

APPENDIX 2:

**LABILITY, PARANORMAL BELIEFS AND
PSYCHOKINETIC EXPERIENCES: DEVELOPMENT OF A
LABILITY SCALE USING AN ONLINE SURVEY-BASED
STUDY**

Sophie L. Drennan, Chris A. Roe & Richard S. Broughton
*Centre for the Study of Anomalous Psychological Processes (CSAPP),
University of Northampton
Northampton, UK*

ABSTRACT

In recent years there has been a resurgence of interest in the experimental study of psychokinesis (PK), with particular focus on the new construct of lability, defined by Braud (1980) as “a systems ready capability for change”. Although this description by Braud and that of lability within Stanford’s Conformance Behaviour Model (CBM) (1978) include the construct as being inherent within a whole system, it is still uncertain as to whether this is an accurate portrayal. Indeed within Stanford’s CBM it is posited that psi capabilities would not share the same mechanisms as those involved with sensory and perceptual information processing. With humans comprised of a multitude of differing processes — both psychological and physiological — it begs the question as to whether only certain facets with prominent labile capabilities would create an impact on PK phenomena. Furthermore, if such facets are identified, could an individual be subsequently characterized as being ‘labile’? With micro-PK effects manifested in the laboratory consistently related to macro-PK and poltergeist activity in real-world environs, there have been many assumptions made regarding the role of individual agents.

A popular theory has been that such individuals are reacting unconsciously to a stressful situation as a form of maladaptive coping response (Roll, 1983), thus consequently supporting Braud’s and Stanford’s theories of PK effects being mediated by internal individual lability interacting with other external systems. Indeed, previous PK-RNG studies based on Stanford’s CBM (1978), by Holt and Roe respectively, (Holt & Roe, 2006; Roe & Holt, 2006,) have shown significant PK effects from the interaction between high and low levels of individual and RNG lability. These studies were based on the premise that certain aspects from cognitive, neurological and emotional individual differences were key to exploring lability and therefore, a battery of measures was employed to assess individual lability via an aggregation of scores, highlighting the need to develop a single, comprehensive lability instrument. For this study, taking its cue from previous research (Drennan, Roe, & Broughton, 2011), measures included to assess lability were the Creative Cognition Inventory (Holt, 2007); The Emotional Creativity Inventory (Averill, 1999); Goldberg’s Openness to Experience Scale (Goldberg, 1999); Mood Affect (Akiskal, Maser, Zeller, Endicott, Corvell, & Keller, 1995); and the Personal Philosophy Inventory (Persinger & Makarec, 1987). For use in the online survey two further scales investigating paranormal phenomena were included: the Anomalous Experience Inventory (Gallagher, Kumar, & Pekala, 1994) and the Rhine Psychokinesis Questionnaire (Simmonds-Moore, Rhine Feather, & Gadd, 2010). Following activation of the online survey for 8 weeks, data from a sample size of 192 respondents were eventually used for conducting analyses.

Factor analyzing the five individual difference measures produced a new Lability Scale consisting of 71 items (including 4 reversed scored items) with strong overall reliability ($\alpha = .86$). Five factors were retained accounting for approximately 35% of the cumulative variance:

- Factor 1 Intuitive Cognition ($\alpha = .92$)
- Factor 2 Conceptual Cognition ($\alpha = .60$)
- Factor 3 Ego-Orientated Cognition ($\alpha = .78$)
- Factor 4 Emotional Interpretation ($\alpha = .71$)
- Factor 5 Analytical Cognition ($\alpha = .85$)

Concurrent validity was produced between the Lability Scale and the five individual difference measures involved in the study, where all but Goldberg's Openness to Experience Scale (Goldberg, 1999) showed strong positive correlations. Subsequently, the relationships between individual lability and paranormal belief and psychokinetic experiences were explored. Significant negative correlations were shown between lability and both paranormal belief ($r = -.56$) and psychokinetic experience ($r = -.51$). Furthermore, significant negative correlations were also shown between both paranormal belief and psychokinetic experience scores and Intuitive Cognition, Ego-orientated Cognition and Emotional Interpretation factors. There were no significant relationships found between paranormal belief and psychokinetic experiences and either Conceptual Cognition or Analytical Cognition.

Performing one way analyses of variance found significant differences between the means of paranormal belief ($F_{2, 160.47} = 44.45, p < 0.01$) psychokinetic experiences ($F_{2, 160.47} = 32.74, p < 0.01$) and levels of lability (low, moderate, high), mirroring the results found in previous experimental PK-RNG studies. These findings have implications for the next stages of research which consists of a series of three experimental PK-RNG studies employing the new Lability Scale, which is hoped will replicate the lability interaction witnessed previously and further confirm construct validity of the new measure. In addition, it is expected that with further usage there will be subsequent refinement of the Lability Scale and factor structure. As it stands, Factor 5 Analytical Cognition, which although has a strong Cronbach's alpha of .85, consists of only 5 items and is on the cusp of being a 'bloated specific', therefore providing a case for subsequent exclusion. However, at this time, it does appear likely that lability will remain multi-dimensional, thus reflecting the fact that it incorporates various facets of individual processes and allow scope for future research to explore whether there are dominant labile processes which may have a greater impact specifically on PK effects. Furthermore, it is interesting to note that significant results are being shown in relation to individuals with low levels of lability corresponding with high levels of both paranormal belief and psychokinetic experiences, suggesting that instances of macro-PK and poltergeist activity phenomena may indeed be more likely mediated by blunted or maladaptive individual responses. Finally, with this in mind, it is hoped that by gaining a better understanding of individual lability throughout the ongoing research will provide a key feature for constructing a predictive statistical model for PK effects both within the laboratory and within real-world situations.

