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Dealing with Apps: Managing Access and Risk in Hybrid Drug Markets

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ABSTRACT

This article examines how social media and messaging apps mediate everyday access to illicit psychoactive substances in Poland. While the study broadly engages with digital infrastructures, Telegram emerged as the primary hub where drug-related practices converge. Drawing on interviews with 19 mostly young, socio-economically mainstream drug users, we analyze how participants navigate app affordances, convenience, and risk in a prohibitive and stigmatized environment. Findings show that digital drug markets are embedded within polymedia ecologies: buyers move across Telegram, Messenger, Snapchat, and offline encounters, combining multiple sources and delivery options such as parcel lockers or ride-sharing couriers. These affordances create hyper-accessibility, normalizing on-demand access while offering users a sense of comfort. At the same time, safety is actively constructed through both technical features (disappearing messages, secret chats) and social mechanisms (legit checks, referrals, reviews). Yet participants often overestimated the security provided by platform affordances and privacy features and assumed that individual buyers remained too minor to be targeted by law enforcement. By situating these practices within broader debates on risk in platform societies, we highlight the hybridity of digital and physical exchanges. App-based drug supply exemplifies how everyday technologies reconfigure access, reshape trust, and blur boundaries between legality and deviance.

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Introduction

As digital technologies become increasingly embedded in different domains of modern lifestyles, they become more opaque in their inner workings, yet more transparent in their ubiquity. They become so mundane and seamless that they often go unnoticed. In the context of illicit drugs, visibility is generally undesirable. Detection and penalization, or the associated stigma, are inherent consequences of being seen with drugs. Therefore, those who attempt to buy illicit psychoactive substances utilizing digital channels are faced with the complexity of this route of access. This paper dwells on the experiences of Polish people who use drugs and utilize social media platforms for supply.

While our focus is on the broader role of social media platforms and messaging apps in facilitating illicit substance supply, Telegram emerged as the central hub in our material. This does not mean that it was the only platform used – participants referred to Facebook, Messenger, and Snapchat as part of their drug-buying trajectories – but Telegram appeared as the key environment where these practices converged. Thus, our analysis treats Telegram both as a paradigmatic example of app-mediated drug markets and as an entry point into the wider polymedia ecology of digital substance supply.

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Hybrid drug markets are crucial to understanding these dynamics. Rather than replacing traditional supply routes, digital platforms extend and intertwine with them, creating transactional environments that are simultaneously online and embodied (Korshøj and Friis Søgaard 2024). Building on this, we situate our study within this field by examining how app-based interactions (primarily on Telegram) intertwine with offline routines, personal trust networks, and delivery practices. Rather than treating Telegram as a standalone environment, we conceptualize it as one node within broader hybrid environments of drug access. This framing allows us to show how users fluidly shift between online and in-person exchanges, and how various features of online tools shape – but do not determine – the material realities of drug buying.

According to data from the report Digital 2025: Poland, Telegram is not among the most popular social media platforms in Poland. It ranks only 9th in the list, with 19.9% of users over the age of 16 using it each month (2025). The average Polish user spends about 3 hours and 31 minutes per month on Telegram, while on TikTok, the average usage time reaches as much as 36 hours and 6 minutes per month (2025). It is worth noting that this difference may also be due to the functionality of the platform itself, for Telegram is mainly used for communication, while TikTok is an entertainment platform focused on video viewing, hence the difference in time is justified. The data shows that Telegram has gained its user base in Poland, but there is still a clear difference in reach and engagement compared to popular social media platforms.

The Telegram app was launched in 2013 and had reached one billion active users worldwide by March 2025 (Singh 2025). The literature emphasizes that the app is considered safe, which, however, often leads to its censorship by state institutions (Bal 2023). The swift adoption of the medium can be attributed not only to its alleged support for freedom of expression (Marechal 2018) but also to the app's interface and the unique features it offers its users. Unlike other social media platforms, Telegram combines multiple functionalities, such as end-to-end encrypted messaging, creation of groups and communities with up to 200,000 members, channels to broadcast messages to an unlimited number of recipients (Telegram FAQ n.d..). Transmitted messages are placed in the cloud, so the app can be used on multiple devices. Only "secret chats" are not synchronized to the Telegram cloud. The app's overarching mission is to remain anonymous, which is important from the perspective of conducting commerce online, from both the sellers' and buyers' sides (Dewey and Buzzetti 2024). Although often perceived as safer and more accessible than the darknet (Moyle et al. 2019) or other messaging platforms such as WhatsApp or Line (Telegram FAQ n.d.), Telegram's appeal largely stems from its reputation for privacy-oriented features rather than guaranteed technical superiority.

Poland represents a curious case of an illicit drug scene. As some progressive changes inside the scene take place (Wanke, Załęska, and Siuda 2025), with robust drug subcultures and grassroots activism and harm reduction initiatives in place, the legal and mainstream society remains arguably conservative, with punitive and reportedly ineffective policies in place (Dolliver 2020; Malinowska-Sempruch 2016). In the meantime, the drug scenes are dynamic and detached from the legal and normative contexts. Digital realms complicate these ontologies even more, producing both disruptions and bridges between the established drug supply and use and their digitally enhanced counter-spaces (Tzanetakis and South 2023).

This paper explores digitally enhanced, mundane drug buying in Poland, scrutinizing accessibility and risk management from the perspective of psychoactive substance users. We first review the literature on platforms and hyper accessibility, as well as app affordances and risk. We then introduce our exploratory qualitative study and its results that cover access and convenience of app-enabled buying, as well as the superficial construction of safety and negotiations of affordances by the drug-buying users. Finally, this paper embeds the results in a broader emerging discussion on the intersections of illicit drugs and digital media, and in doing so contributes to ongoing efforts to more explicitly bridge media studies and drug research.

As highlighted in recent interdisciplinary work (Siuda and Wanke 2026), these fields increasingly intersect around questions of mediation, risk, and infrastructural arrangements. To make this bridge clear, we adopt several core concepts from media studies. We use the

term affordances to describe what a given app enables or constrains for users; platforms to refer to socio-technical systems that structure visibility, interaction, and control; and ecologies to capture how multiple apps, actors, and practices interact within broader communication environments.

Literature review

Platforms, hyper-accessibility, and polymedia infrastructures

Digital platforms are increasingly acting as infrastructures of accessibility, shaping not only how individuals access information but also goods and services. Researchers point out that hyper-accessibility – the constant availability of content, people, and transactions – is a defining feature of contemporary media ecologies (de Reuver, Sørensen, and Basole 2018; Evans et al. 2017). This concept extends beyond utility or technical reachability and encompasses affect, habit, and socio-technical expectations.

Platforms organize time and attention in a way that habituates users to be constantly online and ready to respond (Bucher and Anne 2018). This influences the way users perceive and interact with supply networks, as shown by the drug purchasing practices facilitated by messengers such as Telegram, described in this study. In this sense, platforms' affordances are not just technical properties – they affect emotional rhythms and provide a sense of comfort through the mere fact of connection. For drug buyers, for example, this means knowing that the dealer is just one message away, even if no drugs are being purchased at this particular moment.

