

Online Drugs and COVID-19: Testing General Strain Theory as a Push Factor in Buying Illegal Drugs Online on a Longitudinal Sample Design

Authors : Parti, K. (kparti@vt.edu), Dearden, T. (tdearden@vt.edu), Hawdon, J. (hawdonj@vt.edu)

Sponsors : Virginia Tech Institute of Society, Culture, & Environment; Center for Peace Studies and
Violence Prevention

Global pandemic (WHO, 2020) – The new normal

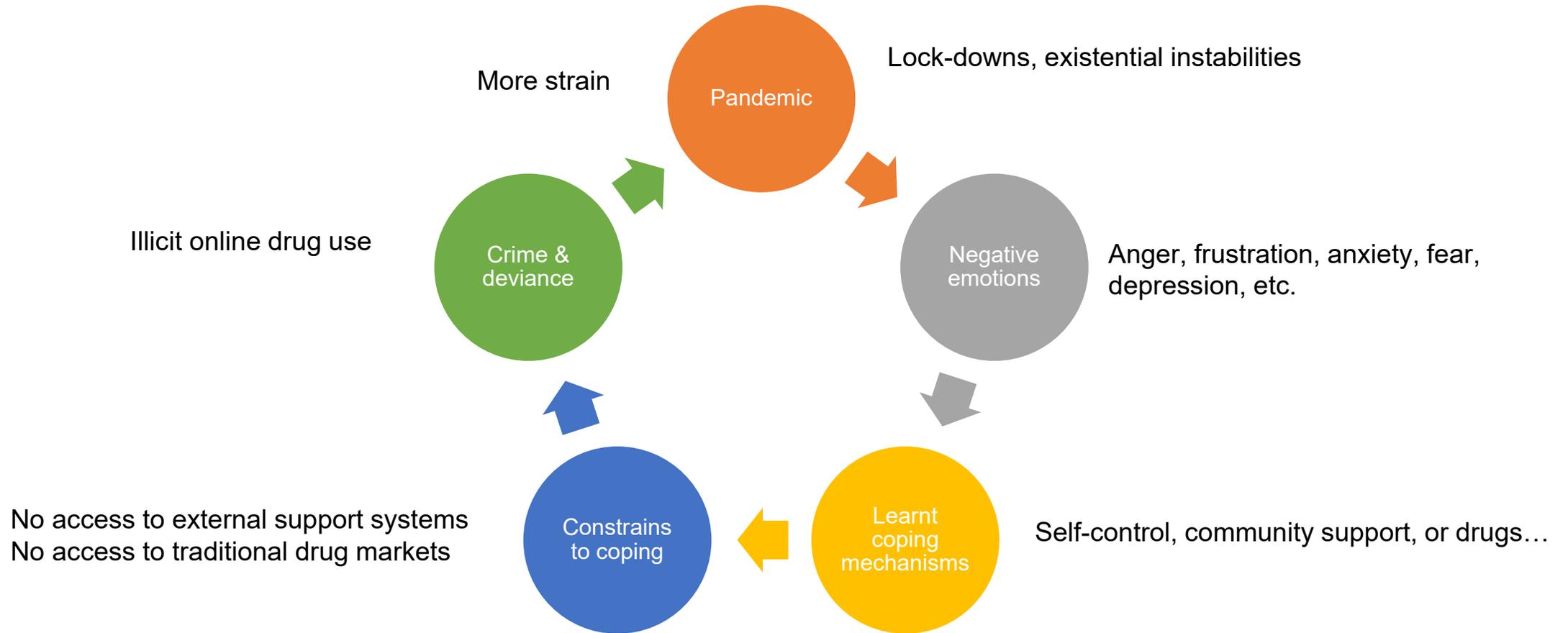
- Traditional (offline) markets stalled – supply-chain disruptions, reduction in purity, increase in prices (Aldridge et al., 2021; Barratt & Aldridge, 2020; UNODC, 2020)
- Illegal drug use decreased first (Been et al., 2021; EMCDDA, 2020a; Sande et al., 2021; Palamar et al., 2020), but...
- Online sales of cannabis, psychoactive substances, and psychedelics increased (Groshkova et al., 2020; EMCDDA, 2020b; Reinstadler et al., 2021)
- Opioid overdoses increased -- fentanyl, methamphetamine, cocaine, and heroin (Wainwright et al., 2020)

Theorizing online illegal drug use 1

- Little research theorizing online illicit drug market changes due to the pandemic
- Natural increases in e-commerce & cryptomarkets
- Anonymity of online drug dealing and postal deliveries may reduce risk of detection
- COVID-19 may have induced changes in the drug market
- Non-market related factors: strain...

