

Online Appendix

1 Participant Demographics

87% of participants in our sample responded to demographic surveys that asked about age, gender, race/ethnicity, education, income, and political party. Table 1 shows the breakdown of responses across these six demographic variables. Compared to the US population, our sample has a higher fraction of White people, Democrats, and individuals with at least a four-year college degree.¹

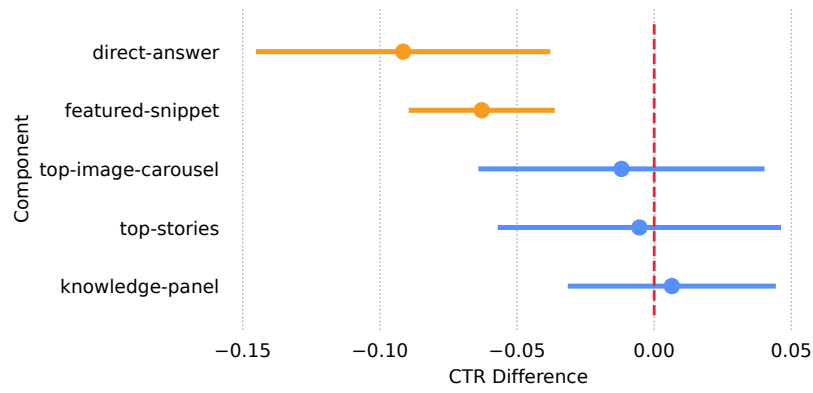
These demographic variables can be interpreted as proxies for a person’s intent. Thus, we repeat our estimation approach (matching and regression in the matched sample) for the subset of participants who responded to a demographic survey and adjust for demographics in the regression models. Specifically, we represent gender, race/ethnicity, education, and political party as categorical variables, and age and income as continuous variables.

Figures 1 and 2 show our estimates for the effects of extracted results and Google Services, respectively. In general, these confidence intervals are slightly wider than those in the main text because only a subset of participants responded to the demographic survey. However, the inferences we make in the main text are unaffected. Figure 3 shows the results of sensitivity analyses using the E-value. The effect of `direct-answers` on time spent on the SERP and the effect of `local-results` on organic clicks to 3rd-parties are more susceptible to unmeasured confounding after adjusting for demographic variables in this smaller sample.

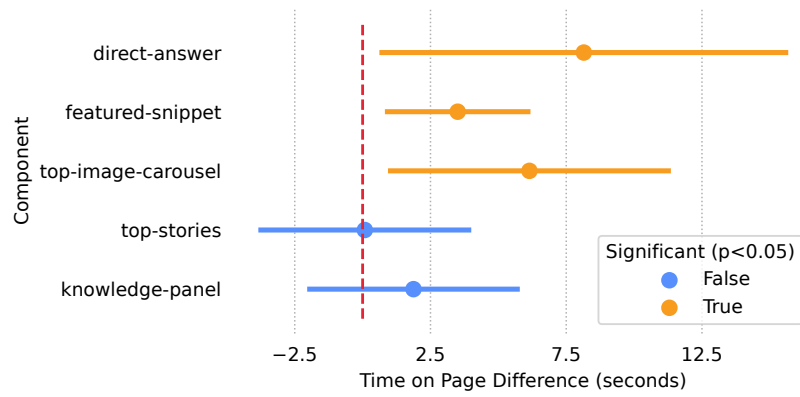
¹<https://www.census.gov/quickfacts/fact/table/US/POP010220>

Demographic Variable		Frequency
Age	18 - 24	13.6
	25 - 44	42.2
	45 - 64	30.3
	65+	13.9
Gender	Male	51.5
	Female	48.5
Race/Ethnicity	White	74.1
	Black	8.4
	Asian	6.8
	Latino	6.8
Education	Four-year degree or higher	54.6
	Less than a four-year degree	45.4
Income	Under \$50,000	47.3
	\$50,000 - \$99,999	30.9
	\$100,000 - \$149,999	12.5
	\$150,000 - \$199,999	4.8
	\$200,000 and over	4.4
Political Party	Democrat	54.8
	Independent/Other	30.8
	Republican	14.4

