

The International Library of Psychology

Parapsychology

Richard Wiseman and Caroline Watt

Parapsychology

The International Library of Psychology

Series Editor: David Canter

Titles in the Series

Environmental Psychology David Canter, Terry Hartig and Mirilia Bonnes

Hypnosis Irving Kirsch and Michael Heap

Counseling Psychology Frederick Leong

Parapsychology *Richard Wiseman and Caroline Watt*

History of Psychology Revisited *William Woodward and Sandy Lovie*

Parapsychology

Edited by

Richard Wiseman and Caroline Watt

University of Hertfordshire, England and University of Edinburgh, Scotland



First published 2005 by Ashgate Publishing

Published 2017 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN 711 Third Avenue, New York, NY 10017, USA

Routledge is an imprint of the Taylor & Francis Group, an informa business

Copyright © Richard Wiseman and Caroline Watt 2005. For copyright of individual articles please refer to the Acknowledgements.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Notice:

Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing in Publication Data

Parapsychology. – (International library of psychology)
I. Parapsychology
I. Wiseman, Richard, 1966- II. Watt, Caroline
130

Library of Congress Cataloging-in-Publication Data

Parapsychology / edited by Richard Wiseman and Caroline Watt.
p. cm. — (The international library of psychology)
Includes bibliographical references.
ISBN 0-7546-2450-1 (alk. paper)
1. Parapsychology. I. Wiseman, Richard (Richard John), 1966- II. Watt, Caroline. III.
Series.

BF1031.P3345 2005 133—dc22

2004054816

ISBN 13: 978-0-7546-2450-9 (hbk)

Contents

Acknowledgements	ix
Series Preface	xi
Introduction	xiii

PART I OUTSIDE THE LAB: PARANORMAL BELIEFS AND EXPERIENCES

1	John Palmer (1979), 'A Community Mail Survey of Psychic Experiences',	
	Journal of the American Society for Psychical Research, 73, pp. 221–51.	3
2	Caroline A. Watt (1990–91), 'Psychology and Coincidences', European Journal	
	of Parapsychology, 8 , pp. 66–84.	35
3	Christopher C. French (2003), 'Fantastic Memories: The Relevance of Research	
	into Eyewitness Testimony and False Memories for Reports of Anomalous	
	Experiences', Journal of Consciousness Studies, 10, pp. 153-74.	55
4	Ian Stevenson (1993), 'Birthmarks and Birth Defects Corresponding to Wounds	
	on Deceased Persons', Journal of Scientific Exploration, 7, pp. 403–16.	77
5	Pim van Lommel, Ruud van Wees, Vincent Meyers and Ingrid Elfferich (2001),	
	'Near-Death Experience in Survivors of Cardiac Arrest: A Prospective Study in	
	the Netherlands', <i>Lancet</i> , 358 , pp. 2039–45.	91
6	Richard Wiseman, Caroline Watt, Paul Stevens, Emma Greening and Ciarán	
	O'Keeffe (2003), 'An Investigation into Alleged "Hauntings", British Journal of	
	<i>Psychology</i> , 94 , pp. 195–211.	99
7	Michael Daniels (2002), 'The "Brother Doli" Case: Investigation of Apparent	
	Poltergeist-Type Manifestations in North Wales', Journal of the Society for	
	Psychical Research, 66, pp. 193–221.	117

PART II TESTING PSYCHIC CLAIMANTS

George P. Hansen (1985), 'A Brief Overview of Magic for Parapsychologists',	
Parapsychology Review, 16, pp. 5–8.	149
John Beloff (1986), 'What is your Counter-Explanation? A Plea to Skeptics to	
Think Again', in P. Kurtz (ed.), A Skeptic's Handbook of Parapsychology,	
Buffalo, NY: Prometheus, pp. 359–77.	153
Erlendur Haraldsson and Karlis Osis (1977), 'The Appearance and Disappearance	
of Objects in the Presence of Sri Sathya Sai Baba', Journal of the American	
Society for Psychical Research, 71, pp. 33–43.	173
	 Parapsychology Review, 16, pp. 5–8. John Beloff (1986), 'What is your Counter-Explanation? A Plea to Skeptics to Think Again', in P. Kurtz (ed.), A Skeptic's Handbook of Parapsychology, Buffalo, NY: Prometheus, pp. 359–77. Erlendur Haraldsson and Karlis Osis (1977), 'The Appearance and Disappearance of Objects in the Presence of Sri Sathya Sai Baba', Journal of the American

vi	Parapsychology	
11	Ray Hyman (1981), 'The Psychic Reading', Annals of the New York Academy of	
	<i>Sciences</i> , 364 , pp. 169–81.	185
12	Sybo A. Schouten (1994), 'An Overview of Quantitatively Evaluated Studies with Mediums and Psychics', <i>Journal of the American Society for Psychical</i>	
	Research, 88, pp. 221–54.	199

PART III EXTRASENSORY PERCEPTION

13	Joseph Banks Rhine (1938), 'Experiments Bearing on the Precognition Hypothesis:	
	I. Pre-Shuffling Card Calling', Journal of Parapsychology, 2, pp. 38–54.	235
14	Charles Akers (1984), 'Methodological Criticisms of Parapsychology', in	
	S. Krippner (ed.), Advances in Parapsychological Research, 4, Jefferson, NC:	
	McFarland, pp. 112–64.	253
15	Irvin L. Child (1985), 'Psychology and Anomalous Observations: The Question	
	of ESP in Dreams', American Psychologist, 40, pp. 1219–30.	317
16	Daryl J. Bem and Charles Honorton (1994), 'Does Psi Exist? Replicable Evidence	
	for an Anomalous Process of Information Transfer', <i>Psychological Bulletin</i> , 115,	
	pp. 4–18.	329
17	Julie Milton (1999), 'Should Ganzfeld Research Continue to be Crucial in the	
	Search for a Replicable Psi Effect? Part I. Discussion Paper and Introduction to	
	an Electronic-Mail Discussion', Journal of Parapsychology, 63, pp. 309–33.	345

PART IV PSYCHOKINESIS AND DISTANT MENTAL INFLUENCE

18	8 Michael Faraday (1853), 'Experimental Investigation of Table-Moving', Athenaeum	
	no. 1340, pp. 801–803.	373
19	Helmut Schmidt (1970), 'A PK Test with Electronic Equipment', Journal of	
	Parapsychology, 34, pp. 175–81.	377
20	Dean I. Radin and Roger D. Nelson (1989), 'Evidence for Consciousness-Related	
	Anomalies in Random Physical Systems', Foundations of Physics, 19, 1499–514.	385
21	William Braud, Donna Shafer and Sperry Andrews (1993), 'Further Studies of	
	Autonomic Detection of Remote Staring: Replication, New Control Procedures,	
	and Personality Correlates', Journal of Parapsychology, 57, pp. 391–409.	401
22	Richard Wiseman and Marilyn Schlitz (1997), 'Experimenter Effects and the	
	Remote Detection of Staring', Journal of Parapsychology, 61, pp. 197–207.	421
23	John A. Astin, Elaine Harkness and Edzard Ernst (2000), 'The Efficacy of	
	"Distant Healing": A Systematic Review of Randomized Trials', Annals of	
	Internal Medicine, 132, pp. 903–10.	433
24	James E. Alcock (2003), 'Give the Null Hypothesis a Chance: Reasons to Remain	
	Doubtful about the Existence of Psi', Journal of Consciousness Studies, 10,	
	pp. 29–50.	441

PART V EXPERIMENTERS' PERSONAL PERSPECTIVES

25	Susan Blackmore (1987), 'The Elusive Open Mind: Ten Years of Negative	
	Research in Parapsychology', Skeptical Inquirer, 11, pp. 244–55.	465
26	Marilyn Schlitz (2001), 'Boundless Mind: Coming of Age in Parapsychology',	
	Journal of Parapsychology, 65, pp. 335–50.	477

Name Index

493



Acknowledgements

The editors and publishers wish to thank the following for permission to use copyright material.

American College of Physicians for the essay: John A. Astin, Elaine Harkness and Edzard Ernst (2000), 'The Efficacy of "Distant Healing": A Systematic Review of Randomized Trials', *Annals of Internal Medicine*, **132**, pp. 903–10.

American Psychological Association for the essays: Irvin L. Child (1985), 'Psychology and Anomalous Observations: The Question of ESP in Dreams', *American Psychologist*, **40**, pp. 1219–30; Daryl J. Bem and Charles Honorton (1994), 'Does Psi Exist? Replicable Evidence for an Anomalous Process of Information Transfer', *Psychological Bulletin*, **115**, pp. 4–18.

British Psychological Society for the essay: Richard Wiseman, Caroline Watt, Paul Stevens, Emma Greening and Ciarán O'Keeffe (2003), 'An Investigation into Alleged "Hauntings", *British Journal of Psychology*, **94**, pp. 195–211. Copyright © 2003 British Psychological Society.

Copyright Clearance Center for the essay: Ray Hyman (1981), 'The Psychic Reading', Annals of the New York Academy of Sciences, **364**, pp. 169–81. Copyright © 1981 NYAS.

European Journal of Parapsychology for the essay: Caroline A. Watt (1990–91), 'Psychology and Coincidences', *European Journal of Parapsychology*, **8**, pp. 66–84.

Imprint Academic for the essays: Christopher C. French (2003), 'Fantastic Memories: The Relevance of Research into Eyewitness Testimony and False Memories for Reports of Anomalous Experiences', *Journal of Consciousness Studies*, **10**, pp. 153–74. Copyright © 2003 Imprint Academic, Exeter, UK; James E. Alcock (2003), 'Give the Null Hypothesis a Chance: Reasons to Remain Doubtful about the Existence of Psi', *Journal of Consciousness Studies*, **10**, pp. 29–50. Copyright © 2003 Imprint Academic, Exeter, UK.

Journal of Scientific Exploration for the essay: Ian Stevenson (1993), 'Birthmarks and Birth Defects Corresponding to Wounds on Deceased Persons', *Journal of Scientific Exploration*, 7, pp. 403–16.

Lancet for the essay: Pim van Lommel, Ruud van Wees, Vincent Meyers and Ingrid Elfferich (2001), 'Near-Death Experience in Survivors of Cardiac Arrest: A Prospective Study in the Netherlands', *Lancet*, **358**, pp. 2039–45.