Importantly, the possibilities offered by specific apps condition not only what is possible, but also what seems safe or natural. In their study of Telegram as a counter-public infrastructure, Buehling and Heft (2023) show how its functionalities – ephemerality, semi-public channels, and user anonymity – enable "alternative communication spaces" (Buehling and Heft 2023:3) in which non-hegemonic or forbidden practices can flourish. In the context of Buehling's and Heft's study, the term referred to the mobilization of protests during a pandemic; however, their insights are directly applicable in the context of platform-based drug markets, where the same features provide a sense of infrastructural security and control.

The empirical reality described in the present study – in which buyers move between Telegram, Snapchat, and Messenger, contacting multiple dealers or comparing offers – reflects the logic of polymedia (Madianou 2015; Madianou and Miller 2013). Users do not choose platforms based solely on technical constraints; instead, they make decisions of profound social and emotional significance, guided by perceived security, anonymity, urgency, or affective comfort. In this sense, Telegram is not just a "tool" for drug transactions, but part of a broader communication ecology in which the choice of medium constitutes the relationship with the dealer. Like transnational families managing intimacy at a distance (Madianou and Miller 2013), people who use drugs utilize platform affordances not only to facilitate access but also to regulate trust, control risk, and maintain emotional boundaries in illicit and insecure exchanges. Taken together, these insights suggest that hyper-accessibility in drug buying is not an accidental feature of digital life, but a socially and technically produced condition, deeply rooted in the capabilities of polymedia environments.

At the same time, classic distinctions between open and closed drug markets (May and Hough 2004) also help frame how visibility and anonymity operate in these polymedia environments. While open markets rely on spatial visibility and ease of access, closed markets depend on trust, referral, and controlled visibility. App-mediated drug buying reshapes these boundaries by combining broad, searchable access with closed-market logics such as selective anonymity, private channels, and vetting. This perspective grounds the digital practices observed here in longer-standing market dynamics, which have been reconfigured through platform infrastructures.

Risk and platform societies: theorizing digital uncertainty

The experience of risk has become a distinguishing feature of late-modern societies, shaped by processes of individualization, technological acceleration, and systemic uncertainty (Beck 1992; Giddens 1991). In the digital context, risk is not merely transferred from offline, but is transformed by the specific logics of platforms – their architectures, data practices, and interaction scripts (Dijck, Poell, and De Waal 2018). Platforms mediate not only content, but also conditions of participation, visibility, and control, giving rise to new forms of vulnerability (Bucher 2018).

Digital risk operates at multiple levels: infrastructural (e.g., surveillance, data extraction), social (e.g., reputational damage, misinterpretation), and affective (e.g., anxiety, hyper-vigilance) (Lupton 2016; Zinn 2008). Institutional protective mechanisms rarely manage these; instead, users introduce different forms of self-regulation and make decisions at the interface level, try to predict algorithms, and manage trust mechanisms based on mutual relationships. In other words, they develop informal heuristics to navigate opaque systems, engaging in practices such as content curation, ephemerality, or changing platforms to balance exposure and concealment (Boyd 2012; Gillespie 2018). These strategies are particularly prominent in contexts characterized by legal or moral ambiguity, where the platforms' capabilities are read and reinterpreted from the perspective of security, discretion, and control (Siuda 2025).

Recent research on informal platform economies suggests that risk management is not merely reactive, but often takes an anticipatory form that is deeply embedded in platform operating skills (Nowak and Siuda 2025). In such contexts, the ability to assess, interpret, and act in the face of platform-specific risks becomes a key form of digital competency and an essential component of users' everyday life (Nowak and Siuda 2025; Talvitie-Lamberg, Lehtinen, and Valtonen 2024).

Against this backdrop, our study offers insights into how users of messaging encryption applications manage risk in situational and embodied ways. In such environments, platform capabilities are not mere technical functions, but tools for interpreting and modulating uncertainty: disappearing messages, anonymous pseudonyms, channel access, or pseudonymous identities act as semiotic signals within locally meaningful regimes of trust. While formal security guarantees are often absent or opaque, users rely on a combination of platform skills, social signals, and affective cues to assess trustworthiness, limit exposure, and manage transactions. This is consistent with broader observations in platform research that risk is often negotiated "at the interface," through the practices of timing, word choice, filtering, and visibility management (Bucher 2018; Marwick and Boyd 2014).

Affordances of app-based drug buying

Research on digitally enhanced illicit drug supply has been slowly moving to the center of attention of social drug studies for a decade (Barratt and Maddox 2016). With cryptomarkets at the forefront, the very visibility of the mediated drug selling created a skew toward studying vendors and their offers rather than people who use drugs and turn to digital platforms to access them (Demant et al. 2018; Moeller, Munksgaard, and Demant 2021; Siuda et al. 2026, 2025). For a similar reason, this scholarship predominantly focused on online activity (Tzanetakis and South 2023). However, recent scholarship increasingly succeeds in reaching the hidden populations of substance-purchasing users and exploring the hybridity of these practices (Korshøj and Friis Søgaard 2024). They increasingly foreground the plasticity and transgressive continuity characteristic of the online-offline drug ecosystems (van der Sanden et al. 2022). This epistemological shift is followed by the empirical move from specialized drug markets on the dark web toward mundane platforms furnishing contemporary ordinary lives, like social media or messengers.

Affordances in the context of illicit drugs have been typically studied from the seller's perspective. Early studies indicated that anonymity plays a pivotal role (Haupt et al. 2022); however, more in-depth analysis shows how affordances are constantly negotiated between platform users and owners, who ought to track and regulate illicit activities (Childs and Bernot 2024). Looking beyond easier and more convenient access to drugs that is enabled

through social media (Dewey and Buzzetti 2024), these platforms offer different risk management affordances to their users. The risks are constructed among the users who report low concern for exposure to law enforcement. On top of that, they reportedly selectively turn to privacy functionalities to limit leaving digital traces (Van Der Sanden, Wilkins, and Rychert 2023).

This study seeks to expand on this emerging line of scholarship and illuminate how social media app users in Poland balance the benefits of hyper-accessibility to drug supply and the convenience of buying them with the risks associated with the illegal status of these substances in the country. Merging social and technological dimensions, it attempts to explore the hybridity of these practices.

Method

The main aim of this study was to explore the experiences and attitudes toward the digitally enhanced drug supply of Polish users. Specifically, of interest was the way they present motivations and circumstances behind using social media platforms and messaging apps for purchasing illicit drugs. The study also attempted to understand how the risks associated with the illegal status of the substance are anticipated by the users.

