

Terms and Methods in Parapsychological Research

PARAPSYCHOLOGICAL ASSOCIATION

The Parapsychological Association, founded in 1957 and an affiliate of the American Association for the Advancement of Science since 1969, consists of approximately 300 members in some 30 different countries. They include anthropologists, biologists, chemists, educators, engineers, librarians, philosophers, physicists, psychiatrists, psychologists, sociologists, and members of some other professions. Parapsychological Association membership spans a continuum of interpretations of the phenomena in question, but all members take a serious interest in their investigation.

Reports of *psi phenomena* concern organism-environment interactions (including those between organisms) in which it appears that information or influence has occurred which cannot be explained through our current understanding of sensorimotor channels. In other words, these reports are *anomalous* because they appear to stand outside of science's traditional concepts of time, space, and force. Psychology is the scientific study of behavior and experience; *parapsychology* studies apparent anomalies of behavior and experience which exist apart from currently known explanatory mechanisms which account for organism-environment and organism-organism information and influence flow.

When an event is classified as a psi phenomenon, it is claimed that all known channels for the apparent interaction have been eliminated. Thus it is clear that labeling an event as a psi phenomenon does not constitute an explanation for that event, but only indicates an event for which a scientific explanation needs to be sought. Phenomena occurring under these conditions are said to have occurred under *psi-task conditions*. Labels such as "extrasensory perception" (ESP) and "psychokinesis" (PK) refer to the apparent direction of information or influence. ESP refers to situations in which, under psi-task conditions, an organism behaves as if it has information about the physical environment (as in "clairvoyance"), another organism's mental processes (as in "telepathy"), or a future event (as in "precognition"). PK refers to situations in which, under psi-task conditions, an organism's physical environment changes in a way that appears to be related to the organism's mental or physiological processes (Morris, 1982; Palmer, 1982).

Many parapsychologists dislike such terms as "ESP" and "clairvoyance" because they do not constitute an explanation and carry implicit theoretical loadings which may not be justified. A commitment to the study of psi phenomena does not require assuming the reality of "non-ordinary" factors or processes. Regardless of what form the final explanation may take, however, the study of these phenomena is likely to expand our understanding of the processes often referred to as "consciousness" and "mind" and of the nature of disciplined inquiry (e.g., the effect of the investigator upon the phenomenon being investigated).

It was this search for understanding, coupled with a commitment to rigorous standards of investigation, that resulted in the founding of the Society for Psychical Research (in England, 1882), the American Society for Psychical Research (in 1885), and a number of similar organizations throughout the world. Many members of the Parapsychological Association hold concurrent membership in these psychical research societies, which are open to interested people in general. The Parapsychological Association, however, is a professional organization that has developed membership standards and has appointed an ethics committee and a public information officer. Several affiliated, but independent, refereed journals serve as outlets for some of the research reports of its members.

RESEARCH APPROACHES

Survey research involves contacting random or representative samples of people and asking them whether they believe they have had various kinds of psi experiences, or collecting detailed descriptions of reported psi experiences. The analysis of survey data involves examining the relative frequencies with which various types of experiences are reported and the relationships between the experiential reports and other characteristics of the respondents. Given the difficulties involved in attempting to determine whether a reported experience actually

involved psi phenomena, survey results are most often used simply to suggest patterns or relationships that can be studied by field and laboratory research methods. For a history and review of survey research methods, see L. E. Rhine's (1977) chapter in the *Handbook of Parapsychology*.

Field research involves the detailed study of individual situations in which there are spontaneous events. A project may consist of the systematic study of conditions associated with recurring events, as in "poltergeist" (or "recurrent spontaneous PK") investigations, or detailed examination of conditions associated with a single event, as in the investigation of individual "precognitive" dreams. A primary goal in field research is the attempt to determine whether or not psi-task conditions are involved by examining possible conventional mechanism explanations for the event's presence and plausibility. Field and laboratory research often overlap; when possible, the researchers manipulate suspected conventional mechanisms to see whether the event is thereby affected (e.g., Giesler, 1984, 1985).

