online harassment. https://techcrunch.com/2021/07/13/discord-buys-sentropy/

Holt, T. J., Blevins, K. R., & Kuhns, J. B. (2008). Examining the displacement practices of johns with on-line data. *Journal of Criminal Justice*, *36*(6), 522–528.

Holt, T. J., Blevins, K. R., & Kuhns, J. B. (2009). Examining diffusion and arrest avoidance practices among johns. *Crime & Delinquency*, *60*(2), 261–283.

Hough, M., & Natarajan, M. (2000). Introduction: Illegal drug markets, research and policy. In M. Hough & M. Natarajan (Eds.), *Crime prevention studies* (Vol. *11*, pp. 1–18). Criminal Justice Press.

Jacques, S., Allen, A., & Wright, R. (2014). Drug dealers' rational choices on which customers to rip-off. *International Journal of Drug Policy*, *25*(2), 251–256. http://dx.doi.org/10.1016/j.drugpo.2013.11.010

James, P. (2021, August 14). Drug dealers fly under police radar in gaming app invasion. *The Advertiser*. file:///H:/Adelaide%20advertiser%20Discord%20article.html

Kastrenakes, J. (2021, July 13). Discord buys AI anti-harassment company. *The Verge*. https://www.theverge.com/2021/7/13/22575809/discord-ai-anti-harassment-company-sentropy-acquisition-buy

Kleiman, M. A. R. (1993). Enforcement swamping: A positive-feedback mechanism in rates of illicit activity. *Mathematical and Computer Modelling*, *17*(2), 65–75. https://doi.org/10.1016/0895-7177(93)90240-y

Kowalski, M., Hooker, C., & Barratt, M. J. (2019). Should we smoke it for you as well? An ethnographic analysis of a drug cryptomarket environment. *International Journal of Drug Policy*, *73*, 245–254. https://doi.org/10.1016/j.drugpo.2019.03.011

Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, *39*(1), 61–72. https://doi.org/10.1509/jmkr.39.1.61.18935

Marshall, J. (2021, April 12). Grams on the 'gram': Why drug dealers are plying their wares on Insta. *The Spinoff*. https://thespinoff.co.nz/society/12-04-2021/grams-on-the-gram-why-drug-dealers-are-plying-their-wares-on-insta/

May, T., & Hough, M. (2004). Drug markets and distribution systems. *Addiction Research & Theory*, *12*(6), 549–563. https://doi.org/10.1080/16066350412331323119

McCay-Peet, L., & Quan-Haase, A. (2016). What is social media and what questions can social media research help us answer? In L. Sloan & A. Quan-Haase (Eds.), *The SAGE handbook of social media research methods* (pp. 13–26). SAGE.

McKenzie, P. (2020, April 27). Alert level 420: Weed dealers on how they're operating in lockdown. *The Spinoff*. https://thespinoff.co.nz/society/27-04-2020/alert-level-420-how-the-weed-industry-is-dealing-with-lockdown/

Moeller, K., Munksgaard, R., & Demant, J. (2017). Flow my FE the vendor said: Exploring violent and fraudulent resource exchanges on cryptomarkets for illicit drugs. *American Behavioral Scientist*, *61*(11), 1427–1450. https://doi.org/10.1177/0002764217734269

Moeller, K., Munksgaard, R., & Demant, J. (2021). Illicit drug prices and quantity discounts: A comparison between a cryptomarket, social media, and police data. *International Journal of Drug Policy*, *91*, 102969.

Moore, C., & Chuang, L. (2017). *Redditors revealed: Motivational factors of the Reddit community* [Paper presentation]. Proceedings of the 50th Hawaii International Conference on System Sciences, Waikoloa Village, HI, United States.

Morrah, M. (2018, April 15). Drug trafficking by Kiwis using dark web is booming—report. *Newshub*. https://www.newshub.co.nz/home/new-zealand/2018/04/drug-trafficking-by-kiwis-using-dark-web-is-booming-report.html

Morselli, C., & Tremblay, P. (2004). Criminal achievement, offender networks and the benefits of low self-control. *Criminology*, *42*(3), 773–804. https://doi.org/10.1111/j.1745-9125.2004.tb00536.x

Moyle, L., Childs, A., Coomber, R., & Barratt, M. J. (2019). #Drugsforsale: An exploration of the use of social media and encrypted messaging apps to supply and access drugs. *International Journal of Drug Policy*, *63*, 101–110. https://doi.org/10.1016/j.drugpo.2018.08.005