Participants of this study were recruited through purposive sampling through ethnographic work in a broader project this study is a part of (Siuda et al. 2026, 2025). They were approached via two complementary routes. One of the authors (RR), who is also an addiction psychotherapist, recruited several interviewees through his professional contacts with people who use psychoactive substances. The remaining authors relied on their existing research networks developed in previous studies. The participant selection criterion was experience with buying illicit substances using social media platforms. The sample consists of $N = 19$ predominantly male participants (only one female), 1 who are in their late 20 s. The age range of the study sample is 18–40. The participants are mainly of a middle-class background, with several blue-collar workers as well as a vocational apprentice. They do not represent any marginalized group and can be hence described as socio-economically mainstream young adults. Most of them are based in several big Polish cities, with a handful of small-town dwellers. The dual recruitment strategy resulted in a combination of recreational and more problematic or dependent users; however, no clinical diagnoses were made, and classifications rely on self-descriptions. The Supplementary File (Table SF1) details the study participants' characteristics. They were interviewed between June and December 2024 in person or online by authors 2 and 3 and a graduate student assistant. A semi-structured interview schedule was used, covering the trajectory of drug purchasing, relations with vendors, risk mitigating strategies, as well as the perceived positives and negatives of online buying.

The interviews were audio recorded, transcribed, anonymized, and open coded by authors 1 and 2. After the initial session of coding, the coding key was constructed, and the interviews were coded with it. Thematic analysis was employed as an analytical strategy (Braun and Clarke 2012). Major themes constructed for this study were: "app affordances," "safety," "accessibility," "handling risk," "encryption," "anonymity," and app-specific codes like "Telegram" or "Facebook."

Despite some normalization processes ongoing in Poland (Wanke, Załęska, and Siuda 2024), the studied population can certainly be defined as stigmatized and vulnerable due to the criminalized nature of their activity (Barratt and Maddox 2016). Even though this study considered hybrid activity, merging offline identities of the participants and their online traces, none of these were collected. We did not record any personal information, but the voice was deleted immediately after the transcripts were done. Any identifying information was erased from the transcript texts. We did not collect, nor ask for, any digital traces; no nicknames, handles, or specific site names were solicited. Ethical approval was granted for this study by the School of Social and Political Science IRB at the University of Edinburgh (approval ID: 288,628) and the Faculty of Cultural Studies IRB at the Kazimierz Wielki University in Bydgoszcz, Poland.

Results and discussion

Access and convenience

As a plethora of dimensions of social lives are augmented digitally and enabled by platforms, their ecologies fluctuate, and people follow the shifts. Our research suggests that it is no different for psychoactive substance supply enabled by apps. The caveat being that digitally assisted buying is associated with the digital socialization of users. As platforms-using trajectories progress, ecological configurations of the digital supply follow. One of the participants recounted their purchasing experiences from 2015 through Facebook groups. They later became reportedly "moderated," so the core activity transitioned to an app that was considered more appropriate: the Telegram, in that case. Next, the sub-groups started proliferating. Despite platform migrations, the milieu, however, remained consistent, designated by this participant, "an environment":

> It started for me with Facebook groups. And I remember one of the bigger groups eventually moved over to Telegram, because it was getting too hard on Facebook with all the moderation and stuff. So I joined a Telegram group that came from that Facebook one, and from there it just kind of took off. In that group, I started seeing links to other ones. And honestly, in my opinion, once you start using that space, let's say, and you join one group like that, it's super easy to end up in ten more. People promote each other and everything. It just spreads like that. (07 banker, 25–30)

The digital trade environments are part of broader social ecologies. There are online-to-offline transitions, as there are platform switches involved. Another participant indicated how localized online substance buying is, at the same time highlighting the transition from semi-public to private channels:

> Next, I moved to [a big city in Poland] for uni, and Facebook groups were the thing there. Just groups where people would post stuff. You know, people would offer things, not directly, mostly through pictures and some kind of secret code. Those Facebook groups weren't great, honestly, they were super risky and kinda sketchy. They didn't make sense in terms of privacy or safety for people. There was just a bazillion of stuff moved there. After a while, though, these groups started dying out because people were just taking info from groups and moving conversations to other messengers anyway. (06 consultant, 25–30)

Following the social "environment" augmented by digital apps is an obvious strategy for people who were socialized online. Participants of our study admitted that age matters, referring to "traditional" contact, tacitly citing generational experience. Nevertheless, with the generational and platform-ecological shifts, the possibility of accessing one's supplier via digital channels comes as an obvious choice.

Likewise, since the supply in general moves to these counter-public spaces (informal, semi-visible digital environments where illicit exchanges can circulate outside mainstream visibility), an array of different vendors becomes accessible for a person who intends to make a purchase:

> I would use whatever was more accessible. You preferred to get it from someone you knew, obviously, something more secure. But if that wasn't available, for example, and you needed to fix something, then you'd check through those messengers. (02 sailor, 25–30)

Many vendors are reportedly available, but the preference is to choose those whom one knows and presumably trusts. Users recounted multiplatform presence and having choice, which is down to the elimination of these dealers, who are not available at the time.

> I used to sort stuff out of different things, Telegram, Snapchat, Messenger. Just depending on who was available at the time. I don't know how to put it; it was just like, every dealer had a different way to contact them, so you'd end up having a bunch of apps. And if one didn't reply, you'd just hit up the next person. (10 IT specialist, 25–30)

Not only is the substance of choice accessible through different buying options, but also a variety of substances is available to users. Such a choice would often be constrained in

street-level drug markets due to the typically narrow assortment available from individual vendors:

> The main advantage of buying online is having access to a wide range of stuff and different people. You can even compare prices, what they've got on offer, and all that. So that's the biggest plus. (12 graphic designer, 18–24)

Access to numerous vendors also produces a more convenient purchasing situation. Unlike the street-level transactions, which can be hectic, online buying situations and the very possibility were described as "comforting":

> It's easier to back out here, so you can change your mind; there's more room to just not go through with the purchase, for example. Or, on the flip side, if you're craving, you can always just hit someone up, and it gives you that kind of peace of mind, like, you're already in touch with a dealer, even if you're not seeing them in person. You know they're there, that they haven't been busted, haven't disappeared, maybe they're just alive, basically. And even just for your headspace, it's comforting to know you're in contact with them, no? Through that messenger. (09 sales agent, 25–30)

The convenience of being able to choose extends to the situation of picking up the order. Users mentioned the variety of available options – ranging from in-person, or dropped off in a public space, or an anonymous shipment to a self-service parcel locker. It is convenient logistically, but also in the social sense, since one does not have to interact with "these people" (18 secondary schooler, 18–24 F), often perceived as higher-risk actors involved in the supply chain.

Another way to avoid meeting the dealer in person is to use a delivery service as a mediator. It involves sending cash via a Polish temporary code-based app called BLIK:

> In Warsaw, some guys, like my guy, for example, would do deliveries using the Uber package. So it worked like this. Say, you couldn't meet up with the guy, but you need the stuff, so they would go to an ATM, you give him a BLIK2 code so they can withdraw the amount of cash you agreed on, and then you'd order an Uber Package to their address. They just give it to the Uber driver, and Uber would bring it over to you. (06 consultant, 25–30)

As a result of the hyper accessibility that is well known by younger generations, who are socialized to function with it, the reconfiguration of retail drug supply occurs. It reportedly reduces the salience of single-dealer specialization by enabling access to a more comprehensive and diversified supply across multiple vendors.

