A PRELIMINARY REPORT ON A METHOD OF MEASURING PSI CORRESPONDENCES WITH IBM MACHINES

J. EISENBUD, R. HATFIELD, S. JACOBS, H. KEELEY, AND R. V. RAINEY (U.S.A.)

A method is described for the use of IBM machines in both the performance and the checking of results of a statistical

type of test for psi correspondences.

Target decks were made up of a specified number of cards, each card punched for one digit from 1 to 5 in a particular one of eighty available columns. The digit sequence of the deck was prepared from a random number table. (Subsequent target decks were generated from those initially so prepared by random shuffling done by an IBM collating machine. Tests for randomicity in these decks were done by matching selected segments of the deck against each other in the same machine.) After the target deck had been digit-punched, a machine operation printed the punched digit on the back of each card. The deck was then ready to be "read" by an "agent."

A subject punched his guesses (1 to 5) directly onto a deck in a given column. The average time (when the machines were working without a hitch) for punching 1,000 cards against an agent working with the target deck was 1 hour. At the end of such a run the two decks were fed into the collating machine which automatically sorted out the correspondences (hits) at the rate of 12 minutes per 1,000 matchings. Pre-prepared decks of 100, with a known number of correspondences, were fed into the machine before each run to check for faulty machine functioning. (When the machine is in order, there is apparently no error in the matching pro-

cess, as determined from many tests with "known" decks). The decks were then resorted for further use at the rate of about 8 minutes per 1,000 cards. The monetary costs per time unit is given for all operations.

Comment: The use of this method was studied in view of (1) the anticipated time-saving factor where many matching tests had to be carried out; (2) the possibility of reducing recording and scoring error below that reported in standard statistical tests for psi; (3) the game-playing appeal this method might have for mechanically minded subjects; (4) the possibilities inherent in the fact that the "guessing" is done in motoric fashion. Punching can be done under a number of conditions of relative dissociation.

Results (mainly achieved after the Conference in Utrecht): So much irritating and time-consuming mechanical trouble with the machines was encountered that the experimenters finally agreed unanimously upon the superiority of the "horse and buggy" methods already in use for simple statistical tests of psi.