## ESP IN YOUNG CHILDREN: A Critique of the Spinelli Evidence

The idea that young children make especially good ESP subjects has long been attractive and has been tested in a variety of studies (see Blackmore 1980 for a review). Some of these produced encouraging results but few used adult controls or systematically compared scoring rates for different age groups. Dr Spinelli (1983) has recently reported the results of an extensive, and apparently very successful, series of ESP experiments doing just this. Testing subjects aged between 3 and 70 years, he found that the youngest scored highest.

His research has been described in detail in his thesis (Spinelli 1978), but this is not readily accessible to most people. The recent paper outlines his theory of

were tested in separate rooms or experimental booths while others were in the same room (usually separated by a screen). In only the first and third studies is this made explicit and it is stated which groups were tested under which conditions. In all others it is not said which arrangement was used. This makes it difficult to assess the adequacy of the precautions taken against sensory leakage in each study. Again, specific predictions might be confirmed by artificial results. For example the use of sensory cues might conceivably be hindered by having to perform complex additional tasks and aided (for visual cues at least) by relaxing music. In addition, where sender choice is used and children are in the same room, any tendency for them to choose the same picture in the same context will be amplified. It is therefore especially important to have information on the conditions used in each study. More generally, information on precautions against sensory leakage should be supplied in reports of ESP experiments.

Because of these and other problems Spinelli carried out two further attempted replications, reported in an appendix to his thesis, and not mentioned in the Parapsychology Review article. The stated objectives were to control for (a) the possibility of cheating (by subjects, assistants or experimenter) and (b) to rule out the possibility that the experimenter's presence was necessary for the highly significant results. The experiments were recorded (at least in part) on video tape and took place in the presence of observers (trained psychologists). I

was also an observer at one of the sessions.

In the first study 12 pairs of subjects aged 4 years were tested during two morning sessions. The results were highly significant (p < .001). Signed statements were obtained from the technician and assistants present, to the effect that no trickery was observed. However, it is not stated in the thesis either whether subjects were in separate rooms, or how the targets were selected.

In the second study 10 pairs of subjects, aged 4–5, were tested during two sessions about three weeks apart. Overall the results were significant but only at the level of p < .05—'less remarkable than those obtained in the first replication' (Spinelli 1978). It was stated that target orders were prepared independently by a secretary in the psychology department. However, it is my recollection that during the first half of this study Spinelli himself carried out the randomisation and I subsequently suggested that in order to rule out any effect of the experimenter, someone else ought really to do it. Only after this, that is for the second half, was the target selection carried out independently. The results of this last session were the least dramatic of all. I do not know whether they were independently significant, or even above chance, but in view of the marginal significance of the whole it is probable that they were not. In view of these disappointing results Spinelli discusses the possible effect of the hot day and the noise of road works outside, in reducing scoring on this final occasion.

On 23 August 1979 I wrote to Spinelli to ask him whether he could supply me with the data for the two sessions separately and provide information on how the randomisation was done for each session. He did not reply and so I cannot assess the importance of the various factors in accounting for the diminishing results under these conditions. Clearly they could be due to the adverse effects of video cameras, unfamiliar observers, the weather and so on but without further

information we cannot be sure.

If the results of all these experiments are to be taken as confirming Spinelli's

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theory of paranormal cognition I believe we must be quite clear about which artifacts were possible in each experiment and which results can be taken as free of artifacts. Certainly the experiments without flaws did produce exciting results and are a useful contribution to the evidence on ESP in young children. But I suggest that Spinelli has exaggerated the overall support for his theory of paranormal cognition.

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A reply by Dr Ernesto Spinelli will appear in our October Issue-Editor.