The access, however convenient, turns out also to be a challenge for users to a certain extent. They have to face market transformations and the complexity of the illicit drug supply. Nevertheless, buying psychoactive substances via digital apps seems to be generally evaluated positively by the users who highlight convenience and safety.

The ecologies of the app drug trade alter the social supply dynamics as well (Van Der Sanden, Wilkins, and Rychert 2023). Rather than replacing earlier forms of access, the practice of being "added" to dealers' circles via trusted customers represents a platform-mediated continuation of closed drug market logics, in which trust is established through personal referral and reputation in order to reduce risk. In this respect, technologically enabled invitation and referral systems reproduce the same trust-based gatekeeping mechanisms described for offline closed markets (Tzanetakis and Nigel 2023). Thus, access is socially supplied and gated, rather than simply technologically enabled:

> I was usually just added by a friend. He was based in that scene, he knew a few guys who sold him different types of stuff, and it was like, a bit sketchy, you know? I wouldn't be surprised if these guys had charges hanging over their heads or something, you know? But he just added me to these specific Telegram channels. And then later, I ended up connecting to them directly, because they kinda saw that I am buying it three times a week. (08 clerk, 18–24)

In sum, digital platforms like Telegram increase the ease of access to substances, especially for those who already know how to obtain them. Despite the platform shifts in pursuit of more security, there is a sense of social continuity of the "environment" among these localized ephemeral groups. The convenience of online buying comes from multiple dealers available and flexible options, as well as

broad access to different drugs and logistical ease. Lower pressure to buy can be juxtaposed with higher accessibility in general.

Constructing safety and disregarding risk

Telegram's official website lists many features that enhance security, but the developers themselves point out that they cannot protect messages sent through the app from rooting the phone, a process of obtaining full administrator capacity (Telegram FAQ n.d.). Only secret chats provide full encryption; ordinary conversations do not benefit from this form of protection. In Telegram, by default, all conversations are conducted as ordinary chats, meaning that full end-to-end encryption is only available when the user manually activates the "secret chat" feature (Telegram FAQ n.d.). Our analysis showed that participants often blindly believe in the security of apps. Multiple functionalities designed to increase privacy and anonymity arguably lead users to have a simplistic idea of the security of the app itself. One user claimed that:

> Telegram is safer in that sense. It kind of stands above governments. It's based in a country where there's no legal obligation to hand over chat logs to law enforcement, so in that way, it's more secure. It's legally safe, but not necessarily safe from scammers. (08 clerk, 18–24)

Telegram is perceived as a secure messenger because its image has been built around the idea of user privacy and security from the beginning. The vision of creating a safe space through secret chat rooms and a self-destructing message function makes it a more compelling choice for completing drug transactions, as another participant noted:

> We switched to Telegram and basically stuck with it. We set it up so it's all encrypted, you know. I mean, I'm not an IT expert, so I don't really know if it's fully encrypted, but there's this little padlock, and the messages have that self-destruct timer. (05 clerk, 35–40)

Users indicated that they did not need technical expertise, and knowing that the tool encrypts content by design increases their confidence and inclination to use it. Asked to justify their judgment, this participant referred to the marketing messaging of the app: "That's what people say about it, and also what the app itself claims – that it's a fully encrypted communication channel." (05 clerk, 35–40)

The platform's features and its designed interface, combined with the promotion of the app as secure, mean that users may unreflectively trust its level of protection. It appears that the messenger is not without loopholes in terms of content sharing (Lee et al. 2017). The app does not present transparency conditions in any way and bases its credibility on users' blind trust in its good intentions and the stated preferences of the platform team (Wijermars and Lokot 2022:129).

The impression of security that comes with using the app is born not only from its technical capabilities, but also from users' unconditional faith in the technology's benevolence. Moreover, Telegram users assume that since they are not criminals or public figures, surveillance does not apply to them. Based on the interviews, it appears that the participants were convinced that because they buy small amounts of illegal substances, they are not of special interest to the services. One user noted: "Generally, it's about people having a sense that they are too much of nobodies, to be taken care of, so to speak, that there is other much heavier, much bigger stuff out there." (09 sales agent, 25–30). According to them, the potential threat of surveillance is not of individual users' concern. Conversely, the imagined law enforcement focuses on sellers rather than buyers, or organized groups that deal drugs on Telegram. Narrating it this way, users of the app distance themselves from the criminal activity and, rather, regard themselves as everyday people going about their matters, and the use of the messenger is not associated with any risk for them in particular.

Telegram openly states in its policy that it upholds user privacy (Telegram FAQ n.d.), but, as critics of the app point out, Telegram can collect and store user metadata such as IP address, devices used, and history of username changes (Wijermars and Lokot 2022). There are no

transparent regulations on how this data is stored. In contrast, seemingly open and accessible groups and broadcast channels can be freely analyzed by all other users, including law enforcement.

There are different affordances of messengers like Telegram, and a broader app ecosystem used by people who buy drugs online, which are used to enhance the perceived safety. The construction of ephemerality is the most fragile and hard to do, given how persistent digital communication is. A lot of symbolic and discursive work is devoted to negotiating the transience of messages sent in the drug purchasing context. Telegram, as per its official website, offers the disappearing messages functionality. Users confirm adhering to them: "It is very often about messaging the group owner directly, and these are the exploding messages, simply with a timer set so they disappear after 5–10 seconds." (03 student, 25–30).

The disappearing functionality is set inside the secret chats that are end-to-end encrypted and not stored on Telegram servers, as per their website. The users were quick to add a caveat to the functionality when discussing it, that it is about the relationship with the persona as much as it is about the technology:

> You simply write to such a person on Telegram through the so-called secret chat, a chat, not these disappearing messages, but the whole chat, that is deleted after some time, I don't remember exactly, it depends on the settings. So you are texting this person, how much you need, and what time you should be there. And here, it is really up to what your relationship with the person is, how long you're cooperating with them. (06 consultant, 25–30)

The relationship is enabled through technology, but it is socially constructed. In addition to disappearing messages and secret chats, it is possible to communicate with a seller through private messages. This means that messages are encrypted end-to-end and are only accessible to the sender and recipient. In private chats, messages cannot be forwarded. If a screenshot is taken, the user will receive a notification. Following rules is essential, but cooperating to create a certain impression and an intimate sense of belonging matters as well:

> These are strictly private messages. You can't write in public so everyone can see it. It is about an individual, an intimate relationship with this dealer. It is about the impression they make, that makes you feel a part of it all, and your satisfaction, your opinion is necessary, that you feel necessary, so to speak, no? (09 sales agent, 25–30)

Setting up an account and finding specific channels by keyword search – utilizing the searchability affordance – seems like a simple task, but in Telegram communities, there are internal rules created by group administrators (Dewey and Buzzetti 2024). The rules are often pinned at the top so that they remain constantly visible and provide a reference point for the conversation. "Legit check" or "LC" must be performed, the purpose of which is to confirm the user's authenticity and trustworthiness to the seller. Legit check balances the two contradicting affordances: anonymity and identification. It functions in two ways and legitimizes the vendors and the buyers alike. The buyers are supposed to be referred by the verified members or are supposed to make themselves vulnerable, sending their face video to the sellers.