Parapsychology Foundation, Inc. for the essay: George P. Hansen (1985), 'A Brief Overview of Magic for Parapsychologists', *Parapsychology Review*, **16**, pp. 5–8.

Prometheus Books for the essay: John Beloff (1986), 'What is your Counter-Explanation? A Plea to Skeptics to Think Again', in P. Kurtz (ed.), *A Skeptic's Handbook of Parapsychology*, Buffalo, NY: Prometheus, pp. 359–77.

Rhine Research Center for the essays: Joseph Banks Rhine (1938), 'Experiments Bearing on the Precognition Hypothesis: I. Pre-Shuffling Card Calling', *Journal of Parapsychology*, **2**, pp. 38–54; Julie Milton (1999), 'Should Ganzfeld Research Continue to be Crucial in the Search for a Replicable Psi Effect? Part I. Discussion Paper and Introduction to an Electronic-Mail Discussion', *Journal of Parapsychology*, **63**, pp. 309–33; Helmut Schmidt (1970), 'A PK Test with Electronic Equipment', *Journal of Parapsychology*, **34**, pp. 175–81; William Braud, Donna Shafer and Sperry Andrews (1993), 'Further Studies of Autonomic Detection of Remote Staring: Replication, New Control Procedures, and Personality Correlates', *Journal of Parapsychology*, **57**, pp. 391–409; Richard Wiseman and Marilyn Schlitz (1997), 'Experimenter Effects and the Remote Detection of Staring', *Journal of Parapsychology*, **61**, pp. 197–207; Marilyn Schlitz (2001), 'Boundless Mind: Coming of Age in Parapsychology', *Journal of Parapsychology*, **65**, pp. 335–50.

Skeptical Inquirer for the essay: Susan Blackmore (1987), 'The Elusive Open Mind: Ten Years of Negative Research in Parapsychology', *Skeptical Inquirer*, **11**, pp. 244–55. Copyright © 1987 Skeptical Inquirer.

Springer for the essay: Dean I. Radin and Roger D. Nelson (1989), 'Evidence for Consciousness-Related Anomalies in Random Physical Systems', *Foundations of Physics*, **19**, 1499–514. Copyright © 1989 Plenum Publishing Corporation.

Society for Psychical Research for the essay: Michael Daniels (2002), 'The "Brother Doli" Case: Investigation of Apparent Poltergeist-Type Manifestations in North Wales', *Journal of the Society for Psychical Research*, **66**, pp. 193–221.

Every effort has been made to trace all the copyright holders, but if any have been inadvertently overlooked the publishers will be pleased to make the necessary arrangement at the first opportunity.

х

Series Preface

Psychology now touches every corner of our lives. No serious consideration of any newsworthy topic, from eating disorders to crime, from terrorism to new age beliefs, from trauma to happiness, is complete without some examination of what systematic, scientific psychology has to say on these matters. This means that psychology now runs the gamut from neuroscience to sociology, by way of medicine and anthropology, geography and molecular biology, connecting to virtually every area of scientific and professional life. This diversity produces a vibrant and rich discipline in which every area of activity finds outlets across a broad spectrum of publications.

Those who wish to gain an understanding of any area of psychology therefore either have to rely on secondary sources or, if they want to connect with the original contributions that define any domain of the discipline, must hunt through many areas of the library, often under diverse headings.

The volumes in this series obviate those difficulties by bringing together under one set of covers, carefully selected existing publications that are the definitive papers that characterize a specific topic in psychology.

The editors for each volume have been chosen because they are internationally recognized authorities. Therefore the selection of each editor, and the way in which it is organized into discrete sections, is an important statement about the field.

Each volume of the International Library of Psychology thus collects in one place the seminal and definitive journal articles that are creating current understanding of a specific aspect of present-day psychology. As a resource for study and research the volumes ensure that scholars and other professionals can gain ready access to original source material. As a statement of the essence of the topic covered they provide a benchmark for understanding and evaluating that aspect of psychology.

As this International Library emerges over the coming years it will help to specify what the nature of 21st Century psychology is and what its contribution is to the future of humanity.

DAVID CANTER

Series Editor Professor of Psychology University of Liverpool, UK



Introduction

History, Background and Terminology

Many people have experienced seemingly psychic phenomena, such as having a dream that predicts the future, seeing a ghost, or thinking of a long-lost friend and then receiving a telephone call from that person moments later. In addition, some individuals appear to possess psychic abilities, including mediums who claim to communicate with the dead, healers who seem to help cure illness, and psychics who can apparently bend keys and cutlery using just the power of their minds.

Although such allegedly psychic experiences and abilities have been reported throughout history, it is only in the last hundred years or so that researchers have carried out systematic and scientific work into these topics (for historical reviews of the area see Beloff, 1977; Hyman, 1985a). Much of the early work in this area was conducted under the auspices of one of the first organizations dedicated to the scientific study of alleged paranormal phenomena, the Society for Psychical Research (SPR). Founded in 1882 by a group of prominent academics, the majority of the SPR's initial research focused on testing individuals claiming to have strong psychic abilities, including several well-known mediums of the day. Around the turn of the last century, almost all research into alleged paranormal phenomena was conducted by individuals either working alone or on behalf of learned societies like the SPR. However, during the 1930s, Professor Joseph Banks Rhine established a parapsychology laboratory at Duke University (North Carolina, USA), and initiated the first systematic programme of university-based research into alleged psychic abilities. Rhine also pioneered a somewhat different approach to the topic, choosing to work with people who did not claim strong psychic abilities and having participants take part in easily controlled experiments, such as attempting to guess the order of a shuffled deck of cards. Since the 1930s a small number of academics have continued to conduct parapsychological research within universities throughout the world.

Most present-day researchers draw a distinction between two types of ostensible psychic ability. In extrasensory perception (ESP), a person appears to receive some information via a channel of communication not presently understood. Researchers frequently draw a distinction between three types of possible ESP phenomena: clairvoyance, in which the information received was not known to anyone else; telepathy, in which the information was known to another person; and precognition, in which the information relates to a future event. In the second type of ostensible psychic ability, psychokinesis (PK), a person appears to influence an object or their surroundings using unknown means. Researchers tend to refer to two types of alleged PK: Macro-PK, in which the apparent phenomenon is large and directly observable (for example, the levitation of an object) and micro-PK, in which small effects are produced that can only be detected via statistical analyses (for example, causing dice to roll sixes at above chance levels).

Generally speaking, researchers investigate the possible existence of ESP and PK using one of three approaches. The first is the study of various types of anomalous experience reported by

the public. These studies have involved a diverse range of methods, including, for example, attempting to identify the types of people that have such experiences and assessing the reliability of their reports. A second approach has focused on individuals who claim to be psychically gifted. These studies typically employ just one subject (the alleged psychic) and, when successful, appear to produce large and impressive effects. The third and final approach assumes that everybody possesses psychic abilities to a small degree, and usually involves carrying out laboratory-based experiments involving large numbers of individuals, none of whom claim to be especially psychic. The effects obtained in these studies are often relatively small and can only be detected by statistical analysis. All three approaches have yielded interesting and useful data, and the five Parts of this volume reflect the diversity of work undertaken in these three main areas.

In addition to employing different approaches to studying alleged psychic experiences and abilities, researchers also hold a diverse range of theoretical perspectives about such phenomena. At one end of the spectrum, some proponents argue that certain experiential and/or experimental data strongly support the existence of psychic abilities, and may believe that they understand how such abilities are best explained (for example, that they are analogous to normal sensory systems or indicative of spiritual advancement). Other researchers are less convinced by the evidence and, even if they do believe that the data suggest some form of unexplained anomaly, are uncertain about how this anomaly should best be viewed. Finally, towards the other end of the spectrum, sceptics reject the notion that there exists convincing evidence for alleged psychic abilities, and instead argue that such evidence is the result of various types of self-deception, fraud or methodological artefacts. Given these diverse viewpoints, it is perhaps unsurprising that this field has attracted a considerable amount of controversy. The essays in this volume have been chosen to provide readers with a general sense of the methods used in this research, the various viewpoints that have been advanced to account for the findings that have been obtained and the controversies generated by this work.

This Introduction is designed to help set each of the selected essays in context, and also to provide additional references for those wishing to delve deeper into the issues surrounding each of the areas covered.

Outside the Lab: Paranormal Beliefs and Experiences

As noted above, many people claim to have had experiences that they consider to be paranormal. The essays in Part I reflect researchers' attempts to understand the nature of such experiences.

The first essay (Chapter 1) describes an extensive survey, carried out by parapsychologist John Palmer, examining the incidence and correlates of allegedly psychic experiences reported by a random sample of people from North Carolina. The survey revealed that such experiences were common, were correlated with various psychological factors (for example, lucid dreaming) and often had a considerable impact on people's lives. This work also demonstrates the diversity of such experiences, with reported phenomena including alleged telepathy, poltergeist activity, apparitions, past-life memories and out-of-body experiences. Other investigators have since carried out the same type of surveys in many other countries and cultures and have obtained similar results (see, for example, Haraldsson, 1985; Roe, 1998; Schouten, 1981, 1982).

Additional work explores why people experience such unusual and seemingly paranormal phenomena. Researchers have approached this issue from a range of quite different perspectives (see, for example, Cardeña, Lynn and Krippner, 2000; Irwin, 1993; Roberts and Groome, 2001). Some researchers have argued that some anomalous experiences do not reflect the existence of genuine psychic abilities, but may instead be due to people incorrectly assigning paranormal causation to normal events (see, for example, Marks and Kammann, 1980; Shermer, 1997; Zusne and Jones, 1982). Caroline Watt's essay on coincidences (Chapter 2) represents an example of this line of research, exploring how various psychological biases may mislead people into believing that they have experienced a rare and meaningful coincidence. Similarly, Chris French's essay (Chapter 3) reviews a large body of work on the psychology of false memory, arguing that this research could help provide a normal explanation for anomalous experiences involving altered states of consciousness, such as alleged alien abductions, past-life regression and near-death experiences.

