

How Long is Too Long?

A Cross Country Analysis of Lockdown Duration and Domestic Violence Rates

Presented by: Idan Schreiber, Rotem Azrieli, Klil Harburger, Yuval Antman



Not all lockdowns save lives.
Some endanger them.

What drives a country's policy in times of crisis?



The Problem



Public Opinion



Economy

But what about the hidden impacts?

Can we learn from data
to detect what's hard to see?

Data Overview



Domestic violence indicators



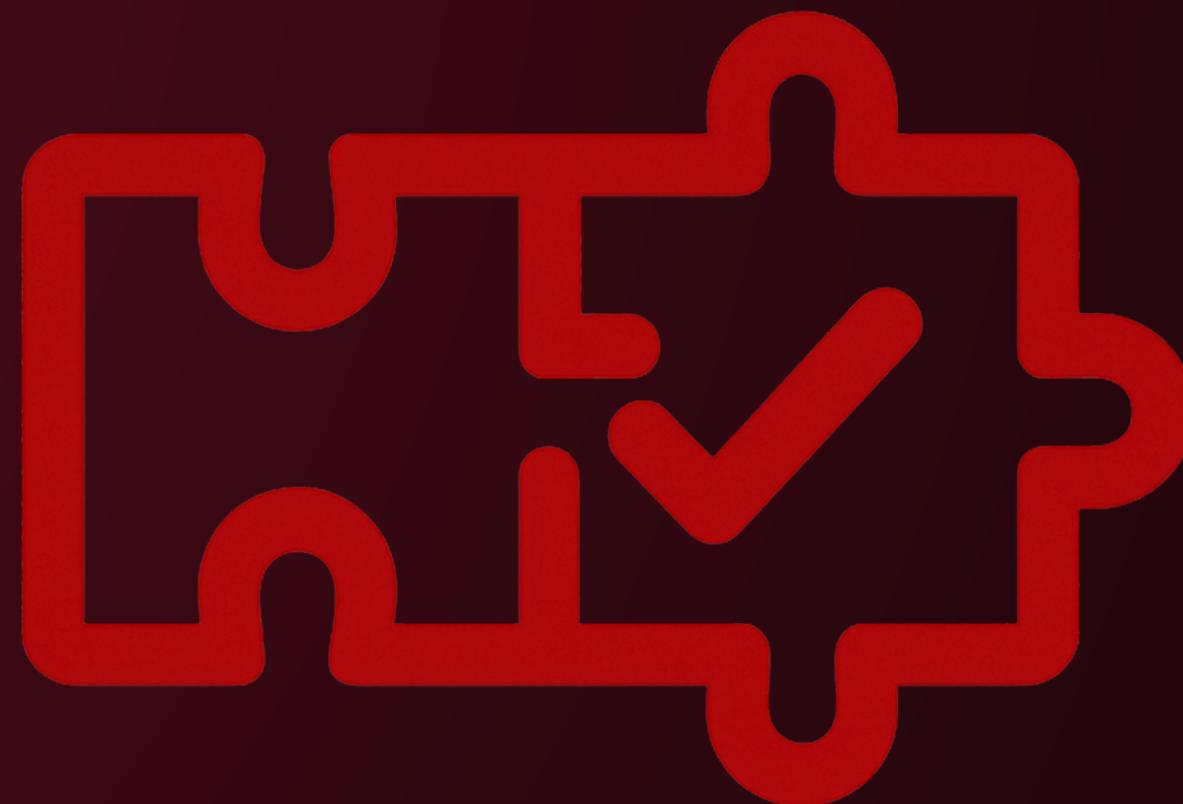
Policy features



COVID-19 deaths



Engineered features



Our Data Aligns With Prior Research

Anderberg(2020),

Piquero&Jenninjs(2021),

Flaxman&Mishra(2020)