> The LC is about saying something on screen, with your face up there, the nick of the guy, or simply some code, like "rhubarb" or "Ala ma kota"3 for example. I kinda see it as, like, a last resort, you know? Cause when you really start digging into your conscience or your imagination or whatever, that stuff can come back up. (03 student, 25–30)

Disclosing one's identity to verify oneself in front of a dealer is burdened by the latent threat of exposure. Legit check, or verification of credibility, could involve sending the seller your photo or video, or confirming a person's credibility based on reviews and testimonials.

You call him, or maybe write to him, depending on how much and how often you've bought from him. I don't know, after four transactions, I just called them, but before that, you just write that you're interested in this type of thing, and he says, okay, we'll do a little legit check, right? So he writes to the most popular dealers. They also stick together, so to speak, on Telegram. Generally, the rule is that

a dealer knows a dealer. And they just write to each other to find out if the person is a snitch or if they want to screw them over. (08 clerk, 18–24)

Another affordance that is managed carefully is the visibility. It is managed by gatekeeping as well as careful identity management and context awareness. Public channels can be found in a search engine by any user, while to access private channels, one must have an invitation link.

In addition to internal security mechanisms, users also pointed to external security measures as an additional layer of protection. On the other hand, they needed to maintain visibility and signal distinctive features of their enterprise. As one of the users remarked about the vendors:

> They wouldn't permit any drug-related avatars, but one would call themselves, I don't know, "Christian WWA," you know? So it was obvious that this was a crystal in Warsaw, you know? 24 by 7, so 24/7 delivery. And it was a typical shop, so to speak, you know? (09 sales agent, 25–30)

Managing visibility in the "plain sight" of public or semi-public channels involved social steganography (Marwick and Boyd 2014). Different ways of coding drug-related content were applied, both alphabetic and multimodal. It involved nicknames of substances and amounts, using non-textual forms, like photos, that are less likely to be automatically detected:

> I think that some of the vendors decided that they'd continue using Telegram, but altered their strategy a bit, because they realized that straight up saying stuff like, that you are buying cocaine, amfetamine or weed was basically asking for trouble, because law enforcement can totally track that. They can filter it out. I suspect they used some guys from the scene. So, they switched things up, deleted the photos, and added ones saying "5 T-shirts, cherry coke," which means that you're buying 5 g of coke. (19 clerk, 31–34)

Other ways of content encryption involve externalizing the messages with the order details, or using internal communications encoded and decoded elsewhere. Users reported on externally hosted numeric codes or other dictionaries that would render the content of the sites safe. For example, using links to notes outside of the channel:

> Sometimes they would add extra security to the communication by using this site that made one-time notes. So they'd generate a note, send over the link, and that was it. You could only open the link once, and it would disappear then. (02 sailor, 25–30)

Besides this self-made encryption, the actual encryption technology was both acknowledged and questioned. Users' opinions vary, which illustrates that the abstract technological systems and their affordances are not automatically absorbed, but are subject to negotiation:

> Now, the main problem with Telegram is that this encryption is not a proper end-to-end encryption; it's kinda there, but the data still gets stored on their servers in a way that it's not fully encrypted. So that's a big issue with Telegram, and that's why it became such a dead zone when it comes to the drug scene. (19 clerk, 31–34)

For once, the encryption may be believed not to be ultimate. When asked about the trust in it, the users would express a degree of reservation: "I don't believe in such a guarantee [of complete anonymity], but it for sure is about maximizing your security when you use these encrypted messages and apps, where you simply do not share your personal data" (12 graphic designer, 18–24). Using encryption is a pragmatic choice.

Users construct safety and manage risk by combining how they perceive the technological protection with adhering to community norms. They may not know exactly how the application works, but they also downplay the surveillance risk by assuming that they are too insignificant to be targeted by law enforcement. The Telegram's image of security is based on the perception of functionalities, such as secret chats or disappearing messages, even if they are not fully understood. These affordances are actively interpreted and adapted to maintain a sense of safety. Alongside the technological ones, social affordances are utilized, as users adhere to legit-checks, referral systems, and reputation building through reviews. Balancing the contradictory needs of anonymity and credibility, the relationships with vendors are also furnished with sociability.

Safety is not inherent to Telegram's design; it is rather actively constructed by users' engagement with technological and symbolic dimensions of the app use and the purchasing process. Users apply individual strategies as well as coordinate peer practices to make the platform safe enough for their activity, despite its limitations.

Conclusion

Buying illicit drugs via social media and messaging platforms seems to be becoming part of the broader incorporation of apps in everyday lives. As such, it is becoming generationally normalized (BenBaruch et al. 2025). It requires certain digital capital (Bakken, Oksanen, and Demant 2023) or technological competencies typically acquired through socialization to adopt it.

Our findings, therefore, speak to the dynamics of social media and messaging apps more generally, while highlighting Telegram as the hub through which participants navigated access, risk, and convenience . 4 The prominence of Telegram should not obscure the fact that the drug-related exchanges unfolded within a wider polymedia environment. Rather, Telegram functions as a condensed site where broader tendencies of app-mediated drug trade – hyper-accessibility, negotiated safety, and ephemeral communities – become most visible.

In line with other studies of social media buying (Dewey and Buzzetti 2024), our results suggest that convenience and eased tensions compared to street-level buying create space for more informed decision making that may potentially lead to decreasing harm associated with buying and using psychoactive substances in illicit markets (Van Der Sanden, Wilkins, and Rychert 2023). However, we did not record many such claims in this study that would suggest intentional caution about issues other than getting criminalized or scammed. Findings of the broader project, this study is a part of, seem to suggest that there is very high potential for peer harm reduction within Polish online drug communities (Siuda and Matuszewski 2025), but it does not seem to be particularly the case for mundane, instrumental drug buying facilitated by apps.

Consistent with findings of the other studies on online drug selling and risk management (Demant and Anker Nexø 2024), our results suggest that the buyers construct safety based on a rather superficial perception of app affordances. It is connected to the neutralization techniques, which these users seem to perform in order to distinguish themselves from the criminalized activity. It is similar to what Søgaard and Højlund Bræmer (2023) observed for comparable socio-economically mainstream young dealers in Denmark, who were drifting in and out of recreational drug sales.

