

# Primary and Secondary Analysis

October 19, 2021

Among the 591 participants who were randomized to the experimental condition, exclude participants who

- did not specify either their preferred product or charity at baseline

```
## # A tibble: 4 x 4
##   decision_point count_randomized proportion_responded_within47hours proportion_randomized_to_product
##   <dbl>          <int>          <dbl>          <dbl>
## 1           1         583          0.592          0.501
## 2           2         492          0.559          0.498
## 3           3         455          0.479          0.497
## 4           4         439          0.444          0.499
```

# 1 Participants and decision points used to estimate causal effect

Among the 591 participants who were randomized to the experimental condition, exclude participants who

- did not specify either their preferred product or charity at baseline
- had a missing value in any of the variables utilized in the noise reduction model; that is, the variables:
  - tot\_days\_with\_any\_drinks
  - typical\_num\_drinks\_per\_day
  - is\_female
  - is\_white\_only

```
## # A tibble: 4 x 4
##   decision_point count_randomized proportion_responded_within47hours proportion_randomized_to_product
##         <dbl>         <int>                <dbl>                <dbl>
## 1             1             581                0.592                0.503
## 2             2             490                0.559                0.496
## 3             3             453                0.477                0.497
## 4             4             437                0.444                0.501
```

Among the 591 participants who were randomized to the experimental condition, exclude participants who

- did not specify either their preferred product or charity at baseline
- had a missing value in any of the variables utilized in the noise reduction model; that is, the variables:
  - tot\_days\_with\_any\_drinks
  - typical\_num\_drinks\_per\_day
  - is\_female
  - is\_white\_only
- had a missing value in any of the variables utilized in the model for the causal effect; that is, the variables:
  - baseline\_anxiety
  - baseline\_depression
  - baseline\_stress

```
## # A tibble: 4 x 4
##   decision_point count_randomized proportion_responded_within47hours proportion_randomized_to_product
##         <dbl>         <int>                <dbl>                <dbl>
## 1             1             567                0.591                0.499
## 2             2             479                0.562                0.497
## 3             3             443                0.481                0.497
## 4             4             427                0.445                0.499
```

## 2 Estimate of causal effect for Hypothesis 1

##	exp_estimate	estimate	std_err	p	LB95	UB95
## Intercept	0.610	-0.495	0.303	0.103	-1.090	0.100
## No. of Days with any drinks	0.912	-0.092	0.062	0.137	-0.213	0.029
## No. of Drinks per day	0.977	-0.023	0.038	0.544	-0.099	0.052
## White (1=Yes, 0=otherwise)	1.057	0.055	0.076	0.469	-0.095	0.205
## Female (1=Yes, 0=otherwise)	1.095	0.091	0.314	0.772	-0.526	0.708
## Male (1=Yes, 0=otherwise)	1.042	0.041	0.318	0.896	-0.583	0.666
## No. of Days elapsed since entering	0.993	-0.007	0.001	0.000	-0.009	-0.004
## beta0	1.009	0.009	0.042	0.835	-0.074	0.092

## 3 Estimate of causal effect for Hypothesis 2

##	exp_estimate	estimate	std_err	p	LB95	UB95
## Intercept	0.607	-0.499	0.311	0.109	-1.110	0.112
## No. of Days with any drinks	0.920	-0.084	0.062	0.176	-0.205	0.038
## No. of Drinks per day	0.966	-0.035	0.039	0.370	-0.111	0.042
## White (1=Yes, 0=otherwise)	1.072	0.070	0.078	0.374	-0.084	0.223
## Female (1=Yes, 0=otherwise)	1.100	0.095	0.323	0.769	-0.539	0.730
## Male (1=Yes, 0=otherwise)	1.050	0.049	0.327	0.880	-0.592	0.691
## No. of Days elapsed since entering	0.993	-0.007	0.001	0.000	-0.009	-0.004
## beta0	1.016	0.016	0.087	0.856	-0.155	0.186
## beta1 (Coefficient for treatment x baseline anxiety)	0.997	-0.003	0.017	0.869	-0.037	0.031
## beta2 (Coefficient for treatment x baseline depression)	1.016	0.015	0.016	0.326	-0.015	0.046
## beta3 (Coefficient for treatment x baseline stress)	0.994	-0.006	0.010	0.559	-0.025	0.014