Experimenter effects in parapsychology: Replication and Mechanism

Results:

Using the same participant pool and experimental procedures, the study investigated experimenter differences in results when measuring participants' paranormal belief, cognitive ability, and psi performance. Hypothesis 1: RW's participants would have a different pattern of correlation between paranormal belief and performance on the cognitive tasks, than CW's participants. Hypothesis 2: RW's participants would score differently on the psi task compared to CW's participants. Each experimenter tested 30 participants. Overall, a significant negative correlation was found between paranormal belief and syllogisms performance: r = -.28, p = .03, 2-t. This correlation was attributable to just one of the experimenters: CW r = -.45, p = .01, 2-t; RW r = -.08, n.s. The difference (calculated using Fisher Z transformation) is statistically significant (p = .03, 2-t).

This suggests an experimenter effect for the correlation between paranormal belief and performance on the syllogisms task, and therefore confirms Hypothesis 1. Further analyses suggested that the negative belief-syllogisms correlation is due to psi-believers shifting their performance on the syllogisms task: CW's psi-believers had significantly lower syllogisms scores than RW's psi-believers (t = 2.16, p = .04, 2-t). A similar, marginally significant, pattern was found for the Matrices task. For the psi task, CW's participants had a mean target rank of 3.0 (SD = 1.5), compared to a mean of 2.7 (SD = 1.6) for RW's participants. This difference was not statistically significant on a Mann-Whitney test (Z = -.90, p = .37, 2-t). Therefore there was no indication of an experimenter difference on ESP results and no support for Hypothesis 2.

Published Work:

Wiseman, R. & Watt, C. (2002). "Experimenter differences in cognitive correlates of paranormal belief and psi". Journal of Parapsychology, 66(4), 371-385.

Watt, C., and Wiseman, R. (2002). "Belief in the Paranormal, Cognitive Ability and Extrasensory Perception: The Role of Experimenter Effects". Proceedings of the 45th Annual Convention of the Parapsychological Association. France, 333-345.

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