In contrast, other investigators have argued that certain anomalous experiences may provide evidence to support the existence of genuine psychic phenomena. The next two essays illustrate this approach. In the first of these, Ian Stevenson (Chapter 4) describes a series of unusual case studies that appear to support claims of reincarnation. Stevenson has gained a considerable reputation for carefully documenting cases (mainly from India and Sri Lanka) in which people allegedly remember details of past lives (see, for example, Stevenson, 1974, 1997; for a critical review of this work see Edwards, 1996) and, in this essay, he argues that certain birthmarks may be indicative of illnesses and accidents suffered by individuals in a previous life. In Chapter 5, Pim van Lommel and his colleagues present the details of a recent study into neardeath experiences (NDEs). People reporting NDEs describe a remarkably similar set of phenomena, including moving through a tunnel of light, blissful feelings, life review and so on (Moody, 1975; Ring, 1980). Some researchers have suggested that these experiences could be the result of various types of hallucination (Blackmore, 1993), whereas others have argued that they may reflect some form of genuine separation between mind and body (for example, Parnia et al., 2001). Van Lommel compares data from those who reported NDEs and those who did not, and argues that existing medical, pharmaceutical and psychological explanations cannot account for these experiences.

The final two essays in Part I reflect two quite different approaches to investigating very different types of alleged paranormal experiences, namely hauntings and poltergeist activity. Parapsychologists have conducted a considerable amount of work at allegedly haunted locations, examining both the reliability of eyewitness reports and whether any environmental factors (for example, air temperature, magnetic field strength and so on) are associated with such reports (see, for example, Houran and Lange, 1998; Maher and Schmeidler, 1975). The essay by Richard Wiseman and his colleagues (Chapter 6) illustrates how these types of method were used to empirically examine two well-known, and allegedly haunted, locations. Research into alleged poltergeist activity has generated a considerable amount of controversy, with some researchers arguing that the phenomena represent genuine paranormal activity (Fontana, 1991) and others that they are the result of self-deception and fraud (Randi, 1985). Mike Daniels' essay (Chapter 7) describes a recent investigation into alleged poltergeist activity in Wales, and illustrates not only the methods used in such investigations, but also the difficulties encountered when trying to reach any firm conclusion during this kind of work.

Testing Psychic Claimants

Many people claim to possess impressive psychic abilities. For example, faith healers and psychic surgeons sometimes appear able to psychically cure illness, mediums claim to contact the dead and some fortune-tellers seem to accurately predict the future. Both parapsychologists and sceptics have carried out a great deal of research into the validity of such claims, and the essays in Part II reflect the diversity of the methods and the results obtained in this work.

The opening essay (Chapter 8), written by George Hansen, notes that many investigations into individuals claiming strong psychic abilities have revealed evidence of trickery and fraud. For this reason it is vital that researchers carrying out such investigations are aware of the considerable literature in conjuring describing ways of faking such abilities. Hansen provides a brief introduction to this work and outlines its relevance for parapsychology (see also Hansen, 1990; Truzzi, 1997).

John Beloff's essay (Chapter 9) raises several important issues relating to how one assesses the investigations of alleged psychics that were carried out around the turn of the century. Beloff outlines a series of sittings that were held with a well-known Italian medium of the day named Eusapia Palladino, and outlines why he believes the events described in this material cannot have a normal explanation. Beloff's essay was first published in 1986 and, since then, the evidential status of much of the material he discusses has been the topic of fierce debate within the pages of the *Journal of the Society for Psychical Research* (see Barrington, 1992, 1993; Fontana, 1992, 1993; Polidoro and Rinaldi, 1998; Wiseman, 1992, 1993a,b,c).

The next essay, written by Erlendur Haraldsson and Karlis Osis (Chapter 10) illustrates some of the issues that arise when trying to assess an alleged psychic in a real world, and uncontrolled, situation. Haraldsson and Osis describe their encounters with Sri Sathya Sai Baba, an Indian religious leader who claims to be able to perform various miracles. Haraldsson and Osis present a detailed description of the phenomena they witnessed and their attempts to assess whether these events have a normal or paranormal explanation. Since the publication of this paper in 1977, several other researchers have written about Sai Baba's alleged abilities (see, for example, Haraldsson and Wiseman, 1995; Beyerstein, 1996).

Ray Hyman is one of the leading critics of parapsychology and has written extensively on the various methodological problems that can hinder research in this area (see, for example, Hyman 1981, 1985b, 1995). Here, his essay (Chapter 11) outlines some of the stratagems used by fortune-tellers to mislead people into believing that they are psychic (for example, the use of general statements, fishing for information and so on), and illustrates why it is highly problematic, if not impossible, to determine whether psychic readings made in a real-world setting constitute evidence for the paranormal. Many of the techniques mentioned by Hyman (such as the 'Barnum Effect', wherein people believe that very general statements, such as 'you have a great deal of untapped creative potential', are highly accurate descriptions of their personalities) have been investigated by researchers interested in persuasion and thus help illustrate the overlap between parapsychology and mainstream psychology. Researchers wishing to test psychics and mediums under controlled conditions have devised several procedures for minimizing the various types of biases and problems outlined by Hyman. The next essay (Chapter 12), written by Sybo Schouten, presents a critical review of these methods and reviews the mixed results obtained in this type of research.

Extrasensory Perception

As noted above, the first systematic programme of research into the existence of ESP was initiated by J.B. Rhine in the 1930s. Much of Rhine's work involved participants attempting to guess the order of shuffled decks of 'ESP cards' (that is, cards printed with one of five simple symbols – a circle, cross, square, star or wavy lines – on their faces). The first essay in Part III, written by Rhine in 1938, describes an initial set of precognition experiments and illustrates the type of methods involved in these early and ground-breaking studies.

Rhine's research generated a significant amount of controversy, with proponents arguing that the results supported the existence of ESP and critics claiming that the studies possessed various methodological and statistical problems (see Palmer, 1986, for a review). This, combined with the rather tedious procedures involved in the studies, and with a tendency for initially significant results to decline over time (see the review by Palmer, 1978) eventually resulted in researchers exploring other ways of running laboratory-based ESP experiments. In Chapter 14 Charles Akers presents a comprehensive and critical review of the key ESP studies that were conducted between the end of the Rhine era and the early 1980s. This review describes the many artefacts and biases that can hinder this research and then evaluates the degree to which these problems were present in a series of studies that both obtained positive results and were seen as making a significant contribution to the field.

In Chapter 15 Irvin Child reviews a series of well-known studies, conducted in the late 1960s and early 1970s at the Maimonides Medical Centre, exploring the possible existence of ESP in dreams. These studies obtained highly significant results, suggesting that the content of participants' dreams reflected randomly selected target material (for example, pictures) that were shown to them the following morning. Child also notes how much of the critical commentary attacking this work misrepresented both the methods and results of the studies.

Partly as a result of the success of the dream ESP work, many researchers focused their attention on running studies in which participants are placed into an altered state of consciousness. Much of this work involves participants undergoing the 'ganzfeld' procedure (a mild sensory deprivation procedure originally developed by perceptual psychologists to help people generate imagery) and then attempting to identify target material, such as a picture or film, being looked at by another person in a separate room.

Parapsychological research using the ganzfeld procedure has generated a considerable amount of debate, with some researchers arguing that the work represents some of the best evidence in favour of ESP (see Honorton, 1985; Honorton *et al.*, 1990; Utts, 1991), and others questioning the validity and quality of the studies (see Blackmore, 1987; Hyman, 1985b; Scott, 1986). Daryl Bem's and Charles Honorton's essay, published in 1994 and now reprinted as Chapter 16, first presents a review of the early ganzfeld studies and then describes a meta-analysis of a series of well-controlled and highly statistically significant ganzfeld studies conducted at the Psychophysical Research Laboratories. Bem's and Honorton's essay provoked a considerable amount of debate and additional meta-analyses (see Bem, 1994; Hyman, 1994; Milton and Wiseman, 1999; Storm and Ertel, 2001). Towards the end of their essay, the authors note the importance of a broad range of investigators attempting to replicate the ganzfeld ESP effect. In the following essay (Chapter 17) Julie Milton begins by picking up on this issue, arguing that the effect has declined in recent ganzfeld studies. She then discusses various reasons for this decline and outlines possible strategies for future research in this area. Milton's essay acted as

the basis for a large-scale electronic discussion about these issues, and the debate about the replicability of ganzfeld-ESP findings continues (Bern, Palmer and Broughton, 2001).

Psychokinesis and Distant Mental Influence

The first essay in Part IV is the oldest in the entire volume, and is included to reflect the type of work that helped form the foundation for more formal studies within parapsychology and psychical research. In it, the famous physicist Michael Faraday investigates 'table-turning' – a popular nineteenth-century pastime where people apparently made contact with the spirit world via the tipping and movement of a table. Faraday describes a series of experiments demonstrating that the phenomenon was not due to spirit intervention, but rather to people unconsciously pushing and pulling the table.

In addition to conducting ground-breaking research into ESP, J.B. Rhine and his colleagues at Duke University also carried out a series of laboratory-based PK studies in which participants were asked to influence mentally the roll of dice (for example, Rhine and Rhine, 1943). Some researchers argued that the resulting studies provide evidence to support the existence of PK but Girden (1962) criticized the work on several grounds, including poor methodological controls and statistical artefacts. Following only partial rebuttal of these criticisms (see Girden et al., 1964; Pratt, 1963), and coupled with difficulties in replicating reported effects, researchers began replacing mechanical targets (for example, the roll of dice) with random event generators (REGs) whose output is determined by, for example, the decay of a radioactive element or from a source of electronic noise. In these studies participants are asked to attempt to bias the output of the REG in a specified direction. The essay by Helmut Schmidt (Chapter 19) describes the methodology and results of one of the first REG PK studies. This study involved participants attempting to influence the random decay of a radioactive source and obtained statistically significant results. Schmidt's studies have been the focus of a considerable amount of debate concerning the possibility of participants cheating (Hansel, 1981; Rao and Palmer, 1987) and possible REG biases in certain studies (Alcock, 1990; Hyman, 1981; Palmer, 1996; Schmidt, 1987).

The following essay (Chapter 20), by Dean Radin and Roger Nelson, was published in 1989 and presents a meta-analytic review of REG studies conducted between 1959 and 1987. The essay notes that the overall effect is statistically significant and also assesses, but rejects, the possibility that this result is due to poor methodology or a file drawer effect (that is, the selective publication of studies obtaining positive results). Subsequent experiments by an international consortium of three laboratories have raised issues about the replicability of this effect (Jahn *et al.*, 2000). Like the ganzfeld, therefore, there seems to be some inconsistency in the findings of the PK REG studies.

