

The impact of the COVID-19 pandemic on personal victimisation

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Outline

- COVID-19 and crime
- Why use victimisation data?
- Mexico's crime survey
- Method: Societal Growth Curves
- Findings
- Conclusions



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COVID-19 and crime

- "The Largest Criminological Experiment in History" (Stickle and Felson, 2020)
- Support for opportunity theories of crime
- Most research has analysed police-reported crime
- Underreporting bias could be particularly relevant for countries with high 'dark figures'.
- Victimisation has been studied less, and to my knowledge, no study has examined repeat victimisation.



Advantages and disadvantages of using victim survey data to study the impact of COVID-19

- Advantages
- Able to capture underreported crimes
- Measures crime concentration at the individual-level
- Can control for individual characteristics

- Disadvantages
- Data usually reported for yearly periods
- Data collection (esp. face-to-face) hampered by pandemic restrictions
- CSEW vs TCSEW
- Usually cross-sectional



DATA AND METHODS



Mexico's National Victimisation Survey

- ENVIPE survey, carried out by Mexico's ONS (INEGI)
- Yearly, running since 2010
- Face-to-face interviews
- Reference year is the previous calendar year
- Collection for 2019 figures (2020) was disrupted by lockdowns
- Sample: ~90k adults (18+)



Can cross-sectional data be used to infer longitudinal trends?

- Time-series cross-sectional data (TSCS)
- Data:
- Pool 11 years of ENVIPE data
- N = 942046, States = 32, Years = 11
- Usually analysed using panel data techniques (i.e. time and unit fixed effects)
- Fairbrother (2014) proposes the application of growth-curve modelling



Societal Growth Curves

- Growth curves are traditionally used to examine individual variation in change over time.
- Y is modelled as a function of time with random intercepts and slopes at the individual level
- $y_{ti} = \beta_{0i} + \beta_{1i}time + u_{0i} + u_{1i}time + e_{ti}$
- Fairbrother (2014) proposes fitting growth curves to "societies" by leveraging the fact that survey data is usually grouped at national and subnational levels.
- Y is modelled as a function of time with random intercepts and slopes at the (sub)national level, with additional random intercepts at the unit-wave level.

Societal growth curves of (repeat) victimisation

- Growth curve for incidence (y = 0,1,2...n) using count data model (multilevel negative binomial).
- Continuous time (linear and polynomial forms) with state and state-year random effects.
- Controlling for gender, age, schooling, and employment.
- Pandemic effect entered as a dummy for 2020.
- Estévez-Soto, Johnson and Tilley (2020) showed that the predictors for prevalence were not always consistent with the predictors of concentration.
- Fit separate societal growth curves for prevalence (y = 0, 1) and concentration (y = 1,2,3,...n).



FINDINGS

Mexico: Societal growth curves of personal victimisation, 2010-2019



Bold line represents national average. Data: INEGI CC-BY Patricio Estévez-Soto. **I**UCL

Mexico: Effect of the pandemic on sexual harassment, 2010-2020



Data: INEGI CC-BY Patricio Estévez-Soto.

Mexico: Effect of 2020 on personal victimisation





Discussion

- Regarding incidence and prevalence, 2020 saw significant decreases in robbery (-23%) and sexual harassment (-42%), and a significant increase (26%) in consumer fraud.
- Regarding concentration, 2020 saw significant decreases for bank fraud (-30%) and sexual harassment (-49%).
- Findings consistent with analyses of police-reported crime and with opportunity theories.

Conclusions

- Some work remains: pandemic effect conditional on individual characteristics (conditional trends vs interaction with 2020).
- Future work can examine incident forms to 'build' monthly time series to examine effect of lockdown directly
- This is the first study of personal victimization using ENVIPE data, not only
 of the pandemic
- Invitation to all to examine victim and crime data from Latin America and the Caribbean