Coover Telepathy Experiments

One of the earliest large-scale experiments on telepathy was conducted in 1915 by John E Coover, a psychologist at Stanford University. He concluded that the results were wholly negative. However, this finding was later disputed by parapsychologists who examined his data.

Experiments

In 1912 John Edgar Coover, then aged forty, was appointed as Thomas Welton Stanford Psychical Research Fellow, financed by a ,000 endowment to Stanford University by Thomas Welton Stanford, a brother of its founder. He held the post for 25 years, performing experiments on various aspects of psychical research. These included large-scale telepathy experiments, whose findings were published in a 1917 monograph *Experiments in Psychical Research* published by Stanford University Press.<u>1</u>

Coover's method was as follows. Coover and a telepathic agent (sender) sat together in one room with a deck of forty playing cards (a regular deck with face cards removed) and a die, while the percipient (receiver) sat in another room. The deck was shuffled and a card picked. The agent either looked at the card or did not, depending on a roll of the die, and the percipient attempted to discern which card had been picked. Coover designated the experimental condition the one in which the agent looked at the card, and the control condition the one in which they did not.

The subjects were generally university students, though he also did trials with ten individuals who claimed to have psychic ability. Having completed 10,000 trials, Coover calculated that there was no significant difference between the experimental and control scores and concluded that the results did not support the telepathy hypothesis. $\underline{2}$ 'No trace of an objective thought-transference' was found either among the 'normal' subjects or among those claiming psychic abilities. $\underline{3}$

Coover explained his standard of statistical significance as follows: '... if we meet the requirement of a degree of accuracy usual in scientific work by making p = 0.9999779, when absolute certainty is p = 1, then [there is] satisfactory evidence for some cause in addition to chance.'<u>4</u> In current statistical usage this would be expressed as p = 0.0000221.

Criticism

Coover's findings led to a loss of interest in the subject of telepathy in the scientific community for more than a decade. However, his findings were immediately questioned by psychical researchers. In a review for the <u>Society for Psychical</u> <u>Research</u>, philosopher FC Schiller noted that the condition when the agent did not look at a card was not in fact a control condition, as Coover supposed, but a test of clairvoyance (the percipients psychically visualizing the cards directly rather than receiving thought impressions of them from the agents). He also noted that certain

of the percipients in the experimental group scored particularly high, well above chance. As a result, Schiller wrote, Coover was 'hardly entitled to deduce from his data that "no trace of an objective thought-transference is found as a capacity enjoyed in perceptible measure by *any* of the individual normal [percipients]" '.5

Coover's claims came under renewed scrutiny in the 1930s in the wake of positive results in ESP experiments conducted by <u>JB Rhine</u> at Duke University. <u>Robert</u> <u>Thouless</u> argued that the measure of statistical significance adopted by Coover, about 50,000 to one, was 'absurdly' high,<u>6</u> and calculated that by a more conventional standard the scores were in fact significant at the level of 200-1 (p = 0.005).<u>7</u> Rhine pointed out that most of the successes were concentrated among only eight of Coover's one hundred subjects, and that five of these scored equally well in both the telepathy and the clairvoyance trials. He called this 'tremendously significant' and lamented that Coover had not focused his efforts on the high-scorers, in which case he would most probably have reported positive findings.<u>8</u> The critics concluded that the findings provided no justification for his claim that telepathy was absent from his findings, still less that, as he held, they definitively 'proved' its non-existence.

Coover died while writing a response, and this was completed by his successor, John L Kennedy.⁹ They argued that a very high level of significance was justified, telepathy being inherently improbable; that the critics had failed to take into proper account the negative results of the ten psychics; and that any above-chance results could be due to poor experimental methodology, such as recording errors.

This last point was examined by <u>Whately Carington</u>, who asked whether successes might be attributed to 'unwitting leakage of information through normal channels, to faulty experimental methods, or to deliberate malpractice on the part of the students'. He concluded that the internal evidence strongly contraindicated all these possibilities, observing that '[t]he more one went into the figures the more difficult it became to account for them on these lines.'<u>10</u>

Aftermath

Coover's successor John L Kennedy also reported no positive results. However, Charles Stuart, who had been trained by Rhine and was hired by Stanford to replicate Rhine's experiments at Duke University, conducted several studies between 1942 and 1944 that reached statistical significance. These were ignored in a 1962 status report on psychical research at Stanford by the Stanford News Service's science editor Robert Lamar, who falsely stated that no positive indications of telepathy had ever been found by its researchers and that Stuart 'had had to admit failure'.<u>11</u> As parapsychologists have lamented, the university authorities subsequently diverted the funding for the psychical research fellowship to conventional psychology, probably contravening the legal terms of the bequest.<u>12</u>

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Endnotes

Footnotes

- <u>1.</u> Coover (1917).
- <u>2.</u> Irwin & Watt (2007), 61-62.
- <u>3.</u> Coover (1917), 124, cited in Thouless (1935), 27.
- <u>4.</u> Coover (1917), 83, cited in Utts (2000), 306.
- <u>5.</u> Schiller (1918), 265.
- <u>6.</u> Thouless (1935), 25.
- <u>7.</u> Thouless (1935), 27.
- <u>8.</u> Rhine (1934), 26-27.
- <u>9.</u> Coover & Kennedy (1939).
- <u>10.</u> Carington (1938), 296.
- <u>11.</u> Radin (2000), 358.
- <u>12.</u> Radin (2000), 358.

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