Other PK work has used a range of biological systems as targets. Much of this research has examined the possible influence of intentionality on human physiology and behaviour. In Chapter 21 William Braud and his colleagues illustrate the types of method used in this work and describe a study looking at one of the most common of alleged paranormal experiences – the remote detection of staring. As noted by Braud *et al.*, a large percentage of the public has had the feeling that someone is staring at them, only to turn around and discover that this is the case. Researchers have carried out several studies into this phenomenon, with mixed

results. Braud et al. review this research and then describe the methods and results of their own study.

The next essay (Chapter 22), by Richard Wiseman and Marilyn Schlitz, also describes a study examining the remote detection of staring, but in addition examines the possible role that the experimenter may play in determining study outcome. As noted in both this section and the previous one, much of the debate concerning the existence of psychic ability revolves around the degree to which the experimental evidence for such abilities can be replicated across several laboratories. This issue is especially problematic within parapsychology as some experimenters have a reputation for consistently achieving positive results whilst others obtain chance findings. Attempting to understand such 'experimenter effects' is therefore clearly vital to the future of the field, and the Wiseman–Schlitz study explores this issue by examining whether two studies, using the same design but carried out by different experimenters, obtain significantly different results.

A review of the small number of studies to empirically examine the possibility of 'distant healing' (including, for example, prayer and therapeutic touch) constitutes the next essay. This review, by John Astin and his colleagues, examined 23 experiments and concluded that, although the results of these studies revealed an overall effect, the poor methodological quality of the work made any clear-cut interpretation of this work problematic. Several other studies into distant healing have been conducted since this review, with mixed results (for example, Leibovici, 2001; Roberts, Ahmed and Hall, 2004).

To close the two Parts on laboratory research into ESP and PK, we have an essay by noted parapsychology critic, James Alcock (see Alcock, 1981, 1985, 1987, 1990). Alcock's essay, which forms his editorial introduction for a special issue of the *Journal of Consciousness Studies*, argues that parapsychologists are inclined to search for paranormal interpretations of their data and tend to neglect the possibility that there simply is no psi in their experiments. He gives a list of 12 'reasons to remain doubtful about the existence of psi'.

Experimenters' Personal Perspectives

The two essays in Part V are written by researchers who are both very knowledgeable about parapsychology, and have spent much of their working lives investigating the possible existence of psychic ability. However, they each present a very different perspective on what has been achieved to date and the best direction for future work in this area.

The first essay (Chapter 25) is written by sceptic Susan Blackmore (see Blackmore, 1988, 1998). Blackmore describes how she has spent over ten years examining the evidence for ESP and PK, including several studies of her own, but remains unconvinced by the evidence. She explores the problems associated with trying to prove or disprove the existence of the paranormal and concludes by suggesting that researchers would do better to focus on trying to understand people's anomalous experiences rather than discover whether such experiences reflect genuine psychic abilities.

In contrast, Marilyn Schlitz's essay formed the basis for her Presidential Address to the Parapsychological Association in 2000. Schlitz (Chapter 26) describes how she has consistently obtained evidence for psi in the experiments that she has conducted (for example, Schlitz and Honorton, 1992; Schlitz and Braud, 1997) and argues that parapsychology is alive and

well, and has the potential to inform several important academic and social issues in the near future.

Implications and the Need for Future Research

The essays in this volume were chosen to illustrate the range of topics investigated within parapsychology, the methods employed to examine these topics and the type of controversies generated by this work. Many of the essays also discuss the significant contribution that parapsychological research has already made, and has the potential to continue to make, to mainstream science. On a methodological level, such work has helped highlight several issues that are relevant to research within the social sciences, including, for example, the need to consider how experimenter effects and subtle statistical artifacts may influence the outcome of a wide range of studies. At a more theoretical level, research into the psychological mechanisms that cause people to erroneously believe that they have experienced paranormal phenomena is highly relevant to many aspects of mainstream cognitive and social psychology, such as work concerned with the psychology of deception and self-deception. In addition, evidence demonstrating the existence of ESP or PK would have profound implications for many aspects of science, including the neuropsychological modelling of brain functions and the causal nature of consciousness. The methodological and theoretical importance of these issues clearly justifies future work in this area. However, given the complexity and long-running nature of past research into these topics, it seems likely that the debate will continue for some time yet.

References

Alcock, J.E. (1981), Parapsychology: Science or Magic?, London: Pergamon.

- Alcock, J.E. (1985), 'Parapsychology as a "Spiritual Science", in P. Kurtz (ed.), A Skeptic's Handbook of Parapsychology, Buffalo, NY: Prometheus.
- Alcock, J.E. (1987), 'Parapsychology: Science of the Anomalous or Search for the Soul?', *Behavioral and Brain Sciences*, **10**, pp. 553–65.
- Alcock, J.E. (1990), *Science and Supernature: A Critical Appraisal of Parapsychology*, Buffalo, NY: Prometheus.
- Barrington, M.R. (1992), 'Palladino and the Invisible Man Who Never Was', *Journal of the Society for Psychical Research*, **58**, pp. 324–40.
- Barrington, M.R. (1993), 'Palladino, Wiseman and Barrington: Ten Brief Replies', *Journal of the Society* for Psychical Research, **59**, pp. 196–98.
- Beloff, J. (1977), 'Historical Overview', in B.B. Wolman (ed.), *Handbook of Parapsychology*, New York: McFarland.
- Bem, D.J. (1994), 'Response to Hyman', Psychological Bulletin, 115, pp. 25–27.
- Bem, D.J., Palmer, J. and Broughton, R.S. (2001), 'Updating the Ganzfeld Database: A Victim of its own Success?', *Journal of Parapsychology*, **65**, pp. 207–18.
- Beyerstein, D. (1996), 'Sai Baba', in G. Stein (ed.), *The Encyclopedia of the Paranormal*, New York: Prometheus Books, pp. 653–57.
- Blackmore, S.J. (1987), 'A Report of a Visit to Carl Sargent's Laboratory', *Journal of the Society for Psychical Research*, **54**, pp. 186–98.
- Blackmore, S.J. (1988), 'Do We Need a New Psychical Research?', *Journal of the Society for Psychical Research*, **55**, pp. 49–59.

- Blackmore, S.J. (1993), Dying to Live: Science and the Near-death Experience, London: Grafton.
- Blackmore, S.J. (1998), 'Abduction by Aliens or Sleep Paralysis?', Skeptical Inquirer, 22, pp. 23-28.
- Cardeña, E., Lynn, S.J. and Krippner, S. (eds) (2000), Varieties of Anomalous Experience: Examining the Scientific Evidence, Washington, DC: American Psychological Association.
- Edwards, P. (1996), Reincarnation: A Critical Examination, Amherst, NY: Prometheus Books.
- Fontana, D. (1991), 'A Responsive Poltergeist: A Case from South Wales', *Journal of the Society for Psychical Research*, **57**, pp. 385–402.
- Fontana, D. (1992), 'The Feilding Report and the Determined Critic', *Journal of the Society for Psychical Research*, **58**, pp. 341–50.
- Fontana, D. (1993), 'Palladino (?) and Fontana: The Errors are Wiseman's Own', *Journal of the Society for Psychical Research*, **59**, pp. 198–203.
- Girden, E. (1962), 'A Review of Psychokinesis (PK)', Psychological Bulletin, 59, pp. 353-88.
- Girden, E., Murphy, G., Beloff, J., Eisenbud, J., Flew, A., Rush, J.H., Schmeidler, G. and Thouless, R.H. (1964), 'A Discussion of Psychokinesis', *International Journal of Parapsychology*, 6, pp. 25–137.
- Hansel, C.E.M. (1981), 'A Critical Analysis of H. Schmidt's Psychokinesis Experiments', *Skeptical Inquirer*, **5**(3), pp. 26–33.
- Hansen, G.P. (1990), 'Deception by Subjects in Psi Research', Journal of the American Society for Psychical Research, 84, pp. 25–80.
- Haraldsson, E. (1985), 'Representative National Surveys of Psychic Phenomena: Iceland, Great Britain, Sweden, USA and Gallup's Multinational Survey', *Journal of the Society for Psychical Research*, 53, pp. 145–58.
- Haraldsson, E. and Wiseman, R. (1995), 'Reactions to and an Assessment of a Videotape on Sathya Sai Baba', *Journal of the Society for Psychical Research*, **60**, pp. 203–13.
- Honorton, C. (1985), 'Meta-analysis of Psi Ganzfeld Research: A Response to Hyman', *Journal of Parapsychology*, **49**, pp. 51–91.
- Honorton, C., Berger, R.E., Varvoglis, M.P., Quant, M., Derr, P., Schechter, E. and Ferrari, D.C. (1990), 'Psi Communication in the Ganzfeld: Experiments with an Automated Testing System and a Comparison with a Meta-analysis of Earlier Studies', *Journal of Parapsychology*, 54, pp. 99–139.
- Houran, J. and Lange, R. (1998), 'Rationale and Application of a Multi-Energy Sensory Array in the Investigation of Haunting and Poltergeist Cases', *Journal of the Society for Psychical Research*, 62, pp. 324–36.
- Hyman, R. (1981), 'Further Comments on Schmidt's PK Experiments', *Skeptical Inquirer*, **5**, pp. 34–40.
- Hyman, R. (1985a), 'A Critical Historical Overview of Parapsychology', in P. Kurtz (ed.), A Skeptic's Handbook of Parapsychology, Buffalo, NY: Prometheus.
- Hyman, R. (1985b), 'The Ganzfeld Psi Experiment: A Critical Appraisal', *Journal of Parapsychology*, **49**, pp. 3–49.
- Hyman, R. (1994), 'Anomaly or Artifact? Comments on Bem and Honorton', *Psychological Bulletin*, **115**, pp. 19–24.
- Hyman, R. (1995), 'Evaluation of the Program on Anomalous Mental Phenomena', Journal of Parapsychology, 59, pp. 321–51.
- Irwin, H.J. (1993), 'Belief in the Paranormal: A Review of the Empirical Literature', *Journal of the American Society for Psychical Research*, **87**, pp. 1–39.
- Jahn, R., Dunne, B., Bradish, G., Dobyns, U., Lettieri, A., Nelson, R., Mischo, J., Boller, E., Bösch, H., Vaitl, D., Houtkooper, J. and Walter, B. (2000), 'Mind/Machine Interaction Consortium: PortREG Replication Experiments', *Journal of Scientific Exploration*, 14, pp. 499–555.
- Liebovici, L. (2001), 'Effects of Remote, Retroactive Intercessory Prayer on Outcomes in Patients with Bloodstream Infection: Randomised Controlled Trial', *British Medical Journal*, **323**, pp. 1450–51.
- Maher, M.C. and Schmeidler, G.R. (1975), 'Quantitative Investigation of a Recurrent Apparition', *Journal* of the American Society for Psychical Research, **69**, pp. 341–51.
- Marks, D.F. and Kammann, R. (1980), The Psychology of the Psychic, Buffalo, NY: Prometheus Books.
- Milton, J. and Wiseman, R. (1999), 'Does Psi Exist? Lack of Replication of an Anomalous Process of Information Transfer', *Psychological Bulletin*, **125**, pp. 387–91.
- Moody, R.A. (1975), Life after Life, Covington, GA: Mockingbird Books.