This study offers a caveat to the scholarship on affordances of bounded social media platforms (Malhotra 2024), as there are two competing and contradictory dynamics in the case of the drug trade. As the vendors pursue visibility for their self-branding and to market their product, and the buyers seek it and hence rely on this exposure, both of these groups, at the same time, strive to remain unnoticed. This tension resonates with what Tzanetakis et al. (2016) conceptualize as the "transparency paradox," in which increased visibility can simultaneously enable trust and expose actors to new forms of risk. Therefore, these Telegram drug channels or other vendors' social media sites have similar features to "digital counterpublics" (Buehling and Heft 2023) or "refracted publics" (Abidin 2021). They stay in opposition to the mainstream views and laws, using the affordances of the platform to sustain their goals (Childs and Bernot 2024). They are also "below the radar": transient, discoverable, decodable, and silosocial (Abidin 2021:2). The app ecologies we studied are ephemeral and yet easy to find for the insiders due to their hybrid presence and "social steganography" applied to mitigate searchability (Marwick and Boyd 2014). In this sense, they are not simply detached from mainstream society, but constitute digitally mediated forms of deviance that are simultaneously embedded in everyday platform infrastructures and normatively positioned outside dominant legal and moral orders. In this respect, the contribution of this paper also lies in bridging media studies and drug research. We identified similar features of "refracted publics" in the medical cannabis back-channels facilitating coordination of buying it for non-medical purposes in Poland (Wanke, Załęska, and Siuda 2025).

This study contributes to the emerging scholarship on the hybridity of the drug trade by showing how online and offline dimensions are increasingly entangled in the everyday practices of people who use drugs. Our findings highlight that app-based transactions cannot be understood in isolation from street-level supply, personal trust networks, and the broader socio-legal environment. Rather, they form part of a continuum in which buyers fluidly move between platforms such as Telegram, Messenger, or Snapchat, and then transition into in-person exchanges or mediated delivery services. This hybridity is not only technological but also social: the affordances of apps are interpreted through users' prior experiences, risk perceptions, and community norms. By situating app-enabled buying within these hybrid ecologies, our study adds to the growing body of research that challenges binary distinctions between digital and physical markets, and instead points to the plasticity, adaptability, and transgressive continuity that define contemporary drug economies (Korshøj and Friis Søgaard 2024; van Der Sanden et al. 2022). In doing so, it again bridges insights from media studies and drug research, illustrating how polymedia environments reconfigure access, safety, and trust in ways that blur the boundaries between online infrastructures and offline realities.

Finally, our findings also contribute to ongoing debates on affordances. Existing work typically conceptualizes affordances as relational possibilities shaped by the interaction between users and platform architectures (Evans et al. 2017). Our study shows that in hybrid drug markets, affordances operate not only as technical action possibilities but as socially stabilized expectations that persist across shifting platforms. While digital environments change – groups move from Facebook to Telegram, vendors adjust their visibility strategies, and communication channels are rearranged – the social practices, heuristics, and trust relations associated with these affordances remain remarkably stable. This suggests that affordances in illicit markets become trans-platform routines embedded in collective interpretations, rather than merely platform-specific features (cf. Nagy and Neff 2015).

Taken together, these observations extend mainstream affordances research by showing that although digital environments shift and mutate, the social constellations around them may remain relatively stable. Participants followed recognizable networks, referral chains, and interpersonal heuristics even as they moved between apps. This reinforces our argument that affordances are interpreted through enduring social logics: users reapply familiar routines of trust, anonymity work, and risk management across new platforms, rather than adapting from scratch.

In addition, our findings bring renewed attention to several dimensions of affordances that have been discussed in prior scholarship but gain particular salience in the context of hybrid drug markets. First, affordances operate as moral infrastructures: users attach moral and normative value to specific features (such as ephemerality or encryption), treating them as signals of "proper," "safe," or "responsible" conduct (cf. Mittelstadt et al. 2016). Second, affordances function as scripts of safety – collectively internalized behavioral prescriptions that guide legitimate practices and encode expectations about how interactions should unfold (Davis and Chouinard 2016). Third, our analysis foregrounds the temporal dimension of affordances (Kim and Kim 2023), demonstrating how timing, ephemerality, and message disappearance are actively calibrated to stabilize trust, coordinate interaction, and minimize perceived danger in volatile environments.

Limitations

Notwithstanding the exploratory nature and inquiring into hard-to-reach populations (Kaufmann and Tzanetakis 2020), this study should be interpreted in the light of some significant limitations. The sample size is still relatively small and skewed toward socio-economically integrated individuals. From our fieldwork (2025; Wanke, Załęska, and Siuda 2024), we know that there are women in Poland who use apps to acquire psychoactive substances; they also appear to be more prevalent in online drug discussions 5 compared to the composition of this study sample. Yet we were only able to recruit one woman, and we were not able to inquire into gendered dimensions (see: Fleetwood, Aldridge, and Chatwin 2020) of app drug buying.

Notes

1. This resulted from the purposive nature of the sampling and the simple fact that men prevailed among our potential respondents, and no other women we approached ultimately agreed to participate.
2. Using Poland's BLIK system, a mobile payment method based on dynamically generated codes, one person can allow another to withdraw cash from an ATM by sharing a temporary code and approving the transaction in real time through their mobile banking app.
3. Polish "Ala has a cat," a classic sentence from elementary school textbooks in Poland.
4. Prior studies (Bakken and Johan Demant 2019; Moyle et al. 2019; Siuda et al. 2025) similarly emphasize how the affordances of social media and messaging apps shape visibility, perceived safety, and the interactional dynamics between buyers and sellers.
5. In the Polish grammar, forms are indicative of the writing subject's gender.

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Data availability statement

Due to the highly sensitive nature of the data and the strict confidentiality guarantees provided to participants, the full interview transcripts cannot be shared. Only non-identifiable supplementary materials, such as the interview guide, can be made available upon reasonable request.

References

Abidin, Crystal. 2021. "From 'Networked Publics' To 'Refracted Publics': A Companion Framework for Researching 'Below the Radar' Studies." *Social Media + Society* 7(1): 2056305120984458. doi: 10.1177/2056305120984458.

Bakken, Silje Anderdal and Jakob Johan Demant. 2019. "Sellers' Risk Perceptions in Public and Private Social Media Drug Markets." *International Journal of Drug Policy* 73: 255–62. doi: 10.1016/j.drugpo.2019.03.009.

Bakken, Silje Anderdal, Atte Oksanen, and Jakob Demant. 2023. "Capital in Illegal Online Drug Markets: How Digital Capital Changes the Cultural Environment of Drug Dealing." *Theoretical Criminology* 27(3): 421–38. doi: 10.1177/13624806221143365.

Bal, Meghna. 2023. "Audio-Visual Piracy on Telegram: A Perspective on Monetization Models, Pirate Strategies and Industrial Pathways." *Contemporary South Asia* 31(2): 311–25. doi: 10.1080/09584935.2023.2204220.

Barratt, Monica Jane and Alexia Maddox. 2016. "Active Engagement with Stigmatised Communities Through Digital Ethnography." *Qualitative Research* 16(6): 701–19. doi: 10.1177/1468794116648766.

