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Summary of Results for the KPU Study Registry

A test of reward contingent precall

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Results

Ninety-nine participants were each exposed to 20 images, creating a total of 1980 trials. Of these, there were 162 (8.1%) trials that required additional consideration by two coders blind to the aims of the study due to spelling and/or grammar issues. The two coders who examined these items agreed 100% on the outcome of 161 (99.4%) of the responses. The 1 (0.6%) trial where no agreement was reached was excluded from the analysis. There were also 21 (1.0%) intrusions which did not refer to any of the images seen but were invariably semantically related (e.g., climber, death, snow) and these were also excluded from the analysis. Furthermore, repetitions were not counted as intrusions, just ignored, as the primary focus was whether 'the participant recalled the image' not necessarily the correct word.

Recall accuracy was coded as the number of images correctly recalled out of 20. The *Precall* score represents the number of correctly recalled images (from a total of 10) that were subsequently repeated and the *Baseline* score represent the number of correctly recalled images that were not repeated. The *Precall* and *Baseline* scores for the positive and negatively valenced images can be seen in Table 1.

Table 1. Showing mean (and standard deviation) *Precall* and *Baseline* scores for the positive images, negative images and for all images combined.

	Positive		Negative		Total	
	Mean	SD	Mean	SD	Mean	SD
Precall	2.36	1.19	3.42	1.06	5.78	1.74
Baseline	2.13	0.99	3.10	1.11	5.22	1.58

The first confirmatory hypothesis tested whether participant's *Precall* score would be greater than their *Baseline* score. A repeated measures t test comparing *Precall* to *Baseline* scores showed that the level of accuracy for the *Precall* condition was significantly higher than the *Baseline* condition (respective means: 5.78 vs. 5.22), $t(98)=2.352$, $p=0.021$, 95% CI (0.0836, 0.987), $d=0.32$. The second confirmatory hypothesis tested whether participant's *Precall* score would be greater in the *Contingent reward* condition compared to the *No reward* condition. An independent samples t test showed no difference in precall between the two conditions, (respective means: 5.68 vs. 5.87), $t(97)=0.562$, $p=0.575$, 95% CI (-0.499, 0.894), $d=0.11$.

Exploratory analysis of possible associations between *Precall* performance and participant belief (using RPBS; Tobacyk, 2004) in paranormal phenomena were conducted, see Table 2. These correlations showed a positive, though not consistent, relationship between precall scores and witchcraft, spiritualism and belief in extraordinary life forms. Interestingly, there was no relationship between precall scores and belief in precognition.

Table 2. Showing correlation coefficients (with significance values) between total precall score and the seven sub-scales of the RPBS

	correlation	significance
Traditional Religious Belief	.060	.55
Psi	.186	.06
Witchcraft	.214	.03*
Superstition	.056	.58
Spiritualism	.205	.04*
Extraordinary Life Form	.229	.02*
Precognition	.127	.21

*Sig at 0.05

Discussion

Data show a clear anomalous effect with participants recalling more of the images that *will be* repeated in the future. However, offering a contingent cash reward of £10 did not influence precall scores. Finally, there was some evidence of a positive relationship between belief in the paranormal and precall performance.