- Palmer, J. (1978), 'Extrasensory Perception: Research Findings', in S. Krippner (ed.), Advances in Parapsychological Research, Volume 2: Extrasensory Perception, New York: Plenum Press.
- Palmer, J. (1986), 'The ESP Controversy', in H.L. Edge, R.L. Morris, J. Palmer and J.H. Rush, *Foundations of Parapsychology: Exploring the Boundaries of Human Capability*, Boston, MA: Routledge & Kegan Paul.
- Palmer, J. (1996), 'Evaluation of a Conventional Interpretation of Helmut Schmidt's Automated Precognition Experiments', *Journal of Parapsychology*, **60**, pp. 149–70.
- Parnia, S., Waller, D.G., Yeates, R. and Fenwick, P. (2001), 'A Qualitative and Quantitative Study of the Incidence, Features and Aetiology of Near Death Experiences in Cardiac Arrest Survivors', *Resuscitation*, 48, pp. 149–56.
- Polidoro, M. and Rinaldi, G.M. (1998), 'Eusapia's Sapient Foot: A New Consideration of the Feilding Report', *Journal of the Society for Psychical Research*, **62**, pp. 242–56.
- Pratt, J.G. (1963), 'The Girden-Murphy Papers on PK', Journal of Parapsychology, 27, pp. 199–209.

Randi, J. (1985), 'The Columbus Poltergeist Case', Skeptical Inquirer, Spring, pp. 221-35.

- Rao, K.R. and Palmer, J. (1987), 'The Anomaly Called Psi: Recent Research and Criticism', *Behavioral and Brain Sciences*, **10**, pp. 539–643.
- Rhine, L.E. and Rhine, J.B. (1943), 'The Psychokinetic Effect: I. The First Experiment', *Journal of Parapsychology*, 7, pp. 20–43.
- Ring, K. (1980), *Life at Death: A Scientific Investigation of Near Death Experience*, New York: Coward, McCann and Geoghegan.
- Roberts, L., Ahmed, I. and Hall, S. (2004), 'Intercessory Prayer for the Alleviation of Ill Health (Cochrane Review)', in *The Cochrane Library, Issue 1*, Chichester: John Wiley & Sons Ltd.
- Roberts, R. and Groome, D. (eds) (2001), *Parapsychology: The Science of Unusual Experience*, London: Arnold.
- Roe, C.A. (1998), 'Belief in the Paranormal and Attendance at Psychic Readings', *Journal of the American Society for Psychical Research*, **91**, pp. 25–51.
- Schlitz, M.J. and Braud, W. (1997), 'Distant Intentionality and Healing: Assessing the Evidence', *Alternative Therapies*, **3**, pp. 62–73.
- Schlitz, M.J. and Honorton, C. (1992), 'Ganzfeld Psi Performance with an Artistically Gifted Population', Journal of the American Society for Psychical Research, 86, pp. 83–98.
- Schmidt, H. (1987), 'Alcock's Critique of Schmidt's Experiments', *Behavioral and Brain Sciences*, **10**, p. 609.
- Schouten, S.A. (1981), 'Analysing Spontaneous Cases: A Replication Based on the Sannwald Collection', European Journal of Parapsychology, 4, pp. 9–48.
- Schouten, S.A. (1982), 'Analysing Spontaneous Cases: A Replication Based on the Rhine Collection', European Journal of Parapsychology, 4, pp. 113–58.
- Scott, C. (1986), 'Comment on the Hyman-Honorton Debate', *Journal of Parapsychology*, **50**, pp. 349–50.
- Shermer, M. (1997), Why People Believe Weird Things: Pseudoscience, Superstition, and Other Confusions of our Time, New York: W.H. Freeman and Company.
- Stevenson, I. (1974), Twenty Cases Suggestive of Reincarnation, Charlottesville: University Press of Virginia.
- Stevenson, I. (1997), Where Reincarnation and Biology Intersect, Westport, CT: Praeger Publishers.
- Storm, L. and Ertel, S. (2001), 'Docs Psi Exist? Comments on Milton and Wiseman's (1999) Metaanalysis of Ganzfeld Research', *Psychological Bulletin*, **127**, pp. 424–33.
- Truzzi, M. (1997), 'Reflections on the Sociology and Social Psychology of Conjurors and their Relations with Psychical Research', in S. Krippner (ed.), *Advances in Parapsychological Research*, Vol. 8, Jefferson, NC: McFarland, pp. 221–71.
- Utts, J. (1991), 'Replication and Meta-analysis in Parapsychology', Statistical Science, 6, pp. 363-78.
- Wiseman, R. (1992), 'The Feilding Report: A Reconsideration', *Journal of the Society for Psychical Research*, **58**, pp. 129–52.
- Wiseman, R. (1993a), 'Palladino and Barrington: Ten Major Errors', *Journal of the Society for Psychical Research*, **59**, pp. 16–34.
- Wiseman, R. (1993b), 'Palladino and Fontana: Nine Major Errors', Journal of the Society for Psychical Research, 59, pp. 35–47.

Wiseman, R. (1993c), 'Martínez-Taboas, Francia and Palladino: Nine Major Errors', *Journal of the Society for Psychical Research*, **59**, pp. 130–40.

Zusne, L. and Jones, W.H. (1982), Anomalistic Psychology: A Study of Extraordinary Phenomena of Behavior and Experience, Hillsdale, NJ: Lawrence Erlbaum.



Part I

Outside the Lab: Paranormal Beliefs and Experiences



[1] A Community Mail Survey of Psychic Experiences

JOHN PALMER¹

ABSTRACT: In March, 1974, a 46-item questionnaire was mailed to a randomly selected sample consisting of 300 students from the University of Virginia and 700 other adult residents of Charlottesville and surrounding suburbs. Items requested respondents to report the incidence and detailed characteristics of various psychic and psi-related experiences. Information concerning attitudes and the personal impact of such experiences was solicited, as well as demographic data.

Usable questionnaires were obtained from 89% of the student sample and 51% of the town sample. Claims of psychic and psi-related experiences were rather wide-spread: over half of the respondents claimed at least one ESP experience, for example. There also was a tendency for persons who claimed psychic or psi-related experiences to claim a large number of them. Variables related to naturally-occurring altered states (e.g., vividness and frequency of dream recall) tended to be strong predictors of such experiences, while demographic variables generally were poor predictors. However, there was a strong negative relationship between age and claims of déja vu experiences. Many respondents indicated that psychic or psi-related experiences affected their attitudes toward life and/or life-styles.

INTRODUCTION

There have been a number of surveys of spontaneous psychic experiences reported in the parapsychological literature. However, most of these surveys involved preselected samples that might be atypical of a broadly representative population. L. E. Rhine (1961), for example, based her findings on the reports of persons who mailed descriptions of their experiences to her on their own initiative or in response to public appeals. Other studies involved asking questions about specific experiences to more or less intact groups

¹ This survey was conducted while I was Research Associate at the Division of Parapsychology, School of Medicine, University of Virginia. I wish to thank Dr. Ian Stevenson, Director of the Division, for providing financial and administrative support, and the Parapsychology Foundation for additional financial support.

222 Journal of the American Society for Psychical Research

such as college students or persons from a particular social class (Green, 1967; Prasad and Stevenson, 1968; Sidgwick and Committee, 1894; West, 1948). Perhaps the most representative study with an American sample is a national interview survey of mystical experiences which unfortunately dealt only superficially with psychic experiences (McCready and Greeley, 1976). A highly representative national survey of psychic experiences in Iceland, using a questionnaire similar to my own, has recently been published (Haraldsson, Gudmundsdottir, Ragnarsson, Loftsson, and Jonsson, 1977).

In 1974, I decided to undertake a survey of psychic experiences in the U.S. using random sampling techniques. My colleague in this endeavor was Mr. Michael Dennis.² A national survey was beyond our resources, so we decided on a community mail survey of Charlottesville, Virginia, and surrounding suburbs. Charlottesville is a community of about 35,000 people with a diversity of social and economic groups, although many of its resources are tied to the University of Virginia, which is located there. We nevertheless felt that Charlottesville is a reasonably representative American community, and a businessman of my acquaintance informed me that it is often considered such for purposes of marketing research.

Our objectives in carrying out the survey were to estimate the proportion of Americans who claim to have had various kinds of psychic expériences, and to explore correlations between these experiences and other variables, including related experiences and activities, attitudes, and demographic factors.

I want to stress at the outset that the survey dealt with experiences that our respondents *claimed* to have been psychic. I am not prepared to state what percentage of these cases actually require paranormal explanations, and to my knowledge no attempts have been made to verify any of them. I nevertheless think that the information obtained in the survey is of value to parapsychology both as a source of sociological information and of hypotheses about the nature of the experiences considered.

Method

Questionnaire

The questionnaire consisted of 46 items,³ many of which contained several parts. Respondents answered by circling a number

² A preliminary report of this survey, co-authored by Mr. Dennis, was presented at the Seventeenth Annual Convention of the Parapsychological Association, Jamaica, N.Y. 1974. An abstract was published in *Research in Parapsychology* 1974. Metuchen, N.J.: Scarecrow Press, 1975. Pp. 130–133.

³ For reasons of space, not all of these items will be discussed in this report.

A Community Mail Survey of Psychic Experiences

next to their choices. They were encouraged to elaborate upon their answers or describe particularly meaningful experiences on the back of the questionnaire or on separate pages. The items can be classified in six main categories, as follows:

IA: Experiences that, if valid, by definition involve psi, i.e., either ESP or PK. These include waking ESP experiences, ESP dreams, being an "agent" for someone else's ESP experience, and poltergeist activity (RSPK).

