Parapsychology

EXTRASENSORY PERCEPTION—DO YOU BELIEVE IN MAGIC?

Uri Geller, a self-proclaimed “psychic,” once agreed to demonstrate his claimed paranormal abilities. During testing, it seemed that Geller could sense which of 10 film canisters contained a hidden object, correctly guess the number that would come up on a die shaken in a closed box, and reproduce drawings sealed in envelopes.

Was Geller cheating, or was he using some ability beyond normal perception? There is little doubt that Geller was cheating (Randi, 1980). But how? The answer lies in a discussion of extrsensory perception (ESP)—the purported ability to perceive events in ways that cannot be explained by known sensory capacities.

Parapsychology is the study of ESP and other psi phenomena (events that seem to defy accepted scientific laws). (Psi is pronounced like “sigh.”) Parapsychologists seek answers to the questions raised by three basic forms that ESP could take:

1. **Clairvoyance.** The purported ability to perceive events or gain information in ways that appear unaffected by distance or normal physical barriers.
2. **Telepathy.** Extrasensory perception of another person’s thoughts, or more simply, the purported ability to read someone else’s mind.
3. **Precognition.** The purported ability to perceive or accurately predict future events. Precognition may take the form of prophetic dreams that foretell the future.

Another purported psi ability cannot be classed as a type of ESP, but is frequently studied by parapsychologists:

4. **Psychokinesis.** The purported ability to exert influence over inanimate objects by willpower (“mind over matter”).

An Appraisal of ESP

Psychologists as a group are highly skeptical about psi abilities. If you’ve ever had an apparent clairvoyant or telepathic experience, you might be convinced that ESP exists. However, the difficulty of excluding coincidence makes such experiences less conclusive than they might seem. Consider a typical “psychic” experience: During the middle of the night, a woman away for a weekend visit suddenly had a strong impulse to return home. When she arrived she found the house on fire with her husband asleep inside (Rhine, 1953). An experience like this is striking, but it does not confirm the reality of ESP. If, by coincidence, a hunch turns out to be correct, it may be reinterpreted as precognition or clairvoyance (Marks & Kammann, 1979). If it is not confirmed, it will simply be forgotten. Most people don’t realize it, but such coincidences occur quite often.

Formal investigation of psi events owes much to the late J. B. Rhine, who tried to study ESP objectively. Many of Rhine’s experiments made use of the Zener cards (a deck of 25 cards, each bearing one of five symbols) (see +Figure 1). In a typical clairvoyance test, people tried to guess the symbols on the cards as they were turned up from a shuffled deck. Pure guessing in this test will produce an average score of five “hits” out of 25 cards.

Fraud and Skepticism

Unfortunately, some of Rhine’s most dramatic early experiments used badly printed Zener cards that allowed the symbols to show faintly on the back. It is also very easy to cheat by marking cards with a fingernail or by noting marks on the cards caused by normal use. Even if this were not the case, there is evidence that early experimenters sometimes unconsciously
gave people cues about cards with their eyes, facial gestures, or lip movements. In short, none of the early studies in parapsychology were done in a way that eliminated the possibility of fraud or “leakage” of helpful information (Alcock, 1990).

Modern parapsychologists are now well aware of the need for double-blind experiments, security and accuracy in record keeping, meticulous control, and repeatability of experiments (Milton & Wiseman, 1997). In the last 10 years, hundreds of experiments have been reported in parapsychological journals. Many of them seem to support the existence of psi abilities.

*Then why do most psychologists remain skeptical about psi abilities?* For one thing, fraud continues to plague the field. It is remarkable, for instance, that many parapsychologists chose to ignore a famous “psychic’s” habit of peeking at ESP cards during testing (Cox, 1994). As one critic put it, positive ESP results usually mean “Error Some Place” (Marks, 1990). The more closely psi experiments are examined, the more likely it is that claimed successes will evaporate (Alcock, 1990; Hyman, 1996b; for a contrary view, see Bem & Honorton, 1994, or Utts, 1996).

The need for skepticism is especially great anytime there’s money to be made from purported psychic abilities. For example, the owners of the “Miss Cleo” TV-psychic operation were convicted of felony fraud in 2002. “Miss Cleo,” supposedly a Jamaican-accented psychic, was really just an actress from Los Angeles. People who paid $4.99 a minute for a “reading” from “Miss Cleo” actually reached one of several hundred operators. These people were hired through ads that read “No experience necessary.” Despite being entirely faked, the “Miss Cleo” scam brought in more than $1 billion before it was shut down.

**Statistics and Chance**

Inconsistency is a major problem in psi research. For every study with positive results, there are others that fail (Hansel, 1980; Hyman, 1996b). It is rare—in fact, almost unheard of—for a person to maintain psi ability over any sustained period of time (Jahn, 1982). ESP researchers believe this “decline effect” shows that parapsychological skills are very fragile. But critics argue that a person who only temporarily scores above chance has just received credit for a *run of luck* (a statistically unusual outcome that could occur by chance alone). When the run is over, it is not fair to assume that ESP is temporarily gone. We must count all attempts.

To understand the run-of-luck criticism, imagine that you flip a coin 100 times and record the results. You then flip another coin 100 times, again recording the results. The two lists are compared. For any 10 pairs of flips, we would expect heads or tails to match five times. Let’s say that you go through the list and find a set of 10 pairs where 9 out of 10 matched. This is far above chance expectation. But does it mean that the first coin “knew” what was going to come up on the second coin? The idea is obviously silly.