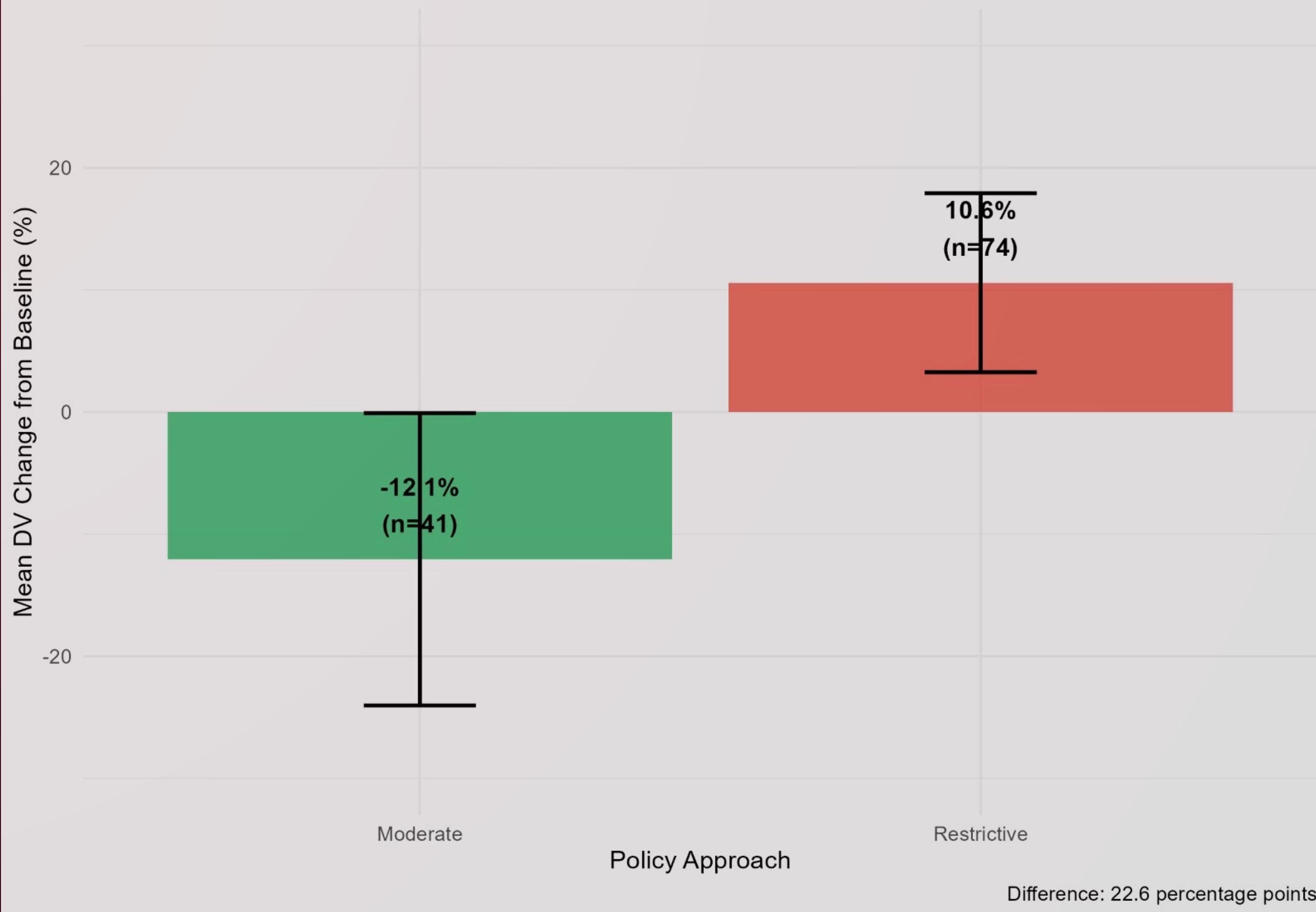
Stage 1 – Does Policy Matter?