IB: Experiences that are not psychic as such, but are of interest to parapsychologists because they might provide a context for either ESP or PK effects. These include out-of-body experiences (OBEs), apparitions, communication with the dead, hauntings, "memories" of a previous lifetime, déja vu experiences, and aura vision. Supplementary questions (see below) explored possible psychic elements in some of these experiences.

II: Altered states of consciousness that are not of direct interest to parapsychologists, but are often considered relevant to psi. These include dreams (addressed in terms of frequency of recall and vividness), lucid dreams, and mystical experiences. The distinction between this category and category IB above is admittedly not a sharp one. For example, some might want to include mystical experiences in IB, while others might want to include déja vu and aura vision in II. Our decisions on this matter were based on our assessment of which topics parapsychologists have historically considered to fall within their purview. They are to some extent arbitrary.

III: Activities related to psi. These include meditation, use of hallucinogenic drugs, analysis of one's dreams, and seeking the services of a psychic.

IV: Attitudes related to psi. Included in this category are attitudes toward astrology, survival of death, reincarnation, and the value of parapsychological research. We did not include a direct question about belief in psi (i.e., a "sheep-goat" question) because we feared it might bias respondents' answers to some of the other questions. We hoped that the question about the value of psi research would get at this issue indirectly, so we interpreted it as a surrogate sheep-goat question.

V: Demographic questions. These include sex, race, age, birth order, marital status, political ideology, religious denomination, religiosity, level of education, occupation, and family income.

VI: The effect of psychic experiences on the respondents' lives, including their attitudes, their life decisions, and whether such experiences had ever saved them or someone else from a crisis or tragedy.

For purposes of analysis, items in category I (A and B) were

223

224 Journal of the American Society for Psychical Research

treated as dependent or criterion variables, while items in categories II through V were treated as independent or predictor variables. Items in category VI have not been analyzed in relation to other items in the survey.

Items in categories I through III generally had multiple parts. First, respondents answered "yes" or "no" to whether they ever had the experience or engaged in the activity in question. If they answered "yes," they then answered a set of from one to eight supplementary questions asking for more specific information about these experiences. The first of these questions usually referred to how many times respondents had the experience, and they responded by circling a number from "1" to "9-or-more." For the other questions, they circled the number of these experiences that had a given characteristic. We recognized that in cases where persons had multiple experiences, they may well not be able to remember the exact number they had, or exactly how many had a given attribute. This format nonetheless allowed us to make rough estimates of these numbers.

The primary questions were phrased as precise descriptions of the experience or activity of interest, using the simplest words possible. In most cases, we avoided the use of labels such as "telepathy," "apparition," and "out-of-body experience" that might have different connotations for different respondents. We also generally avoided giving examples, lest respondents feel they should answer "no" unless their experience was the same as the example. These principles should become clear as I quote the questions in the presentation of results to follow.

Selection of Sample

Our purpose was to obtain as representative and random a sample as possible of the population of Charlottesville. Toward this end, we used two sources. The first was the City Directory of Charlottesville, which lists all persons over 18 living in numbered street addresses in Charlottesville and surrounding suburbs. The second was the University of Virginia (UVa) Student Directory, which gives a complete listing of students registered at the University at the beginning of the school year.

We decided upon an initial sample of 1,000 persons. Based upon census figures of the proportion of Charlottesville residents who were UVa students, we selected 700 names from the City Directory and 300 names from the Student Directory. These became our "town" (T) sample and our "student" (S) sample, respectively.

The names to be selected for the samples were determined by referring to a computer-generated table of pseudo-random num-

A Community Mail Survey of Psychic Experiences

bers. These numbers defined the page, the column, and the row of the Directory which was to be sampled. This procedure became quite complicated with the City Directory, because of the nonsystematic way in which names were arranged on the pages. Also, names had to be excluded from each Directory for various reasons (e.g., UVa students had to be excluded if their names were "chosen" from the City Directory).⁴

Procedure

On March 1, 1974, one copy of the survey questionnaire, along with a postage-paid "business reply" return envelope, was sent to each of the 700 persons sampled from the City Directory. The first mailing to the 300 students was on March 11, because the week of March 1 coincided with the University's spring vacation. It also corresponded to a postal rate increase, which is why we didn't wait until March 11 to mail all the surveys.

There were two additional follow-up mailings to persons who had not yet returned their questionnaires. Each of these mailings occurred three weeks after the preceding one. It consisted of a new copy of the questionnaire, a new return envelope, and a supplementary letter exhorting the person to return his or her completed questionnaire.

Each questionnaire had a three-digit code number stamped on the lower right-hand corner of the back page. This number keyed the person's name on our mailing list. When a questionnaire was returned, this number was circled on the mailing list and the date we received it was recorded.

If a questionnaire was returned to us by the post office as undeliverable, or if someone else returned it indicating the person was deceased, a new name was sampled and the questionnaire was sent to the new individual. If a person returned an uncompleted questionnaire or indicated a refusal to cooperate, we simply treated that person as a "no-return" and did not resample.

Data Scoring and Analysis

The respondents' answers were transferred directly from the questionnaires to IBM cards by professional keypunchers at the UVa Computer Center. The data were subsequently stored on magnetic tape.

The data were analyzed using the SPSS statistical package (Nie,

225

⁴ A manuscript describing the selection procedure in more detail is available from the author upon request.

226 Journal of the American Society for Psychical Research

Hull, Jenkins, Steinbrenner, and Bent, 1975). Frequency distributions were first printed out for all items. Most of the items were then cross-tabulated with each other, resulting in the printout of a large number of contingency tables and corrected chi-square values. In some cases it was necessary to combine some of the response categories for meaningful cross-tabulations.

Results

Return Rates

We obtained usable questionnaires from 354 townspeople and 268 students, corresponding to 51% and 89% of the initial samples. Not all respondents answered every item, so that the "Ns" for individual items discussed below are often slightly less than the above figures.

We were very gratified by the response of the students, and I consider our final sample to be highly representative of this aspect of our population. The response of the townspeople, while less gratifying than the response of the students, was by no means a bad showing for this type of survey. Nevertheless, the representativeness of this sample is questionable.⁵ Although we have not undertaken a formal comparison with census figures, it is obvious that there is an under-representation of the lower socio-economic classes in our final T sample. This is understandable, because such persons may have had difficulty in understanding the questions or been adverse to "paperwork" generally. The seriousness of this bias is mitigated somewhat by the fact (to be discussed later) that socio-economic variables were not strongly correlated with the frequency of reported psychic experiences.

A second way in which we attempted to assess the bias produced by the relatively low response rate of the townspeople was to evaluate the responses on questionnaire items as a function of when the respondents returned their questionnaires. Respondents were divided into three groups according to whether they returned their questionnaires after the first, second, or third mailings. For the T sample, these three groups contained 183, 112, and 59 respondents, respectively.

The original rationale for this procedure was based upon the assumption that persons who did not return their questionnaires at all were more like the persons who returned them after the third mailing than those who returned them after the first mailing. Thus if there were, say, a significant decline in the proportion of respon-

 $^{^{5}}$ I understand that sociologists consider 60% to be the minimal rate of return which justifies a claim of representativeness.

A Community Mail Survey of Psychic Experiences

dents who reported having had a psychic dream across the three groups, we might suspect that the non-respondents had relatively few psychic dreams and that our sample percentage was an overestimate of the population percentage.

What we found, in fact, was that for none of the questionnaire items was there a significant difference in responses as a function of date of return. Moreover, the general trend was for a slightly higher proportion of people in the first and third groups to report psychic and psi-related experiences than in the second group. Although I cannot provide any evidence justifying the rationale outlined in the preceding paragraph, these results do make me more confident that the results from our T sample are not grossly off base.

Psychic Experiences

In this section I will present descriptive data regarding the experiences listed in Category I as defined above. These data are listed in Table 1. The figures in parentheses refer to the estimated proportion of *experiences* that have the characteristic in question.

A few comments about these latter estimates are in order. They were computed by dividing the total number of experiences reported as having the characteristic by the total number of experiences reported by respondents in the sample. Thus the experience rather than the respondent is the unit of analysis, and some respondents contributed to this figure more than others. Moreover, it was necessary to exclude from these computations the data from respondents who claimed to have nine or more of the experiences, since the exact number of experiences they had could not be determined. The adjacent figures not in parentheses refer to the proportion of those persons claiming to have had the experience at least once who also claimed to have had at least one such experience with the characteristic in question. The advantages and disadvantages of these figures are roughly complementary to those of the figures in parentheses.

For reasons of space, I will not quote all the figures in the text. Therefore, readers may wish to keep Table 1 at hand as they read the following paragraphs.

Waking ESP Experiences. This question was designed to assess how many respondents ever had what they considered to be a valid ESP experience while in the waking state. The question was worded as follows: "Have you ever had, while awake, a strong feeling, impression, or 'vision' that a previously unexpected event had happened, was happening, or was going to happen, and [learned] later that you were right?"

227

228 Journal of the American Society for Psychical Research

Item	$T (N=354)^{a}$	S(N=268)
Waking ESP	38	39
More than one	86 ^b	79 ^b
Vision (hallucinations)	45 (30) ^c	24 (13) ^c
Tragic event	42 (21)	35 (17)
Family member	78 (51)	59 (33)
Within 24 hours	83 (56)	86 (67)
Told someone	55 (30)	46 (23)
ESP Dreams	36	38
More than one	85	89
Especially vivid	81 (66)	80 (68)
Tragic event	43 (19)	31 (17)
Family member	65 (41)	58 (34)
Within 24 hours	63 (35)	58 (31)
Told someone	46 (22)	40 (16)
ESP Agency	18	20
More than one	72	65
Emotion	62 (49)	58 (45)
Thinking of percipient	62 (49)	51 (43)
Family member	61 (47)	42 (32)
RSPK (Poltergeist)	8	6
More than one	86	63
Other person present	46	27
Out-of-Body Experiences	14	25
More than one	87	82
Saw physical body	56 (43)	62 (45)
Traveled	29 (21)	27 (14)
ESP (information acquired)	15 (7)	12 (3)
Seen as apparition	10 (9)	9 (2)
Produce at will	16 (12)	22 (16)
Apparitions	17	17
More than one	74	79
Seen	46 (34)	41 (33)
Heard	70 (58)	65 (45)
Touched	61 (53)	56 (43)
Family member	49 (42)	29 (17)
Deceased	59 (39)	30 (19)
ESP (information acquired)	24 (18)	11 (2)
Collective	22 (12)	29 (13)
Communication with the Dead	8	5
Seen or heard	72	31
Automatic writing	12	0
Direct voice	21	23
Xenoglossy	8	31
Lived in Haunted House	7	8
Past-Life Memories	8	9
More than one experience	69	87
Dream	65 (42)	68 (38)
More than one lifetime	36	32
Famous person	37	43

 Table 1

 Percentage of Respondents Claiming Psi or Psi-Related Experiences

A Community Mail Survey of Psychic Experiences

Item	$T (N=354)^{a}$	$S (N = 268)^{a}$
Recalled details	32	27
Verified details	12	5
Déjà Vu	68	88
More than one	97	99
Aura Vision	5	6
More than one	87	67
See at will	37	47

Table 1 (continued)

^a Sample size varies slightly from question to question due to non-responders. ^b Figures in this column refer to the percentage of respondents who claimed the basic experience, not the percentage of the total sample.