Theorizing online illegal drug use 2

General strain theory (Agnew, 1992)



Hypotheses

H1: Illegal online drug purchase increased during the pandemic

H2: Individuals who were more strained were more likely to have purchased illegal drugs online

H3: There is an interaction between strain and time into COVID-19: the combination of strain and time under COVID-19 increased the purchasing of illegal drugs online

Sample

- Online survey panel provided by Dynata
- Similar to random, probability-based samples (Weinberg et al., 2014; Simmons & Bobo, 2015; MacInnis et al., 2018)
- Sample represents US population over 18 according to gender, race, ethnicity, and age
- Longitudinal design (N=4,653):
 - **Fall 2019 (before pandemic)**
 - **Spring 2020**
 - **Fall 2020**
 - **Fall 2021**

Results

H1: Illegal online drug purchase increased during the pandemic:

2019:	7.27% of the sample purchased illegal drugs online
2020/1:	7.23%
2020/2:	8.05%
2021:	13.5%

($\chi^2=40$, $p<.001$)

Results

H2: Individuals who were more strained were more likely to have purchased illegal drugs online:

Online illicit drug buyers Strain level (mean)	Non-buyers Strain level (mean)
M=5.2	M=2.4

($t(4,436)=-24.46, p<.001$)

Results

Multiple regressions

Base wave: Fall 2019

Spring 2020 }
Fall 2020 } n.s.

Fall 2021: 73% increased chance of participants reporting purchasing illegal drugs online, compared to the pre-COVID-19 data.

Results

H3: There was NO interaction between strain and COVID-19, *however...*

Increased the odds of buying illegal drugs online	Decreased the odds
Being male by 57% (p=.001)	Being white by 26% (p=.028).
Having higher income: Each bracket income increase elevated the likelihood by 31% (p<.001).	Age: With every year of age, the likelihood decreased by 4% (p<.001).
Education: Each bracket increase caused a 29% increase (p<.001).	

Discussion 1

- Results suggest that market forces were likely the primary drivers of the increased use of online drug markets during COVID.
- => Market changes did not induce increased drug purchase until Fall 2021
- Although strain increased during the pandemic, drug users did not increasingly buy drugs online because of that.
 - More likely: offline drug buyers turned to online drug markets by convenience (innovative adaptation)

Discussion 2

Traditional police strategies, such as:

- Offline (street) hot spot policing & militarized enforcement
- Zero tolerance policing

Might not work online...

- Harmful, ineffective, symbolic
- Can lead to riskier behavior
- Disproportionately affects small scale drug users, more educated users, younger people, & non-white races

Limitations

- Survey participants in paid panels are over-educated, from higher income brackets, and younger
- We did not ask *why* males with higher education and higher financial well-being more likely to purchase online illicit drugs...
- It could be certainty, security, trust, computer skills, access to internet, being comfortable using cryptocurrency, avoiding street violence or the combination of those



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General Strain Theory Index Measures (Adapted from Hinduja & Patchin, 2007)

In the past 12 months have you...	Yes	Percent
Been treated unfairly	1,857	41.40
Received a bad grade, performance review, or evaluation	691	15.28
Got into a disagreement with a family member	2,224	49.11
Had a death or hospitalization of a close friend or family member	1,603	35.39
Got into a disagreement with a friend	1,655	36.57
Had to deal with money problems	2,038	45.06
Broke up with a significant other	713	15.76
Parents divorced	455	10.07
Been the victim of a crime	677	14.97