Restrictive vs. Moderate Lockdowns



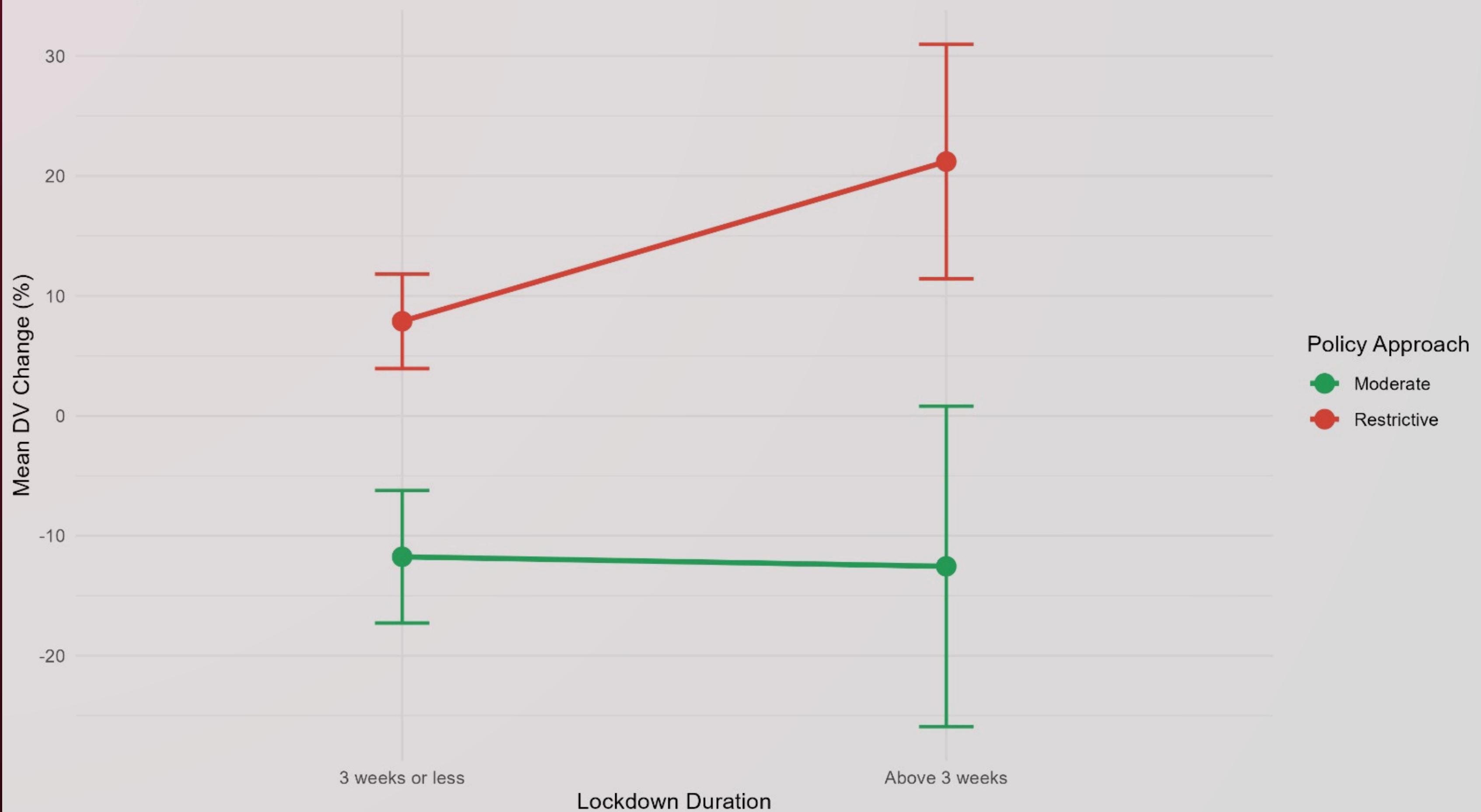
Domestic Violence Impact by Policy Approach