^c Figures in parentheses refer to the percentage of total experiences reported by respondents having the characteristic in question, excluding data from those reporting nine or more experiences.

At least one such experience was reported by 38% of the T sample and 39% of the S sample. The experiences tended to be intuitive rather than visual or hallucinatory in both samples, although a significantly greater percentage of these respondents reported at least one visual experience in the T sample than in the S sample (45% vs. 24%; p < .01).⁶

Contrary to what one might expect, only about one of five cases concerned "tragic events such as accidents or deaths," although about 40% of those reporting waking ESP experiences said they had at least one experience of this type. A large percentage of the cases were reported as involving members of the respondents' family, but these were a majority only in the T sample. The percentage of these respondents reporting at least one experience involving a family member was significantly greater in the T sample than in the S sample (78% vs. 59%; p < .01).

In a clear majority of the cases, the verifying event occurred within 24 hours before or after the experience, and in over a quarter of the cases the respondents said they told someone of their experience "before learning of the event by normal means." Thus a number of the cases are at least potentially verifiable.

ESP Dreams. This question was phrased as follows: "Have you ever had a rather clear and specific *dream* which matched in detail an event which occurred before, during, or after your dream, and which you did not know about or did not expect at the time of the dream?"

The figures for this item are very similar to those for the item concerning waking experiences. At least one psychic dream was

229

⁶ Details of the chi-square analyses referred to here and elsewhere in this report are available from the author upon request.

reported by 36% of the T sample and 38% of the S sample. It is noteworthy that about two-thirds of these dreams were reported as being "more vivid" than the respondents' "ordinary dreams."

The figures regarding the subject matter of the dream (i.e., concerning a tragic event or a family member) are comparable to those reported for waking ESP experiences. However, the percentage of ESP dreams involving a family member was somewhat less than it was for waking experiences in the T sample (41% vs. 51%), and the percentage of townspeople reporting at least one such experience is not significantly different from the student percentage.

The data regarding potential veridicality (i.e., time interval between experience and verifying event, sharing the experience prior to verification) are comparable to the data for waking experiences.

ESP "agency." This question was designed to determine whether respondents believed they had ever been the object of someone else's ESP experience. Specifically, we asked: "Has any other person ever told you they had a dream, 'vision,' or definite feeling in which they seemed to get information about an event involving you which they could not have gotten in any 'normal' or conventional way?" Although we refer to this process as "agency," it should not necessarily be concluded that the "agent" played an active role in the experience.

Fewer of our respondents claimed to have been the source of an ESP "message" than claimed to have been on the receiving end. The above question was answered affirmatively by only 18% of the T sample and 20% of the S sample.

In a little less than half of the cases, it would appear that the respondent was "experiencing strong emotion at the time," and in about the same percentage he or she was "thinking of the other person at the time."

As was the case with receptive ESP experiences, a sizeable percentage of these "agency" cases involved family members, approaching half in the T sample. However, the difference between the T and S samples in the percentage of these respondents reporting at least one case of agency involving a family member did not reach significance.

RSPK. This question was designed to determine how many respondents were witnesses to poltergeist disturbances. The question was worded as follows: "Have you ever seen an object move with no 'natural' or physical means of motion that you could discover?"

Such an experience was claimed by 8% of the T sample and 6% of the S sample. It is difficult to determine how many of these persons could be identified as actual poltergeist agents. We attempted to get a handle on this by asking "whether these experiences occurred most often in the company of another person."

This seems to have been true in about a third of the cases overall, implying (albeit loosely) that the respondent was the agent in the other two-thirds.

Psi-Related Experiences

The data for psi-related experiences are also listed in Table 1. *Out-of-Body Experiences (OBEs)*. This question was worded as follows: "Have you ever had an experience in which you felt that 'you' were located 'outside of' or 'away from' your physical body; that is, the feeling that your consciousness, mind, or center of awareness was at a different place than your physical body? (If in doubt, please answer 'no.')"

At least one OBE was claimed by 14% of the T sample and 25% of the S sample. This difference is significant (p < .01). Our overall percentage, however, is similar to that obtained in other surveys (e.g., Green, 1967; Hart, 1954).

The respondents who reported OBEs said they saw their physical bodies while "outside" in about 44% of them. Thus while this is a common characteristic of OBEs, it is by no means universal. In only about one case out of six did respondents "'travel' to distant places and 'see' or 'hear' what was going on there."

The percentage of OBEs for which the respondents claimed any evidentiality was small. I found it interesting that the number of claims of appearing as an apparition was almost identical to the number of claims of ESP associated with the experience. In no case is there firm evidence that these two attributes occurred together, but this is a possibility in six cases.⁷ It is noteworthy that almost 20% of the respondents reporting OBEs said they had induced at least one voluntarily.

Apparitions. The question about apparitions was adopted essentially verbatim from the S.P.R. Census of Hallucinations (Sidgwick and Committee, 1894). It read, "Have you ever had, while awake, a vivid impression of seeing, hearing, or being touched by another being, which impression, as far as you could discover, was not due to any external physical or 'natural' cause?" (A sentence following this question cautioned respondents *not* to include experiences of the Christ or other religious figures.)

This question was answered affirmatively by 17% of the respondents in each sample, which is comparable to the uncorrected

⁷ These were cases in which the respondents claimed to have had more than one OBE, and at least one with each of these attributes. Firm evidence could only be claimed if the respondent reported both attributes and only one OBE. There were no such cases.

figure of 13% obtained from the S.P.R. Census. Our results differed from the Census in one important respect, however. While the majority of the apparitions in the Census were visual, ours were predominantly auditory or tactile. Our results correspond more closely to those of L. E. Rhine (1956), who found that most of the "hallucinations" in her sample were auditory.

About 42% of the apparitions reported by the townspeople involved a family member, while only 17% of the students' apparitions fell into this category. However, the percentages of respondents in the two samples (49% vs. 29%) who saw at least one apparition of a family member did not differ significantly. The townspeople were about twice as likely as the students to ''recognize the being as someone you knew had died sometime earlier'' in at least one apparitional experience, and this time the difference is significant (59% vs. 30%; p < .02).

Only about 10% of the apparitions (mostly from the T sample) informed the respondent "of an unexpected accident or death." (But two of the five students in this group claimed to have had such an experience eight or more times!) Only about one in eight apparitions were collectively perceived, although approximately a quarter of those reporting apparitions claimed at least one collective experience. In the S.P.R. Census, where only one experience per person was analyzed, approximately a third of the apparitions were collectively perceived when more than one person was present.

Communication with the Dead. This question was designed to tap mediumistic-type experiences, although it might have overlapped somewhat with the question on apparitions. The question was worded as follows: "Have you ever 'communicated' with the dead or believed yourself to have been controlled or 'possessed' by a 'spirit'?"

This question was answered affirmatively by 8% of the T sample and 5% of the S sample.

Among the 26 townspeople who responded affirmatively, seeing the "spirit" or hearing its voice was the most common mode of communication (18 persons), although three reported control of handwriting (automatic writing), five reported that a "spirit" had controlled their voices (direct voice), and two reported that it had communicated through them in a foreign language they did not know (xenoglossy).

Among the 13 students who claimed communication with the dead, four said they had seen or heard a "spirit'," three reported direct voice, and four reported xenoglossy. None reported automatic writing.

Haunting. This question asked respondents, "Have you ever lived in a house you believed to be 'haunted'?" An affirmative

response was given by 7% of the T sample and 8% of the S sample.

Past-Life "Memories." We asked our respondents: "Have you ever had what seems to be a 'memory' of a previous lifetime (i.e., reincarnation)?" Such "memories" were claimed by 8% of the T sample and 9% of the S sample.

Approximately two-thirds of those who recalled previous lifetimes said that at least one of their memories came in the form of a dream, although only 40% of the total memories reported were dreams.

About a third of our recallers claimed to remember more than one lifetime, while about 40% remembered being a "well-known or important person."

Fourteen respondents (30% of all recallers) said they were "able to recall details such as names, places, historical events, etc.," which they hadn't known about prior to experiencing the "memories," but only four of them claimed to have "checked any such details and found them to be correct in records of the actual past."

 $D\acute{e}j\grave{a} Vu$. This question was phrased as follows: "Have you ever had the strong feeling or impression that you had been some place or in the same situation before, even though you had never actually been there before or were experiencing the event for the first time in 'real life'?"

This question evoked a far higher percentage of affirmative responses than did any of the other questions relating to the supposedly psi-related experiences we examined. It was answered affirmatively by 68% of the T sample and 88% of the S sample. This difference is highly significant (p < .001).

Aura Vision. We asked, "Have you ever seen light or lights around or about a person's head, shoulders, hands, or body which, as far as you could tell, were not due to 'normal' or 'natural' causes (i.e., 'halo' or 'aura')?"

This question was answered affirmatively by 5% of the T sample and 6% of the S sample. Over 40% of these positive responders said they could see the light around people when they wanted to, at least sometimes.

Multiplicity of Psi or Psi-related Experiences. There is considerable evidence from the survey that most of the respondents who claimed to have had psychic or psi-related experiences apparently had a large number of them. First, most respondents who reported one experience of a given type said they had more than one of this type. These percentages range from a low of 63% to a high of 99% (see Table 1). Reports of having had such experiences nine or more times were quite common.

