

PAP Amendments Following Pilot Study: Recruitment, Design, and Power Calculations

23 April 2026

We conducted the study pilot in Dumfries and London. The London recruitment campaign ran from 18 February to 26 February, while the Dumfries campaign ran from 28 February to 20 March. Following the pilot study and in response to recruitment and implementation challenges, we introduce revisions to the recruitment strategy, experimental design, and power calculations.

(1) Recruitment Process

The recruitment strategy has been revised to improve both participation rates and feasibility. Since local recruitment rates via digital ads were below expectations, recruitment has been expanded from targeted local areas to a nationwide approach across the UK. As a result, online recruitment will apply only to the live webinar condition and the passive video conditions (short and long arms).

Second, recruitment for in-person workshops has been removed from the online recruitment pipeline. These sessions will instead be organised, where possible, through local partner organisations, which will recruit participants directly.

Despite differences in recruitment channels, all participants will complete the same survey instruments, ensuring comparability across modes. The resulting data will be harmonised and combined into a single dataset, consistent with the overall experimental framework.

(2) Experimental Design

The experimental design follows a sequential randomisation strategy that combines a two-stage randomisation for online participants with a separate randomisation for in-person workshops.

For online participants, the design proceeds in two stages. In the first stage, participants are randomly assigned to one of two modes: (i) the live webinar condition or (ii) the passive video condition, with equal allocation. In the second stage, participants are randomised within each mode. In the webinar condition, participants are assigned to either a treatment group or a control group. In the passive video condition, participants are assigned to one of three arms: short video treatment, long video treatment, or control. Block randomisation is applied by education level (no university versus university) to ensure balance across groups.

For in-person workshops, participants are recruited through local partners and randomised within the in-person mode into treatment and control groups. These sessions follow the same survey structure and measurement approach as the online modes.

(3) Power Calculation, Attrition Assumptions, and Subgroup Analyses

Power calculations are based on 80% power, a 5% significance level, and minimum detectable effects (MDEs) of 0.20 standard deviations (SD) for the short video condition, 0.25 SD for the long video and webinar conditions, and 0.30 SD for the in-person workshops.

Attrition assumptions have been updated following the pilot study. Previously, we assumed a 20% attrition rate for passive video conditions. Based on pilot evidence, we now differentiate by format, with attrition set at 10% for the short video and 30% for the long video. For live and in-person modes, we assume 70% attrition for the webinar condition (updated from 50%) and 20% attrition for in-person workshops.

Applying these assumptions, the required sample sizes are as follows.¹ For passive video conditions, the short video arm requires 400 participants inflated by 10% attrition ($400 \times 1.10 = 440$), and the long video arm requires 250 participants inflated by 30% attrition ($250 \times 1.30 = 325$), with the control group set at 440 to match the largest comparison group. This yields a total of 1,205 participants for passive digital media training.

For the webinar condition, assuming a 0.25 SD effect size and 70% attrition, we require approximately 1,670 participants (treatment and control combined), which we round to 1,700 participants, spread across approximately 10 webinars.

For in-person workshops, assuming a 0.30 SD effect size and 20% attrition, the required sample size is approximately 445 participants (treatment and control combined). For simplicity and consistency with implementation constraints, we target around 420–450 participants, spread across approximately 10 workshops.

The total sample size is therefore approximately 3,300 participants.

We will monitor recruitment, attendance, and completion rates closely and will file an amendment to the PAP if realised attrition diverges significantly from these assumptions.

¹ All calculations are based on the EGAP power calculator: <https://egap.shinyapps.io/power-app/>