Table 1: Participant Demographics

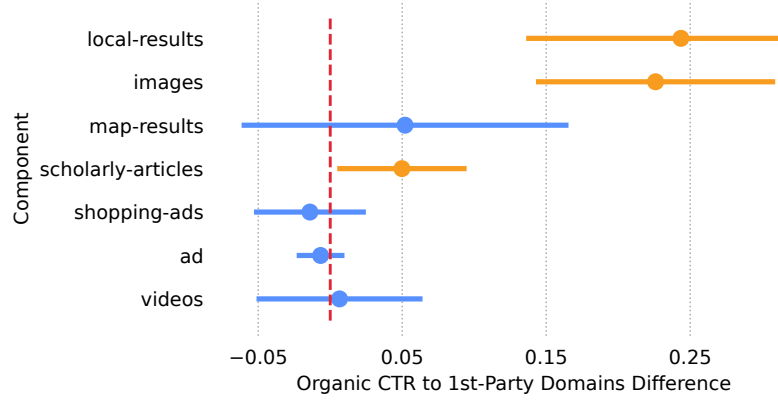


(a) CTR

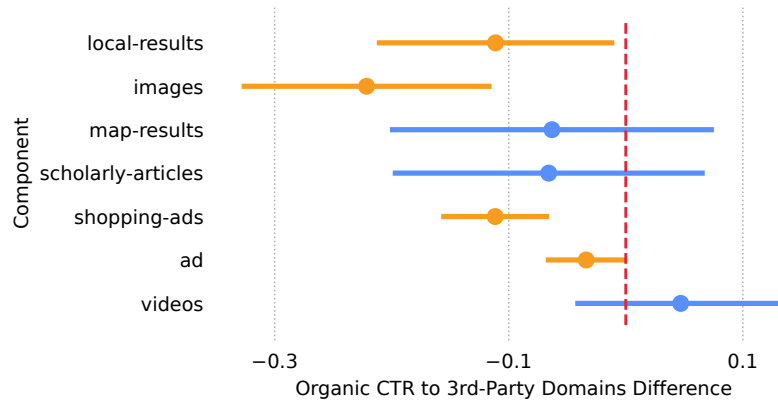


(b) Time on the SERP

Figure 1: Effects of extracted results on CTR and Time on the SERP after adjusting for demographic variables.



(a) Organic CTR to 1st-Party Domains



(b) Organic CTR to 3rd-Party Domains

Figure 2: Effects of Google Services on organic CTR to 1st and 3rd-party domains after adjusting for demographic variables

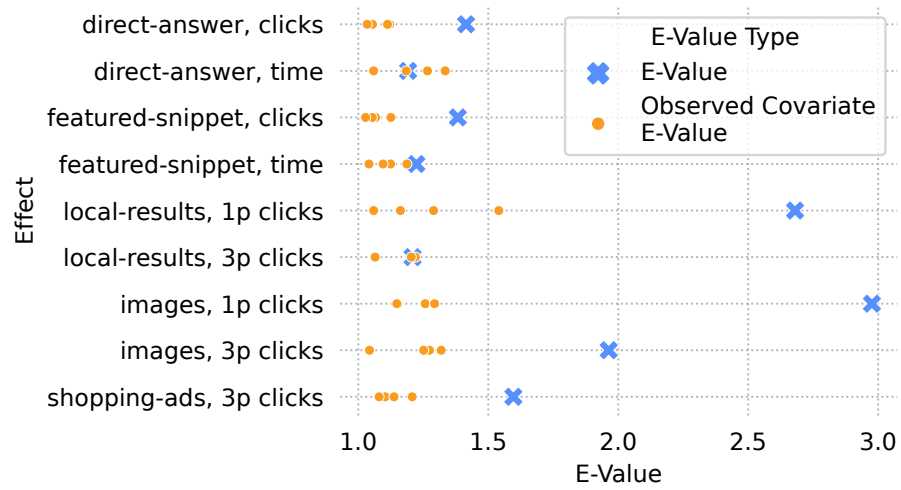


Figure 3: E-value sensitivity analysis after adjusting for demographic variables. For each treatment-outcome pair, the E-value represents the minimum amount of unmeasured confounding needed to tip the confidence interval. Observed covariate E-values demonstrate how much the confidence bound closer to zero changes on the E-value scale if we drop one group of covariates.