

Appendix 2 Study within a trial

We embedded a methodological study within the REACT trial on the impact of higher incentives and conditional rewards on recruitment, and registered it as a SWAT protocol, which is available online.¹⁶⁰

The strongest evidence exists for payment incentives as supporting effectiveness in increasing follow-up completion rates.^{122,124} However, the amount paid, and whether it is offered conditionally or unconditionally, remain areas of uncertainty. We compared the relative effectiveness and costs associated with a lower value (£10) with those associated with a higher value (£20) of reward, and whether the reward was conditional or unconditional. We embedded this SWAT in the REACT randomised trial, for the 24-week follow-up.

At 24 weeks' follow-up, participants underwent a second randomisation to one of the following four intervention groups:

- intervention 1 – £10 conditional (dependent on completion of the follow-up questionnaire)
- intervention 2 – £10 unconditional (offered with the request, and so available even without completion)
- intervention 3 – £20 conditional
- intervention 4 – £20 unconditional.

To assess the impact of this second randomisation, the number (proportion) of participants providing 24-week follow-up data was calculated, presented and compared between arms using the χ^2 test. The independent impact of intervention arm on retention rates over and above that of reward was explored by including the intervention arm along with the value of the reward (or un/conditional nature of the reward) as an explanatory variable in logistic regression.

Outcome

Table 55 shows the number of people completing the GHQ-28 at the 24-week follow-up in each arm of the trial, and in each category of £10 versus £20 reward, and unconditional versus conditional reward. A chi-squared test showed no significant benefit in offering people a higher level of reward, or a conditional reward.

TABLE 55 Retention rates at 24 weeks according to randomised value/nature of reward

Randomised group	Completed GHQ-28 (n)		Did not complete GHQ-28 (n)	
	REACT arm	RD-only arm	REACT arm	RD-only arm
Overall	292	307	96	83
Value of the reward				
£10	148	146	51	44
£20	144	161	45	39
Nature of the reward				
Unconditional	145	158	41	45
Conditional	147	149	55	38

The independent impact of intervention arm on retention rates was explored by including intervention arm along with value of the reward (or un/conditional nature of the reward) as an explanatory variable in logistic regression. There was no significant impact of intervention arm on retention when allowing for either the value of reward (odds ratio 0.825, 95% CI 0.590 to 1.154) or the nature of reward (odds ratio 0.825, 95% CI 0.590 to 1.154) (see *Report Supplementary Material 1*, section 6.6.11).

Discussion

Retention in online trials is always a challenge. We used several strategies to maximise retention, including multiple strategies for follow-up, which showed some success. However, our SWAT showed that, for this population, there was no effect when varying the amount of financial incentive to complete follow-up or when making the incentive conditional on completion. This finding was in contrast to previous studies, such as the 'Sexunzipped' online trial,¹⁰⁷ in which higher financial rewards (£20 vs. £10) increased response rates for both online self-report data and urine samples by post, and might reflect differences in the populations, highlighting the importance of understanding the motivations of the population being recruited.¹²³ It is possible that older relatives in a caring role are more motivated to take part in the trial by having access to the intervention and the opportunity to improve care for other relatives, whereas younger people recruited to a sexual health study may have less disposable income and be more motivated by the financial reward. However, this remains speculative and is an important area for future research, especially as misunderstanding motivation could result in retention strategies that, in fact, have a negative impact on retention.¹⁶¹