

Revised Prolific Recruitment with Screening

Current policy-attitude distribution

The current sample of 168 participants has the following distribution of centred policy attitudes (Question A of the moral conviction block):

Centred policy attitude	Left N	Right N	Total N	Share
Policy adverse -2	0	3	3	1.8%
-1	0	5	5	3.0%
0	1	10	11	6.5%
+1	28	55	83	49.4%
Policy aligned +2	55	11	66	39.3%
Total	84	84	168	100%

The preregistered strategy of recruiting participants using Prolific’s quota-sampling function based on political affiliation did not generate sufficient variation in moral conviction. The recruitment strategy therefore needs to be adapted.

Design change

The study already contains 168 observations. The existing sample is strongly concentrated at policy-aligned attitude scores. Preliminary data indicate that left-leaning participants are unlikely to report policy-adverse attitude scores. Subsequent recruitment is therefore restricted to right-leaning participants.

Within the right-leaning pool, a custom screening procedure will identify participants with a neutral or adverse policy-attitude score; all other participants will be screened out.

The direction of policy attitude (Question A) is combined with the two-item moral conviction measure (Questions B and C) to construct the moral conviction moderator. The screening procedure therefore targets the directional component of the final moderator rather than the moderator itself.

Predicted policy-attitude distribution

The predicted final distribution based on the screening design outlined above is:

Centred policy attitude	Current N	Expected additional N	Predicted total N	Predicted share
Policy adverse -2	3	56	59	11.7%
-1	5	93	98	19.4%
0	11	187	198	39.3%
+1	83	0	83	16.5%
Policy aligned +2	66	0	66	13.1%
Total	168	336	504	100%

Screening assumptions

The right-leaning pilot sample contained 84 participants. Of these, 18 had a centred policy-attitude score of 0 or below:

$$\hat{p} = \frac{18}{84} = 0.2143.$$

Screen-out capacity and expected observations

The planned Prolific study includes:

- 336 study places after pre-screening;
- a maximum of 1,300 screen-out slots.

With an eligibility probability of $p = 0.2143$, the expected number of screen-outs required to obtain 336 eligible participants in the absence of a screen-out cap is:

$$336 \frac{1-p}{p} = 336 \frac{0.7857}{0.2143} \approx 1,232.$$

For budget reasons, the stopping rule is set at a maximum of 1,300 screen-outs and a maximum of 336 successful completions.

Let X_r denote the number of screen-outs before obtaining r eligible participants. Then

$$X_r \sim \text{NegBin}(r, p),$$

and with a maximum of 1,300 screen-outs,

$$P(\text{obtain } r \text{ participants}) = P(X_r \leq 1299).$$

Therefore, the probability that this strategy adds at least 300 observations, or fills all 336 available places, is:

$$P(N_{\text{add}} \geq 300) = P(X_{300} \leq 1299) \approx 0.996,$$

$$P(N_{\text{add}} = 336) = P(X_{336} \leq 1299) \approx 0.814.$$

The results are sensitive to the true screening probability:

Eligibility rate p	$P(N_{\text{add}} \geq 300)$	$P(N_{\text{add}} = 336)$
0.18	22.3%	0.4%
0.20	89.9%	29.8%
0.214	99.6%	81.4%
0.22	99.9%	92.7%
0.25	> 99.9%	> 99.9%