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London ; Newbury Park, Calif: SAGE Publications Ltd.

BenBaruch, Yifat, Monica Jane Barratt, Daniel Feingold, and Sharon R. Sznitman. 2025. "Cannabis Trading on Telegram Channels: Implications for the Normalization of Use and Supply." *International Journal of Drug Policy* 145: 104930. doi: 10.1016/j.drugpo.2025.104930.

Boyd, Danah. 2012. "Networked Privacy." *Surveillance & Society* 10(3/4): 348–50. doi: 10.24908/ss.v10i3/4.4529.

Braun, Virginia and Victoria Clarke. 2012. "Thematic Analysis." Pp. 57–71 in *APA Handbook of Research Methods in Psychology, Vol 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and biological, APA Handbooks in psychology®*, edited by H. Cooper, M. N. Coutanche, L. M. McMullen, A. T. Panter, D. Rindskopf, and K. J. Sher. (WA, DC), USA: American Psychological Association.

Bucher, Taina. 2018. *If. . .Then: Algorithmic Power and Politics*. NY: Oxford University Press.

Bucher, Taina and Helmond. Anne. 2018. "The Affordances of Social Media Platforms." Pp. 233–53 in *The SAGE Handbook of Social Media*, edited by Jean Burgess, Alice Marwick, and Thomas Poell. London: SAGE Publications Ltd.

Buehling, Kilian and Annett Heft. 2023. "Pandemic Protesters on Telegram: How Platform Affordances and Information Ecosystems Shape Digital Counterpublics." *Social Media + Society* 9(3). doi: 10.1177/20563051231199430.

Childs, Andrew and Ausma Bernot. 2024. "The Platformisation of Illicit Drug Markets: How Datafication, Technological Affordances, and Platform-Mediated Labour Practices Shape Illicit Drug Markets." *Crime, Media, Culture: An International Journal* 21(2): 17416590241254519. doi: 10.1177/17416590241254519.

Davis, Jenny L. and James B. Chouinard. 2016. "Theorizing Affordances: From Request to Refuse." *Bulletin of Science, Technology & Society* 36(4): 241–48. doi: 10.1177/0270467617714944.

Demant, Jakob and Louise Anker Nexø. 2024. "The Gut Feeling of Rational Acting: Differentiation in Cognitive Strategies within Commercial and Recreational Sellers in Hybrid Digital Social Media Markets." *International Criminal Justice Review* 34(3): 224–44. doi: 10.1177/10575677241241072.

Demant, Jakob, Rasmus Munksgaard, David Décary-Hétu, and Judith Aldridge. 2018. "Going Local on a Global Platform: A Critical Analysis of the Transformative Potential of Cryptomarkets for Organized Illicit Drug Crime." *International Criminal Justice Review* 28(3): 255–74. doi: 10.1177/1057567718769719.

de Reuver, Mark, Carsten Sørensen, and Rahul C. Basole. 2018. "The Digital Platform: A Research Agenda." *Journal of Information Technology* 33(2): 124–35. doi: 10.1057/s41265-016-0033-3.

Dewey, Matías and Andrés Buzzetti. 2024. "Easier, Faster and Safer: The Social Organization of Drug Dealing Through Encrypted Messaging Apps." *Sociology Compass* 18(2): e13175. doi: 10.1111/soc4.13175.

Digital 2025: Poland. 2025. https://datareportal.com/reports/digital-2025-poland.

Dijck, Jose, Thomas Poell, and Martijn De Waal. 2018. *The Platform Society: Public Values in a Connective World*. NY: Oxford University Press.

Dolliver, Diana S. 2020. "A Supply-Based Response to a Demand-Driven Problem: A Fifteen-Year Analysis of Drug Interdiction in Poland." *Crime, Law and Social Change* 73(1): 1–23. doi: 10.1007/s10611-019-09839-4.

Evans, Sandra K., Katy E. Pearce, Jessica Vitak, and Jeffrey W. Treem. 2017. "Explicating Affordances: A Conceptual Framework for Understanding Affordances in Communication Research." *Journal of Computer-Mediated Communication* 22(1): 35–52. doi: 10.1111/jcc4.12180.

Fleetwood, Jennifer, Judith Aldridge, and Caroline Chatwin. 2020. "Gendering Research on Online Illegal Drug Markets." *Addiction Research & Theory* 28(6): 457–66. doi: 10.1080/16066359.2020.1722806.

Giddens, Anthony. 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge: Polity Press.

Gillespie, Tarleton. 2018. *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media*. New Haven London: Yale University Press.

Haupt, Michael Robert, Raphael Cuomo, Jiawei Li, Matthew Nali, and Tim K. Mackey. 2022. "The Influence of Social Media Affordances on Drug Dealer Posting Behavior Across Multiple Social Networking Sites (SNS)." *Computers in Human Behavior Reports* 8: 100235. doi: 10.1016/j.chbr.2022.100235.

Kaufmann, Mareile and Meropi Tzanetakis. 2020. "Doing Internet Research with Hard-To-Reach Communities: Methodological Reflections on Gaining Meaningful Access." *Qualitative Research* 20(6): 927–44. doi: 10.1177/1468794120904898.

Kim, Donggyu and Soomin Kim. 2023. "Social Media Affordances of Ephemerality and Permanence: Social Comparison, Self-Esteem, and Body Image Concerns." *Social Sciences* 12(2): 87. doi: 10.3390/socsci12020087.

Korshøj, Nina Tvede and Thomas Friis Søgaard. 2024. "Hybrid Drug Dealing: Merging On- and Offline Spheres When Dealing Drugs via Social Media." *International Journal of Drug Policy* 130: 104509. doi: 10.1016/j.drugpo.2024.104509.

Lee, Jeeun, Rakyong Choi, Sungsook Kim, and Kwangjo Kim. 2017. "Security Analysis of End-To-End Encryption in Telegram." 2017 Symposium on Cryptography and Information Security (SCIS 2017), Nishi, Naha, Okinawa, Japan. https://koasas.kaist.ac.kr/handle/10203/227138.

Lupton, Deborah. 2016. *The Quantified Self*. Cambridge, UK: Polity.

Madianou, Mirca. 2015. "Polymedia and Ethnography: Understanding the Social in Social Media." *Social Media + Society* 1(1): 2056305115578675. doi: 10.1177/2056305115578675.

Madianou, Mirca and Daniel Miller. 2013. "Polymedia: Towards a New Theory of Digital Media in Interpersonal Communication." *International Journal of Cultural Studies* 16(2): 169–87. doi: 10.1177/1367877912452486.

Malhotra, Pranav. 2024. "'What You Post in the Group Stays in the Group': Examining the Affordances of Bounded Social Media Places." *Social Media + Society* 10(3): 20563051241285777. doi: 10.1177/20563051241285777.

Malinowska-Sempruch, Kasia. 2016. "Shaping Drug Policy in Poland." *The International Journal on Drug Policy* 31: 32–38. doi: 10.1016/j.drugpo.2016.02.018.

