Codebook for: Borwein, Sophie, Beatrice Magistro, R. Michael Alvarez, Bart Bonikowski, and Peter Loewen. "Causal Beliefs and the Potential for Political Backlash Against AI."

Dataset: lca_dat.csv

LCA indicators:

product_quality_lca

Quality of services/products. "Do you think that...? Introducing the new technology will increase or decrease the quality of the services/products the company provides?"

- 0 Don't know
- 1 Decrease
- 2 No change
- 3 Increase

price_lca

Price of services/products. "Do you think that...? The price consumers pay for the services/products the company provides will increase or decrease?"

- 0 Don't know
- 1 Decrease
- 2 No change
- 3 Increase

profits_lca

Profits from services/products. "Do you think that...? Profits for the company will…?"

- 0 Don't know
- 1 Decrease
- 2 No change
- 3 Increase

demand_lca

Demand for services/products. "Do you think that...? Demand for the services/products will increase or decrease?

- 0 Don't know

- 1 Decrease
- 2 No change
- 3 Increase

complement_lca

Skill complementarity of new technology. “Do you think that...? ChatGPT complements the workers’ skills (makes them better at their jobs) or substitutes the workers’ skills (replaces them in their jobs)?”

- 0 Don’t know
- 1 Substitute
- 2 Neither
- 3 Complement

inequality_lca

Inequality from new technology. “Do you think that...? ChatGPT will increase or decrease inequality among customer service workers [professionals working in marketing]?

- 0 Don’t know
- 1 Decrease
- 2 No change
- 3 Increase

worker_wages_lca

Wages for workers. “Do you think that...? Wages for some workers will increase or decrease?"

- 0 Don’t know
- 1 Decrease
- 2 No change
- 3 Increase

hiring_lca

Hiring. ““Do you think that...? The company will increase or decrease hiring of new workers?

- 0 Don’t know
- 1 Decrease
- 2 No change

- 3 Increase

Demographic and experimental covariate dummies:

Each variable is coded as a 0/1 dummy for input into the LCA model, created from the underlying factor; omitted category in parentheses.

age_group_lca_30_44

Age group 30–44 (reference: 18–29).

- 1 Respondent is aged 30–44
- 0 Otherwise

age_group_lca_45_64

Age group 45–64 (reference: 18–29).

- 1 Respondent is aged 45–64
- 0 Otherwise

age_group_lca_65over

Age group 65 or older (reference: 18–29).

- 1 Respondent is aged 65 or over
- 0 Otherwise

gender_lca_woman

Gender (reference: man). Respondents who identified as non-binary in the original survey are excluded from lca_dat.

- 1 Woman
- 0 Man

education_lca_some_college

Education (reference: HS or less). Harmonized across US and Canadian categories.

- 1 Some college
- 0 Otherwise

education_lca_university

Education (reference: HS or less).

- 1 College or university graduate
- 0 Otherwise

education_lca_postgrad

Education (reference: HS or less).

- 1 Postgraduate degree
- 0 Otherwise

race_lca_Black

Race/ethnicity (reference: White). Harmonized across US race and Canadian visible-minority categories.

- 1 Black
- 0 Otherwise

race_lca_Asian

Race/ethnicity (reference: White).

- 1 Asian (including East, South, Southeast Asian and related categories in Canada)
- 0 Otherwise

race_lca_Hispanic

Race/ethnicity (reference: White).

- 1 Hispanic/Latino/Latin American
- 0 Otherwise

race_lca_Other

Race/ethnicity (reference: White). Includes groups not captured above.

- 1 Other race
- 0 Otherwise

income_lca_Low

Household income (reference: Mid). Income terciles are defined within country using family income.

- 1 Bottom income tercile (“Low”)
- 0 Otherwise

income_lca_High

Household income (reference: Mid).

- 1 Top income tercile (“High”)
- 0 Otherwise

countr_lca_Canada

Country (reference: US).

- 1 Canada
- 0 United States

urban_lca_rural

Place type (reference: urban). Constructed from urbancity (US YouGov variable) and Statistics Canada Statistical Area Classification (Canada).

- 1 Rural
- 0 Urban

high_skill_lca_professionals

Job type experimental treatment (reference: customer service jobs).

- 1 High-skill professional jobs vignette
- 0 Customer-service jobs vignette

info_lca_no_info

Information experimental treatment (reference: info).

- 1 No additional information about effects of ChatGPT
- 0 Information provided about effects of ChatGPT

Policy outcome variables:

All policy variables are coded 1 if the respondent selected the policy; 0 otherwise.

social_spending

“Expand social spending, such as unemployment benefits, to support workers facing potential job loss.”

basic_income

“Implement a basic income that covers essential living costs for everyone, regardless of their financial situation.”

reskill

“Fund programs to re-skill workers for new jobs.”

invest_uni

“Invest in universities and colleges to support training in new technologies and skills.”

reduce_immigHS

“Reduce the number of high-skilled immigrants entering your country for work.”

reduce_immigLS

“Reduce the number of low-skilled immigrants entering your country for work.”

restrict_trade

“Restrict international competition by increasing trade barriers on goods and services to your country.”

tax_AI

“Introduce a specific tax on companies that adopt generative AI tools.”

subsidies

“Provide subsidies to companies that invest in generative AI and similar technologies.”

regulation
“Regulate the use of generative AI.”

Vote choice variables:

vote_us

Reported 2020 US presidential vote

- 0 Democratic
- 1 Republican

- 2 Other (including third-party and “other” candidates)
- NA Non-US respondents or missing vote

vote_can

Reported 2021 Canadian federal vote

- 0 Liberal Party of Canada (LPC)
- 1 Conservative Party of Canada (CPC)
- 2 New Democratic Party (NDP)
- 3 Other (Bloc, Greens, People’s Party, other)
- NA Non-Canadian respondents or missing vote

Scaled versions of main experimental outcomes

For the following variables, original categorical responses (decrease / no change / increase) have been mapped onto a 0–1 scale to facilitate interpretation, with higher values indicating “increase / complement / increase inequality”. Here “don’t know” responses are excluded.

product_quality_num

Rescaled version of product_quality.

- 0 Decrease
- 0.5 No change
- 1 Increase

price_num

Rescaled version of price.

- 0 Decrease
- 0.5 No change
- 1 Increase

profits_num

Rescaled version of profits.

- 0 Decrease
- 0.5 No change
- 1 Increase

demand_num

Rescaled version of demand.

- 0 Decrease
- 0.5 No change
- 1 Increase

complement_num

Rescaled version of complement.

- 0 Substitute
- 0.5 Neither
- 1 Complement

inequality_num

Rescaled version of inequality.

- 0 Decrease inequality
- 0.5 No change
- 1 Increase inequality

worker_wages_num

Rescaled version of worker_wages.

- 0 Decrease
- 0.5 No change
- 1 Increase

hiring_num

Rescaled version of hiring.

- 0 Decrease
- 0.5 No change
- 1 Increase

Manipulation check

Pass/fail indicator for the ChatGPT video manipulation check

- 1 Correctly identifies video content

- 0 Otherwise