Laboratory research involves deliberately produced psi-task conditions, that is, occasions when there has been an effort to rule out conventional mechanisms of person-environment interactions. For example, sensory cues to the nature of target items in ESP tests can be eliminated by physically separating subjects from the target material and by ensuring that experimenters do not know the identity of the target. Conscious or unconscious interference can be eliminated by using statistically random sequences of target events. Laboratory PK tests use target systems whose "normal" behavior is well known and understood. In addition, they separate the subject from the target systems to eliminate physical contact. Discussions of problems in laboratory research and approaches to establishing laboratory psi-task conditions can be found in the chapters by Morris (1978, 1982) and Rush (1977, 1982) in Volumes 1, 2, and 3 of *Advances in Parapsychological Research*. Laboratory and field research can be oriented toward demonstration of the existence of psi or toward questions about the processes of psi phenomena.

Demonstration research involves comparing observed events with what would be ordinarily expected in a single carefully defined situation. In this type of research, statistically unlikely outcomes under psi conditions indicate that events have occurred that do not appear to be explicable by known mechanisms and are unlikely to be coincidence, but do not give information about how or why the events occurred.

Process research involves studying factors related to the outcomes of psi tests in either a field or laboratory setting. This may mean examining correlations between the outcomes and variations in psychological or physical factors. Or it may involve creating differences in psychological or physical conditions and comparing outcomes under the different conditions. Depending on the variables measured or manipulated, process research can be used to evaluate hypotheses about processes that may be fundamental to the occurrence of psi phenomena or about processes that may affect the strength or accuracy of the phenomena but are not fundamental to their occurrence. An example of the former type of research would be a study designed to see whether random physical processes are more sensitive to PK effects than are deterministic processes. An example of the latter would be a study asking whether people's psychological characteristics interact with the performance in different types of testing situations.

Criticisms of parapsychology often take the position that the extrachance scores obtained by parapsychologists are due to flawed experimental procedures in the positive studies or to the failure to report negative or nonsignificant findings. The former criticism has been responded to by detailed analyses (e.g., Pratt, Rhine, Smith, Stuart, & Greenwood, 1940) and debates (e.g., Honorton, 1985; Hyman, 1985). The latter criticism does not appear to be valid; a successful attempt to locate unpublished ESP studies found almost as many with extrachance results as with chance results (Blackmore, 1980). Furthermore, this is not only a problem in parapsychology; researchers in the social and behavioral sciences in general are concerned with the frequency with which investigators fail to publish negative or nonsignificant results. The Parapsychological Association in 1975 instituted a policy against the selected publication of only positive experiments.

Defects in experimental procedures have been observed by parapsychologists themselves (e.g., Akers, 1984; Stanford & Palmer, 1972), and members of the Parapsychological Association are devoted to improving the quality of their research. At the same time, Parapsychological Association members have often been in the forefront of exposing fraudulent and irresponsible practitioners who use the title "parapsychologist" without the knowledge of, or the commitment to, rigorous scientific standards.

Implications of parapsychological data must be cautiously considered. Although the data do not establish

processes that underlie psi phenomena, their apparently systematic relationships with psychological variables such as testing conditions and subjects' beliefs and personalities do suggest that some internally consistent processes are at work. At the same time, it is clear that very little is currently known about the operations and limitations of psi phenomena. For this reason, claims of practical applications of psi should be treated with extreme caution. Such considerations are especially important when claims are made for medical uses of psi. When the health of a human being is at stake, it is usually better to err on the side of skepticism than on the side of credulity. The Parapsychological Association takes the position that none of the accumulated data justify discouraging a person from seeking competent medical care for an illness. Skepticism also needs to be exercised in regard to commercial claims that psi ability can be trained or used for making personal decisions.

Parapsychology has a century-old tradition of bringing scientific imagination and rigor to the study of phenomena typically ignored by other investigators. Whatever the eventual outcome of this search may be, it cannot help but add to the sum of knowledge about humanity and the human condition.

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