Mozilla Foundation. (2020). *Privacy not included—Discord. Retrieved June 17, 2021, from https://foundation.mozilla.org/en/privacynotincluded/discord/

"Nelly." (2021). Discord transparency Report: Jul–Dec 2020. Retrieved June 1, 2021, from https://blog.discord.com/discord-transparency-report-july-dec-2020-34087f9f45fb

Oksanen, A., Miller, B. L., Savolainen, I., Sirola, A., Demant, J., Kaakinen, M., & Zych, I. (2021). Social media and access to drugs online: A nationwide study in the United States and Spain among adolescents and young adults. *European Journal of Psychology Applied to Legal Context*, *13*(1), 29–36. https://doi.org/10.5093/ejpalc2021a5

Petersen, M. A., Petersen, I. L., Poulsen, C., & Nørgaard, L. S. (2021). # studydrugs–Persuasive posting on Instagram. *International Journal of Drug Policy*, 103100. https://doi.org/10.1016/j.drugpo.2020.103100

Pierce, D. (2020, October 29). How Discord (somewhat accidentally) invented the future of the internet. *Protocol*. https://www.protocol.com/discord

Przepiorka, W., Norbutas, L., & Corten, R. (2017). Order without law: Reputation promotes cooperation in a cryptomarket for illegal drugs. *European Sociological Review*, *33*(6), 752–764. https://doi.org/10.1093/esr/jcx072

Ruggiero, V., & South, N. (1997). The late-modern city as a bazaar: Drug markets, illegal enterprise and the 'barricades.' *British Journal of Sociology*, 54–70. https://doi.org/10.2307/591910

Sandberg, S. (2012). The importance of culture for cannabis markets: Towards an economic sociology of illegal drug markets. *British Journal of Criminology*, *52*(6), 1133–1151. https://doi.org/10.1093/bjc/azs031

Savage, J. (2020). *Gangland: New Zealand's underworld of organised crime*. HarperCollins.

Scott, C. R. (2004). Benefits and drawbacks of anonymous online communication: Legal challenges and communicative recommendations. *Free Speech Yearbook*, *41*(1), 127–141. https://doi.org/10.1080/08997225.2004.10556309

Søgaard, T. F. (2019). Drop-off drug distribution: Why users choose to source illegal drugs from delivery dealers. *Nordic Journal of Criminology*, *20*(2), 213–222. https://doi.org/10.1080/2578983X.2019.1667676

Swart, J., Peters, C., & Broersma, M. (2018). Shedding light on the dark social: The connective role of news and journalism in social media communities. *New Media & Society*, *20*(11), 4329–4345. https://doi.org/10.1177/1461444818772063

Topalli, V., Wright, R., & Fornango, R. (2002). Drug dealers, robbery and retaliation. Vulnerability, deterrence and the contagion of violence. *British Journal of Criminology*, *42*(2), 337–351. https://doi.org/10.1093/bjc/42.2.337

van der Sanden, R., Wilkins, C., Romeo, J. S., Rychert, M., & Barratt, M. J. (2021). Predictors of using social media to purchase drugs in New Zealand: Findings from a large-scale online survey. *International Journal of Drug Policy*, *98*(C), 103430. https://doi.org/10.1016/j.drugpo.2021.103430

Watters, J. K., & Biernacki, P. (1989). Targeted sampling: Options for the study of hidden populations. *Social Problems*, *36*(4), 416–430. https://doi.org/10.1525/sp.1989.36.4.03a00070

Wilkins, C., Prasad, J., Romeo, J., & Rychert, M. (2017). *Recent trends in illegal drug use in New Zealand, 2006-2016*. SHORE, College of Health, Massey University.

Wilkins, C., Reilly, J. L., & Casswell, S. (2005). Cannabis 'tinny' houses in New Zealand: Implications for the use and sale of cannabis and other illicit drugs in New Zealand. *Addiction*, *100*(7), 971–980. https://doi.org/10.1111/j.1360-0443.2005.01134.x

Wilkins, C., Romeo, J. S., Rychert, M., Prasad, J., & Graydon-Guy, T. (2018). Determinants of high availability of methamphetamine, cannabis, LSD and ecstasy in New Zealand: Are drug dealers promoting methamphetamine rather than cannabis? *International Journal of Drug Policy*, *61*, 15–22. https://doi.org/10.1016/j.drugpo.2018.09.007

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