[sophie.drennan@northampton.ac.uk]

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ABSTRACT

Within parapsychology, there is an inference that poltergeist activity may be directly related to psychokinetic (PK) effects unconsciously generated by an individual agent. As stated by Roll:

“The phenomena are usually associated with a living person: in fact, it seems to have become part of the meaning of poltergeist that there be such a connection. This suggests that the events may be cases of psychokinesis (PK) produced by that person...” (Roll, 1977, p. 382 - 383)

However, due to the spontaneous nature of such activity within real-world environs, investigating such a relationship has been problematic. Therefore, foundational investigators such as Rhine (1944) attempted to manipulate PK effects within a controlled environment, albeit with debatable findings and the identification of yet more extraneous variables. Gradually, the investigation of PK either empirically in the laboratory using random number generators (RNGs) or observing persons with alleged abilities became less popular. And yet, rather than abandon this rich seam of research, in recent years there has been a resurgence of interest in the experimental study of psychokinesis (PK), with particular focus on psi-conducive variables and the role of individual differences. In particular, attention has become focused on the new construct of lability, defined by Braud as:

“...the ease with which a system can change from one state to another...” (1980, p. 1)

Such a concept would be directly inverse to a state of stability or inertia. Previous PK-RNG studies by Holt and Roe respectively (Holt & Roe, 2006; Roe & Holt, 2006) have taken their cue from Stanford's Conformance Behaviour Model (1978), whereby systems with weaker levels of lability are able to adapt to a system with stronger levels and found significant PK effects from this interaction between differing levels of individual and RNG lability. However, at that time, a battery of measures was employed in the methodology to assess individual lability, thus highlighting the need to develop a single, comprehensive lability instrument. Therefore, the dual purpose of the presented study was to construct a new psychometric tool with which to assess lability and then consequently, explore the relationships between lability and both paranormal belief and psychokinetic experiences. Existing measures included to assess lability were the Creative Cognition Inventory (Holt N. , 2007); The Emotional Creativity Inventory (Averill, 1999); Goldberg's Openness to Experience Scale (Goldberg, 1999); Mood Affect (Akiskal, Maser, Zeller, Endicott, Corvell, & Keller, 1995); and the Personal Philosophy Inventory (Persinger & Makarec, 1987). Two further scales to investigate paranormal phenomena were included – the Anomalous Experience Inventory (Gallagher, Kumar, & Pekala, 1994) and the Rhine Psychokinesis Questionnaire (Simmonds-Moore, Rhine Feather, & Gadd, 2010). Following activation of the online survey for 8 weeks, data from a sample size of 192 respondents were eventually used for conducting analyses.

Factor analyzing the five individual difference measures produced a new Lability Scale consisting of 71 items (including 4 reversed scored items) with strong overall reliability ($\alpha = .86$). Five factors were retained accounting for approximately 35% of the cumulative variance:

Lability and PK Performance

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Concurrent convergent validity was assessed using correlational analysis between the Lability Scale and the five individual difference measures involved in the study, where all but Goldberg's Openness to Experience Scale (Goldberg, 1999) showed strong positive correlations. Subsequently, the relationships between individual lability and paranormal belief and psychokinetic experiences were explored. Significant negative correlations were shown between lability and both paranormal belief ($r = -.56$) and psychokinetic experience ($r = -.51$). Furthermore, significant negative correlations were also shown between both paranormal belief and psychokinetic experience scores and Intuitive Cognition, Ego-orientated Cognition and Emotional Interpretation factors. There were no significant relationships found between paranormal belief and psychokinetic experiences and either Conceptual Cognition or Analytical Cognition.

Performing one way analyses of variance found significant differences between levels of lability (low, moderate, high) and paranormal belief ($F_{2, 160.47} = 44.45, p < 0.01$); and psychokinetic experiences ($F_{2, 160.47} = 32.74, p < 0.01$) - mirroring results found in previous experimental PK-RNG studies. Furthermore, using psychokinetic experiences as a dependent variable a 2-way analysis of variance found that there was a significant interaction between gender, age group (low, moderate, high) and levels of lability ($F_{4, 174} = 2.49, p < 0.05, \omega^2 = .05$). These findings have implications for better understanding the role of individual differences in PK and/or poltergeist manifestations, by highlighting the probability that it is individuals with lower levels of lability and age groups that are more likely to experience PK effects in particular. The next stages of research will consist of a series of three experimental PK-RNG studies investigating physiological arousal; participant/experimenter interaction; feedback/sender strategies. The studies will employ the Lability Scale within the standardized methodology in order to determine construct validity. It is hoped that on completion of the ongoing research that a statistical model can be built relating to the possibly predictive variables for PK effects.

[sophie.drennan@northampton.ac.uk]

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