2-group classification with 95% confidence intervals



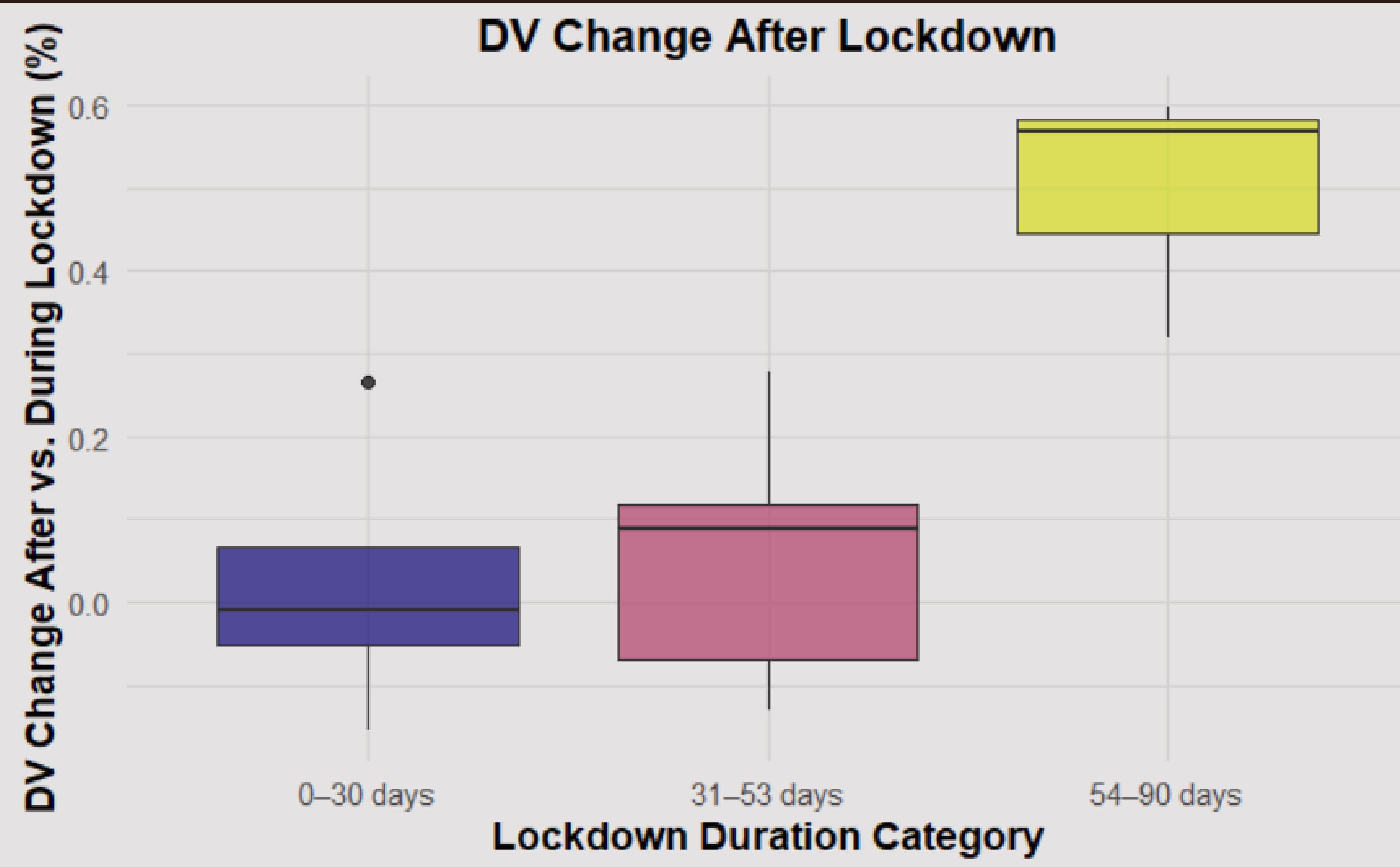
Lockdown Duration Threshold Effect

DV impact before and after 3-week threshold



Stage 2 – The Aftereffects– Have the lockdowns made things worse?