Now, what if a person guesses 100 times what will come up on a coin. Again, we might find a set of 10 guesses that matches the results of flipping the coin. Does this mean that the person, for a time, had precognition—then lost it? Parapsychologists tend to believe the answer is yes. Skeptics assume that nothing more than random matching occurred, as in the two-coin example.

**Inconclusive Research**

Unfortunately, many of the most spectacular findings in parapsychology simply cannot be *replicated* (reproduced or repeated) (Hyman, 1996a). Even the same researchers using the same experimental subjects typically can’t get similar results every time (Schick & Vaughn, 1995). More importantly, improved research methods usually result in fewer positive results (Hyman, 1996b).

Reinterpretation is also a problem in psi experiments. For example, ex-astronaut Edgar Mitchell claimed he did a successful telepathy experiment from space. Yet news accounts never mentioned that on some trials Mitchell’s “receivers” scored above chance, while on others they scored below chance. The second outcome, Mitchell decided, was also a “success” because it represented intentional “psi missing.” But, as skeptics have noted, if both high scores and low scores count as successes, how can you lose?

Of course, in many ESP tests the outcome is beyond debate. A good example is provided by recent ESP experiments done through newspapers, radio, and television. In these mass media studies, people attempted to identify ESP targets from a distance. Such studies allow large numbers of people to be tested. The results of over 1.5 million ESP trials recently done through the mass media are easy to summarize: There was no significant ESP effect (Milton & Wiseman, 1999). Zero. Zip. Nada. Clearly, lottery organizers have nothing to fear!
Stage ESP

If psychic phenomena do occur, they certainly can’t be controlled well enough to be used by entertainers. **Stage ESP** simulates ESP for the purpose of entertainment. Like stage magic, it is based on sleight of hand, deception, and patented gadgets. (See ✦Figure 2.). A case in point is Uri Geller, a former nightclub magician who “astounded” audiences—and some scientists—with apparent telepathy, psychokinesis, and precognition.

It’s now clear that tests of Geller’s performance were incredibly sloppy. For instance, Geller reproduced sealed drawings in a room next to the one where the drawings were made. Original reports failed to mention that there was a hole in the wall between the rooms, through which Geller could have heard descriptions of the pictures as they were being drawn. Likewise, in the “die in the box” tests Geller was allowed to hold the box, shake it, and have the honour of opening it (Randi, 1980; Wilhelm, 1976).

![Figure 2](image1.png)

Why weren’t such details reported? Sensational and uncritical reporting of apparent paranormal events is widespread. Hundreds of books, articles, and television programs are produced each year by people who are getting rich by promoting unsupported claims. If a person did have psychic powers, he or she would not have to make a living by entertaining others. A quick trip to a casino would allow the person to retire for life.

**Implications**

After 130 years of investigation, it is still impossible to say conclusively whether psi events occur. As we have seen, a close look at psi experiments often reveals serious problems of evidence, procedure, and scientific rigour (Alcock, 1990; Hyman, 1996b; Marks & Kammann, 1979; Swets et al., 1988). It is also interesting to note that a survey of leading parapsychologists and skeptics found that almost all in both camps said their belief in psi had decreased (Blackmore, 1989). Yet being a skeptic does not mean a person is against something. It means that you are unconvinced. The purpose of this discussion, then, has been to counter the uncritical acceptance of psi events that is rampant in the media.

What would it take to scientifically demonstrate the existence of ESP? Quite simply, a set of instructions that would allow any competent, unbiased observer to produce a psi event under standardized conditions that rule out any possibility of fraud (Schick & Vaughn, 1995). Undoubtedly, some intrepid researchers will continue trying to supply just that. Others think it’s time to abandon the concept of ESP (Marks, 1990; Swets et al., 1988). At the very least, it seems wise to question the uncritical acceptance of psi events that is rampant in the media. (But then, you already knew we were going to say that, didn’t you!)
STUDY BREAK

EXTRASENSORY PERCEPTION

RELATE

Let’s say that a friend of yours is an avid fan of TV shows that feature paranormal themes. See if you can summarize for her or him what is known about ESP. Be sure to include evidence for and against the existence of ESP and some of the thinking errors associated with non-skeptical belief in the paranormal.

LEARNING CHECK

1. Four purported psi events investigated by parapsychologists are clairvoyance, telepathy, precognition, and ________________.

2. The ________________ cards were used by J. B. Rhine in early tests of ESP.

3. Natural, or “real life,” occurrences are regarded as the best evidence for the existence of ESP. T or F?

CRITICAL THINKING

6. What would you estimate is the chance that two people will have the same birthday (day and month, but not year) in a group of 30 people?

7. A “psychic” on television offers to fix broken watches for viewers. Moments later, dozens of viewers call the station to say that their watches miraculously started running again. What have they overlooked?

ANSWERS

1. Four purported psi events investigated by parapsychologists are clairvoyance, telepathy, precognition, and ________________.

2. The ________________ cards were used by J. B. Rhine in early tests of ESP.

3. Natural, or “real life,” occurrences are regarded as the best evidence for the existence of ESP. T or F?

ANSWERS

1. psychokinesis 2. Zener 3. F 4. T 5. F 6. Most people assume that this would be a relatively rare event. Actually, there is a 71 percent chance that two people will share a birthday in a group of 30. Most people probably underestimate the natural rate of occurrence of many seemingly mysterious coincidences (Alcock, 1990).

7. When psychologists handled watches awaiting repair at a store, 57 percent began running again. With no help from a “psychic,” believing the “psychic’s” claim overlooks the impact of big numbers: even a very small leap in the odds of an event occurring may result in a few successes. In one study, 2 percent began running again, with no help from a “psychic.”

REFERENCES


