LABILITY AND PK PERFORMANCE: IDENTIFYING THE OPTIMAL CONDITIONS FOR PK-RNG EFFECTS IN THE LABORATORY USING AN I CHING TASK

Chris A. Roe & Sophie L. Drennan

CSAPP, The University of Northampton

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Objectives: We proposed to build on the success of the Northampton approach to PK research that attempts to generate tasks that are engaging for participants and which have some personal meaning for them. This work has produced effect sizes described as ‘remarkably strong’. That work would be extended here to address the following identified needs: a need to better articulate the construct of lability as an individual difference measure; to confirm previously reported interaction effects between sender and target system lability using an alternative PK testing paradigm so as to help rule out explanations in terms of methodological artifact; include measures of paranormal belief/confidence, anxiety and arousal; to explore the effects of experimenter-participant interaction and general laboratory ambience.

Methods: Study 1 utilised a new PK testing program involving an I Ching divination task. Different sources of randomness (RNG, RND function in BASIC, and random numbers from published tables) were sampled to produce 3 hexagrams. Participants rated the applicability of all I Ching outcomes in advance using a Q-sort method. Study 2 was an on-line survey intended to produce a psychometrically robust measure of lability and to explore whether the construct was associated with spontaneous experience of PK phenomena. Study 3 used the refined Lability Scale from Study 2 in a further I Ching experiment, and also looked at the effects of stress and physiological arousal on performance. Study 4 retained was another I Ching RNG-PK experiment but focused on the impact upon task success of the interaction between participants and the researcher. Study 5 investigated the use of effort on the production of PK performance using a ‘practice’ and a ‘test’ I Ching trial. In the latter participants were encouraged to strive for a desired prediction along the lines suggested by Rubin and Honorton (1971).

Results: The general pattern of performance in Study 1 was in line with prediction, with highest ratings awarded to hexagrams selected by the most labile randomness source, and lowest for the most stabile source, the mean shifts were small and nonsignificant. A similar pattern was found for participant lability, and for the overall interaction. Study 2 produced a Lability Scale consisting of 71 items with acceptable overall internal reliability that incorporated five factors. Three of the factors, Intuitive Cognition, Ego-orientated Cognition and Emotional Interpretation, predicted paranormal belief and psychokinetic experience scores. Study 3 also failed to replicate earlier interaction effects between participant and target system lability. Relationships
between arousal measures and PK performance were inconsistent, but there were significant correlations between heart rate and low lability target system performance and between PSS and high lability performance. Study 4 also failed to find any lability interaction effect, and there were no differences found between the 'friendly' and 'formal' experimental conditions. Participant ratings of the quality of interaction were not associated with PK scores; experimenter assessments produced larger but still nonsignificant effect sizes. Study 5 did produce a significant interaction between individual lability levels and RNG lability levels ($F_{2,94} = 3.84, p < 0.05$). Performance in ‘test’ condition was significantly better than in the ‘practice’ condition for low and intermediate lability target systems, but not for high lability.

**Conclusions:** Only the final experiment gave rise to the proposed interaction effect, with the other three experiments giving outcomes that were very close to chance expectation. Internal effects offer somewhat more encouragement, with performance related to participant striving and suggestively to researcher ratings of experimenter-participant interaction. It would be interesting to see how other researchers might fare if attempting replications and the software and materials will be made freely available to interested parties.

**Publications:**

**Journal papers**

None as yet

**Peer reviewed conference proceedings**


**Other Conference presentations**


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