

# Codebook for “Causal Inference with Latent Treatments”

## HKData.csv and HKRepData.csv:

- **resp:** The respondent’s response to the question: On a scale from 0 to 100, where 0 is completely disagree and 100 is completely agree, how much do you agree with the following statement: The United States government should support the protesters in Hong Kong.
- **numtexts:** Either 2 or 3, Whether the respondent a text with 2 or 3 components.
- **treatycommit:** A binary indicator which is 1 if the commitment treatment is present in one of the texts shown to the respondent, 0 if the commitment treatment is not present in any of those texts. The commitment texts vary (1) whether the law is described merely as a bill or the Hong Kong Policy Act, (2) the language and verb tense used to describe the commitment, (3) the presentation of the timing of the bill's passage, i.e. whether it was in 1992, 27 years ago, during George H.W. Bush's Administration, or some time ago, and (4) whether the commitment protects Hong Kong's freedom, autonomy, right to govern itself, or some combination thereof.
- **brave:** A binary indicator which is 1 if the bravery treatment is present in one of the texts shown to the respondent, 0 if the bravery treatment is not present in any of those texts. The bravery texts vary (1) whether the protester's willingness to be beaten, imprisoned, or tortured is attributable to a desire to be free, (2) whether the protesters are described as the Hong Kong protesters or merely as some protesters, (3) whether their dangers are described as being beaten, imprisoned, or tortured or as being targeted by brutal police tactics and intimidation, and (4) whether their actions are explicitly described as brave.
- **evil:** A binary indicator which is 1 if the mistreatment treatment is present in one of the texts shown to the respondent, 0 if the mistreatment treatment is not present in any of those texts. The mistreatment texts vary (1) whether China is described as authoritarian, totalitarian, communist, or just as China, (2) whether China is described as having a long history of mistreating its citizens or more specifically described as not allowing free speech, free press, or the due process of law, (3) whether China is explicitly described as attempting to destroy freedom in Hong Kong, (4) whether the Tiananmen Square Massacre in 1989 is recounted, (5) whether the text alleges that 18 million Chinese citizens have been killed by Chinese government policy, (6) whether Chinese mistreatment of the Uyghurs is detailed.
- **flag:** A binary indicator which is 1 if the flag treatment is present in one of the texts shown to the respondent, 0 if the flag treatment is not present in any of those texts. The flags texts vary (1) whether the text praises the flag as a symbol for freedom

everywhere, (2) whether waving flags is attributed to a desire to emulate the American Revolution, and (3) whether waving flags is described as affirming a commitment to American values.

- threat: A binary indicator which is 1 if the threat treatment is present in one of the texts shown to the respondent, 0 if the threat treatment is not present in any of those texts. The threat texts vary (1) whether the text mentions possible future aggression to Japan or Taiwan, (2) whether the text describes efforts to catch up to American military capabilities, (3) whether the text mentions purchasing arms from Russia, and (4) whether the text discusses the growth of the Chinese aircraft carrier fleet.
- economy: A binary indicator which is 1 if the economy treatment is present in one of the texts shown to the respondent, 0 if the economy treatment is not present in any of those texts. The economy texts vary whether (1) respondents are told that China has been governed separately from China for the last 150 years, (2) the use of the term free-market, (3) whether Hong Kong is described as having a special status within China, (4) whether Hong Kong is described as one of the richest cities in the world, and (5) whether Hong Kong's autonomy is described as self-government.
- treatyviolation: A binary indicator which is 1 if the treatyviolation treatment is present in one of the texts shown to the respondent, 0 if the treatyviolation treatment is not present in any of those texts. The violation texts vary whether (1) the date in which Britain returned Hong Kong to China is mentioned, (2) China's promise not to interfere in Hong Kong's affairs for 50 years is mentioned, (3) the Sino-British Joint Declaration is mentioned by name, and (4) the texts says that protesters allege China's actions violate the Sino-British Joint Declaration.
- resp\_id: A unique identifier for the respondent.
- text1: A string with the first component of the text delivered to the respondent.
- text2: The second component of the text.
- text3: The third component of the text. Blank if the respondent received a text with only two components.

#### **trumpdt.csv:**

- score: The score that YouGov's panel assigned to the given tweet, averaged over all respondents with a given party identification. It is a 5 point scale from -2 to 2, corresponding to Terrible, Bad, OK, Good, and Great. The average score is multiplied by 100 so that score goes from -200 to 200.
- Gind: a binary indicator for whether the observation is for the "Independent" group in the YouGov panel which is 1 if the score is for respondents who identify as political independents and 0 if the respondents do not identify as political independents.
- Gdem: a binary indicator for whether the observation is for the "Democrat" group in the YouGov panel which is 1 if the score is for respondents who identify as Democrats and 0 if the respondents do not identify as Democrats.

- Grep: a binary indicator for whether the observation is for the “Republican” group in the YouGov panel which is 1 if the score is for respondents who identify as Republicans and 0 if the respondents do not identify as Republicans.
- The remaining 300 columns correspond to words. The column heading is the word, and the value is the number of times that word appears in the given tweet.