Marechal, Nathalie. 2018. "From Russia with Crypto: A Political History of Telegram." FOCI @ USENIX Security Symposium.

Marwick, Alice E. and danah Boyd. 2014. "Networked Privacy: How Teenagers Negotiate Context in Social Media." *New Media & Society* 16(7): 1051–67. doi: 10.1177/1461444814543995.

May, Tiggey and Mike Hough. 2004. "Drug Markets and Distribution Systems." *Addiction Research & Theory* 12(6): 549–63. doi: 10.1080/16066350412331323119.

Mittelstadt, Brent Daniel, Patrick Allo, Mariarosaria Taddeo, Sandra Wachter, and Luciano Floridi. 2016. "The Ethics of Algorithms: Mapping the Debate." *Big Data & Society* 3(2): 2053951716679679. doi: 10.1177/2053951716679679.

Moeller, Kim, Rasmus Munksgaard, and Jakob Demant. 2021. "Illicit Drug Prices and Quantity Discounts: A Comparison Between a Cryptomarket, Social Media, and Police Data." *International Journal of Drug Policy* 91: 102969. doi: 10.1016/j.drugpo.2020.102969.

Moyle, Leah, Andrew Childs, Ross Coomber, and Monica Jane Barratt. 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: 101–10. doi: 10.1016/j.drugpo.2018.08.005.

Nagy, Peter and Gina Neff. 2015. "Imagined Affordance: Reconstructing a Keyword for Communication Theory." *Social Media + Society* 1(2): 2056305115603385. doi: 10.1177/2056305115603385.

Nowak, Jakub and Piotr Siuda. 2025. "Self-Exposure as a Way of Life. Privacy Tradeoff and Datafied Citizenship." Proceedings of the Annual Hawaii International Conference on System Sciences 2025, Honolulu, HI, Hawaii International Conference on System Sciences. 2346–55.

Singh, Shubham. 2025. "Telegram Users Statistics 2025 [Latest Worldwide Data]." https://www.demandsage.com/telegram-statistics/.

Siuda, Piotr. 2025. "Navigating Community-Transaction and Egalitarian-Hierarchy Divides: Redefining Virtual Communities in the Darknet Drug Trade and Beyond." *Information, Communication & Society* 1–17. doi: 10.1080/1369118X.2025.2540920.

Siuda, Piotr, Mikko Aaltonen, Ari Haasio, Angus Bancroft, Juha Nurmi, Haitao Shi, and J.. Tuomas Harviainen. 2025. "Digital Drug Trading Ecologies in Context: Technological, Geographic, and Linguistic Variation Across Darknet Platforms." *International Journal of Drug Policy* 145: 104984. doi: 10.1016/j.drugpo.2025.104984.

Siuda, Piotr and Paweł Matuszewski. 2025. "The Opioid Crisis in Poland? Insights from Online Forum Data." *International Journal of Drug Policy* 142: 104844. doi: 10.1016/j.drugpo.2025.104844.

Siuda, Piotr, Leszek Świeca, Patrycja Cheba, and Haitao Shi. 2026. "'Similar to Legal Companies': Vendor Brands and Other Aspects of Marketing Communication in the Darknet Drug Trade." *Deviant Behavior* 47(2): 243–258. doi: 10.1080/01639625.2024.2428711.

Siuda, Piotr and Michał Wanke, eds. 2026. *Media Studies Meet Drug Research*. Routledge.

Søgaard, Thomas Friis and Marie Højlund Bræmer. 2023. "Law-Abiding Criminals: Young Adults' Drift into and Out of Recreational Drug Sales." *Nordic Journal of Criminology* 24(1): 1–17. doi: 10.18261/njc.24.1.2.

Talvitie-Lamberg, Karoliina, Vilma Lehtinen, and Sanna Valtonen. 2024. "Tactics of Invisibility: How People in Vulnerable Positions Make Datafied Everyday Life Livable." *New Media & Society* 26(9): 5445–65. doi: 10.1177/14614448221136077.

Telegram FAQ. n.d. Retrieved September 21, 2025. https://telegram.org/faq.

Tzanetakis, Meropi, Gerrit Kamphausen, Bernd Werse, and Roger Von Laufenberg. 2016. "The Transparency Paradox. Building Trust, Resolving Disputes and Optimising Logistics on Conventional and Online Drugs Markets." *International Journal of Drug Policy* 35: 58–68. doi: 10.1016/j.drugpo.2015.12.010.

Tzanetakis, Meropi and South. Nigel. 2023. "Introduction: The Digital Transformations of Illicit Drug Markets as a Process of Reconfiguration and Continuity." Pp. 1–12 in *Digital Transformations of Illicit Drug Markets: Reconfiguration and Continuity*, edited by M. Tzanetakis and N. South. Emerald Publishing Limited.

Tzanetakis, Meropi and Nigel South. 2023. *Digital Transformations of Illicit Drug Markets*. Emerald Publishing Limited.

Van Der Sanden, Robin, Chris Wilkins, and Marta Rychert. 2023. "'I Straight Up Criminalized Myself on Messenger': Law Enforcement Risk Management Among People Who Buy and Sell Drugs on Social Media." *Drugs: Education, Prevention and Policy* 31(3): 1–13. doi: 10.1080/09687637.2023.2224497.

Van der Sanden, Robin, Chris Wilkins, Marta Rychert, and Monica J. Barratt. 2022. "'Choice' Of Social Media Platform or Encrypted Messaging App to Buy and Sell Illegal Drugs." *International Journal of Drug Policy* 108: 103819. doi: 10.1016/j.drugpo.2022.103819.

Van Der Sanden, Robin, Chris Wilkins, Marta Rychert, and Monica J. Barratt. 2023. "Social Supply and the Potential for Harm Reduction in Social Media Drug Markets." *Contemporary Drug Problems* 50(3): 381–401. doi: 10.1177/00914509231178940.

Wanke, Michał, Olga Załęska, and Piotr Siuda. 2024. "'Now I Like to Know What I Smoke'—Differentiated Cannabis Normalization in Polish Online Discussions." *Drugs: Education, Prevention and Policy* 1–11. doi: 10.1080/09687637.2024.2423755.

Wanke, Michał, Olga Załęska, and Piotr Siuda. 2025. "'Overdried, without Curing? F*Ck, This [is Supposed to be] Government Licensed Skunk!' Medical Cannabis and the Refracted Publics within an Online Polish Drug Forum." *Sociological Inquiry* 95(2): 271–87. doi: 10.1111/soin.12652.

Wijermars, Mariëlle and Tetyana Lokot. 2022. "Is Telegram a 'Harbinger of Freedom'? The Performance, Practices, and Perception of Platforms as Political Actors in Authoritarian States." *Post-Soviet Affairs* 38(1–2): 125–45. doi: 10.1080/1060586X.2022.2030645.

Zinn, Jens O., ed. 2008. *Social Theories of Risk and Uncertainty: An Introduction*. Malden, MA: Wiley-Blackwell.