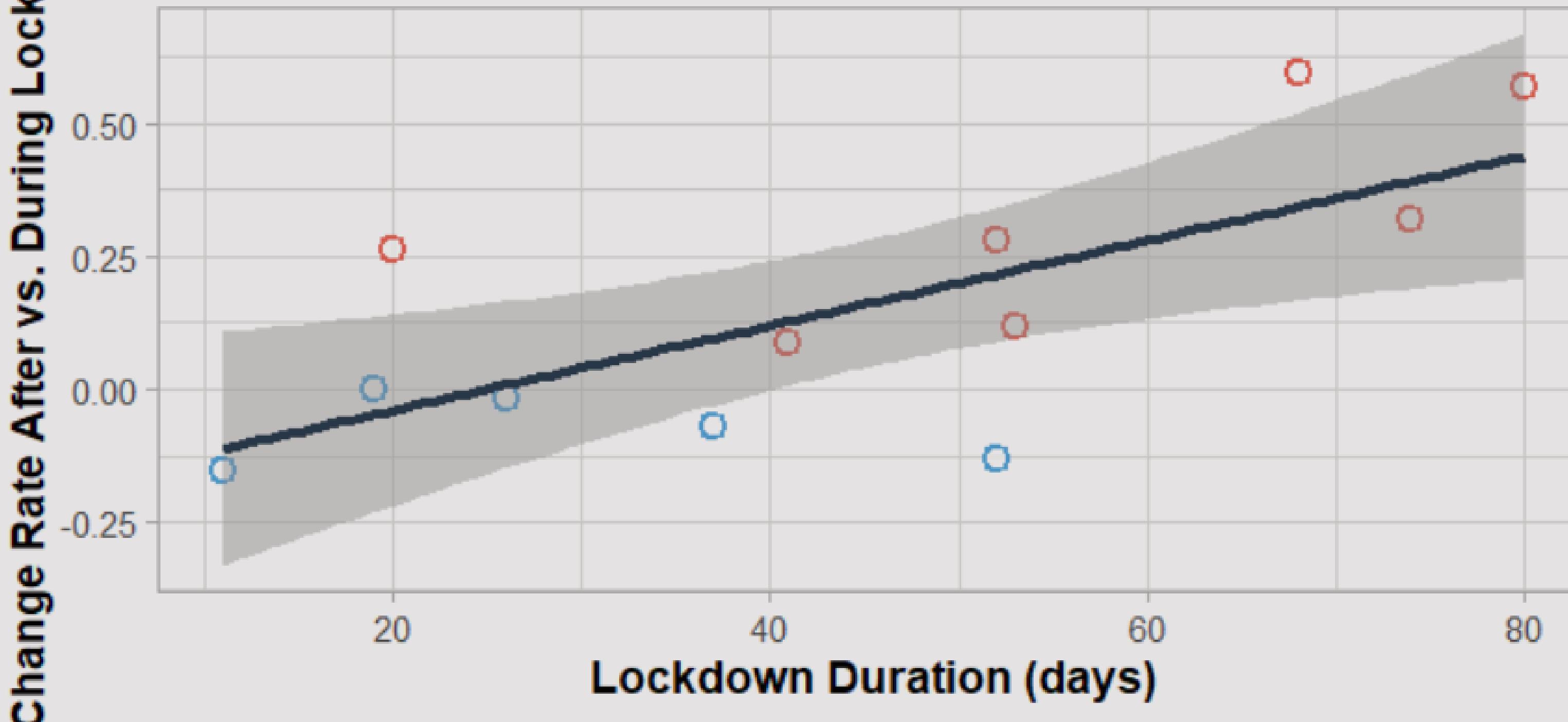




Change in DV Following Lockdown Duration

Increase vs. Decrease in Domestic Violence After Lockdown Compared to During

○ Decrease ○ Increase



So...
How long is too long?



Regression-Based Estimation Of The Ideal Lockdown Length

why regression?



Continuity



Precision

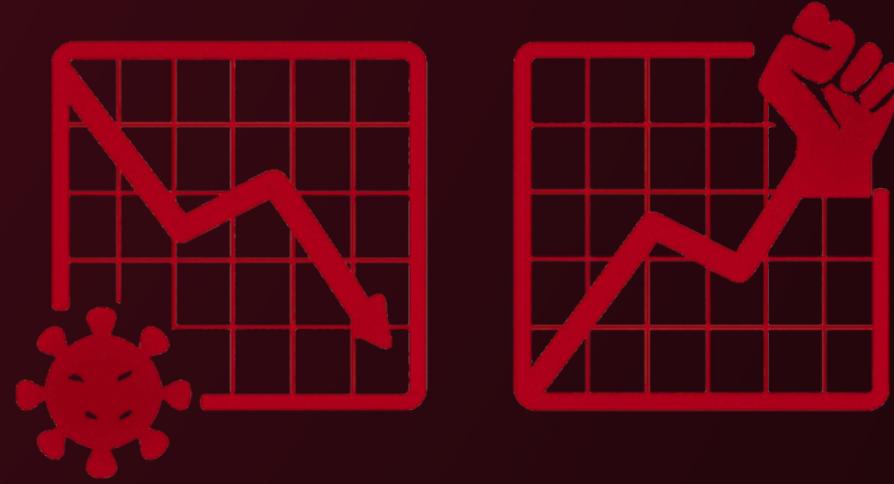


Scalability

The Pipeline:



normalization



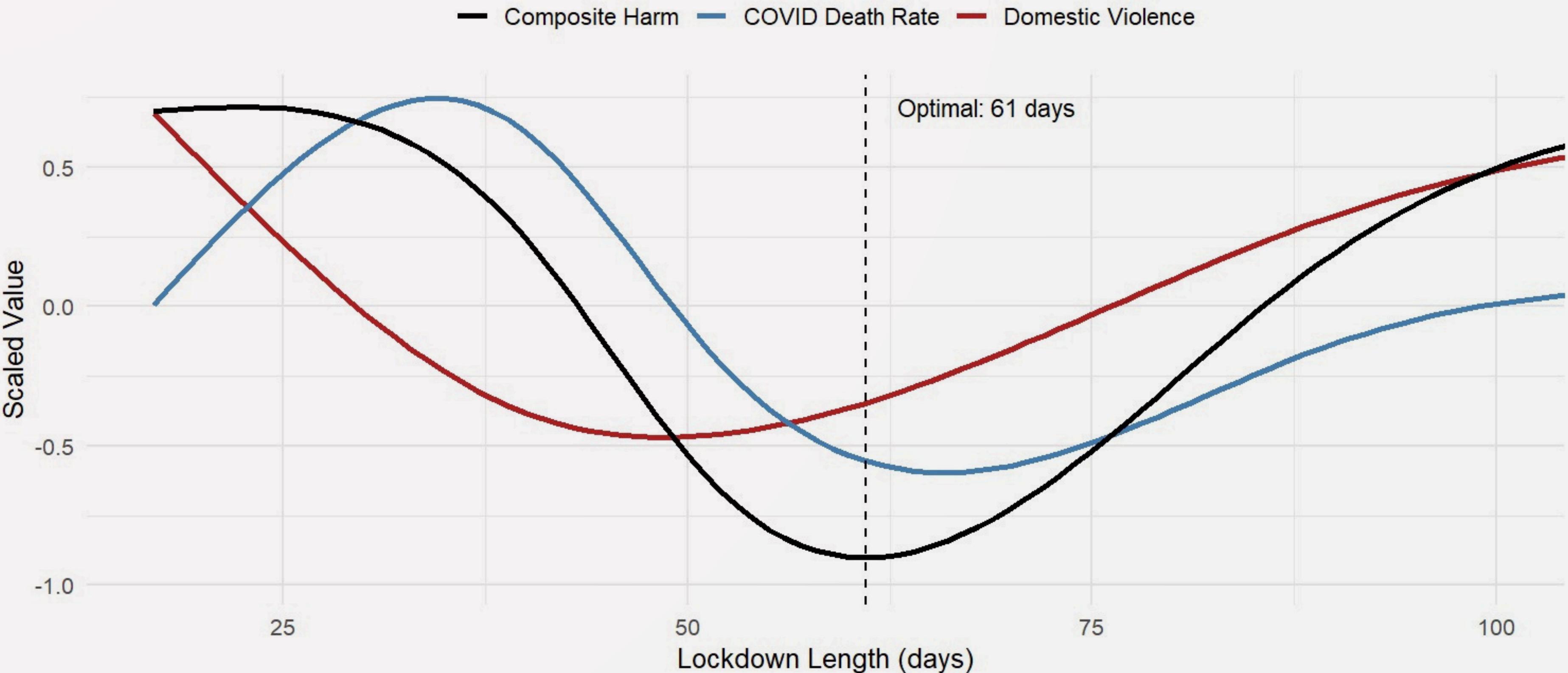
Dual Modeling



Composite Harm

Nonlinear Relationship Between Lockdown Length and Harm Outcomes

Spline models fitted to scaled outcomes; optimal composite duration marked



Future work & Limitations