Secondly, there was a tendency for respondents who reported

one type of experience to report other types as well. This was especially true in the T sample. Among the 55 cross-tabulations contrasting the 11 items discussed so far two at a time, 50 of them were statistically significant (i.e., p < .05), most highly so. This consistency was somewhat less evident in the S sample, where only 26 of the 55 cross-tabulations were significant, but it is still present to a high degree. The discrepancy between the samples is not primarily attributable to the smaller number of respondents in the S sample. In 43 of the 55 tabulations, the magnitude of the percentage differences within the chi-square table was greater in the T sample than in the S sample.

In an analysis in which mystical experiences were included among psi-related experiences, we found that 82% of the T sample and 96% of the S sample had at least one psychic or psi-related experience. Fifty-eight percent of the T sample and 74% of the S sample reported more than one. Seventeen percent of the T sample and 19% of the S sample reported five or more.

Altered States of Consciousness

Frequency data for items in this category are presented in Table 2 and their relationships with psi-related experiences in Figure 1. All relationships discussed in this and the next two sections are in the positive direction.

Table 2
PERCENTAGE OF RESPONDENTS HAVING EXPERIENCES OR PRACTICING ACTIVITIES
of Relevance to Psi

Item	$T (N=354)^{a}$	$S (N = 268)^{a}$	
Recall of Dreams			
Once a week or more	42	67	
Once or twice a month	24	19	
Rarely or never	34	14	
Vivid Dreams			
Once a week or more	29	44	
Once or twice a month	30	33	
Rarely or never	41	24	
Lucid Dreams			
Once a week or more	4	8	
Once or twice a month	10	21	
Rarely	42	42	
Never	44	29	
Mystical Experiences	28	35	
More than one	79 ^b	69 ^b	
Self-Analysis of Dreams	36	53	
How long			
Less than 6 months	32	34	

Α	Community	Mail	Survey	of	Psychic	Experiences
---	-----------	------	--------	----	----------------	-------------

Item	$T (N=354)^{a}$	$S (N = 268)^{a}$
6 months to 5 years	22	48
More than 5 years	45	19
How helpful		
Very helpful	13	2
Somewhat helpful	46	47
Not helpful	37	50
Harmful	3	1
Sought a Psychic	10	3
More than once	72	38
More than one psychic	45	0
Acted upon advice	33	78
How helpful		
Very helpful	15	67
Somewhat helpful	30	22
Not helpful	52	11
Harmful	3	0
Meditation	6	9
How long		
Less than 6 months	42	44
6 months to 5 years	21	56
More than 5 years	37	0
How helpful		
Very helpful	44	23
Somewhat helpful	50	59
Not helpful	0	18
Harmful	6	0
Mind-Expanding Drugs	7	32
How frequently		
Once a week or more	33	37
Occasionally	17	20
Seldom	28	22
Once or twice	22	22
Psi-related experiences during	29	28

Table 2 (continued)

Note; figures in some percentage columns do not add up to 100 due to rounding error.

^a Sample size varies slightly from question to question due to non-responders.

^b Figures in this column refer to the percentage of respondents who claimed the basic experience or activity, not the percentage of the total sample.

Dreams. Three of the four questions in the "altered states" category concerned dreams. Forty-two percent of the T sample and 67% of the S sample stated that they recalled their dreams at least once a week; 29% of the T sample and 44% of the S sample stated that at least once a week they had a dream they would describe as "vivid."

Lucid dreams, which we defined in the questionnaire as "a special sort of dream in which you knew *during the dream* that you

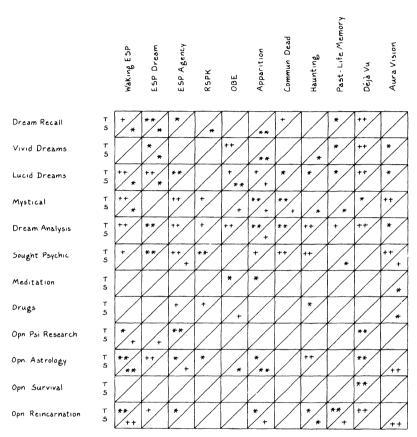


Fig. 1. Relationships between psi-related experiences and other experiences, activities, and opinions (*p < .05; +p < .01; **p < .001; ++p < .0001).

were dreaming and felt that you possessed all your waking faculties," were claimed by 56% of the T sample and 71% of the S sample. However, only 14% of the T sample and 29% of the S sample said they had such dreams more often than "rarely."

These items were generally good predictors of psi-related experiences,⁸ especially ESP experiences. Frequency of dream recall was significantly related to waking ESP experiences and ESP dreams in both samples. In the T sample, it was also related significantly to

⁸ From here on, the term "psi-related experiences" will also include experiences distinguished as "psychic"; i.e., those in category IA as well as IB.

ESP agency, communication with the dead, past-life memories, and $d\dot{e}j\dot{a}$ vu. On the other hand, it related significantly only to RSPK and apparitions in the S sample.

Vividness of dreams was not quite as reliable a predictor as frequency of dream recall. The only variable it related to significantly in both samples was ESP dreams, a finding that should be interpreted in the context of the fact reported above that respondents tended to rate their ESP dreams as more vivid than their ordinary dreams. Vividness also was significantly related to OBEs, past-life memories, déjà vu, and aura vision in the T sample, and to apparitions and hauntings in the S sample.

Whether or not a respondent had ever had a lucid dream was a strong predictor of psi-related experiences. This was especially true in the T sample, where it was significantly related to every psi-related experience except RSPK. In the S sample, it was significantly related only to waking ESP, ESP dreams, OBEs, and apparitions.

Mystical Experiences. The survey revealed that 28% of the T sample and 35% of the S sample claimed to have had "a profound and deeply moving 'spiritual,' 'mystical,' or transcendental experience." Of those claiming a mystical experience, about three-quarters said they had had more than one.

Mystical experiences were significatly related to waking ESP in both samples, but to ESP dreams in neither. This item also significantly predicted apparitions and communication with the dead in both samples. In addition, it significantly predicted ESP agency, RSPK, *déjà vu*, and aura vision in the T sample, and OBEs, hauntings, and past-life memories in the S sample.

Activities Related to Psi

Data for items in this section are also in Table 2 and Figure 1.

Dream Analysis. We asked our respondents the following: Have you "ever tried to remember or analyze your dreams for the guidance or insight they might give you?" This question was answered affirmatively by 36% of the T sample and 53% of the S sample. Fifty-nine percent of these respondents in the T sample found such analysis to be at least somewhat helpful, as compared to 49% of the S sample.

I was interested in this as a predictor of psi experiences, especially because it conceivably might separate out persons who had been in psychotherapy, and whose experiences might have some pathologic origin. We did not wish to approach this question directly for obvious reasons. Of course, an affirmative answer to this

question by no means necessarily implies psychotherapeutic experience.

This item did prove to be a very strong predictor of psi experiences, but only for the T sample. There was a significant relationship between reported self-analysis of dreams and every one of the 11 psi-related experiences for the T sample. For the S sample, this relationship was only significant for apparitions, although the other relationships tended to be in the positive direction.

Visits to Psychics. We asked our respondents whether they had "ever seriously sought information, help, or guidance" from a "medium, clairvoyant, or psychic," "palm reader," "astrologer," or "faith (or psychic) healer." The question was answered affirmatively by 10% of the T sample and 3% of the S sample. Interestingly, while 89% of those in the S sample who sought such help found it at least somewhat helpful, only 45% of the corresponding respondents in the T sample did.

Again, this item proved to be a better predictor of psi-related experiences in the T sample than in the S sample. It was significantly related in this sample to every psi-related experience except OBEs, past-life memories, and déja vu. In the S sample, it was significantly related only to ESP agency, past-life memories, and aura vision. The extreme marginal totals in these latter analyses, however, suggest some caution in their interpretation.

Meditation. We asked our respondents whether they had ever practiced meditation, in the sense of a "*formal* technique of stilling the mind." The question was answered affirmatively by only 6% of the T sample and 9% of the S sample. Meditation was described as at least somewhat helpful by 94% of those in the T sample who practiced it, and 82% of those in the S sample.

Meditation was not a strong predictor of psi-related experiences, although the direction of the relationship was almost always positive. It was significantly related to OBEs and apparitions in the T sample and to aura vision in the S sample.

Drugs. We asked our respondents whether they had "ever used 'mind expanding' drugs or medicines," and, if so, whether they had had any psi-related experiences while under their influence. We used this rather non-specific wording to avoid putting some of our respondents in the position of admitting the use of illegal substances. Although our survey was essentially anonymous, we did keep records of the names associated with the code numbers on the questionnaires until the solicitation phase of the project was completed.

The drug question was answered affirmatively by 7% of the T sample and 32% of the S sample. We suspect that the figure for the S sample is a gross underestimate of actual drug use. Whether this

resulted from a fear of legal difficulties, whether the term "mind expanding drugs" was interpreted by some as not including the milder hallucinogens such as marijuana, or whether some other factor is involved is unclear.

In any event, drug use was a surprisingly poor predictor of psi-related experiences, although relationships were generally positive. In the T sample, it was significantly related only to ESP agency and to witnessing of RSPK and haunting phenomena. (Again, caution is required here in interpreting this finding because of the extreme marginal totals on both variables.) In the S sample, drug use was significantly related to OBEs and aura vision. We suspect that the drug-OBE relationship is the explanation of why OBEs were significantly more prevalent in the S sample than in the T sample.

It also should be mentioned, however, that these relationships do not directly measure whether respondents who used drugs had psi-related experiences while under the influence of such drugs. Only 29% of the drug users said they had at least one psi-related experience under the influence of drugs; and 13% of the T sample who reported OBEs and 21% of the S sample who reported OBEs said they had at least one OBE under the influence of drugs.

Opinions on Psi-Related Topics

Frequency data for the opinion items are presented in Table 3 and their relationships to psi-related experiences in Figure 1.

Parapsychological Research. We asked our respondents to choose among a series of alternatives concerning their opinions about "the scientific study of psychic phenomena." The responses indicated that they had an overall positive attitude toward parapsychological research. Most respondents opted for the moderately positive response that since "mankind has recorded a long history of psychic experiences," science should study them so that "we may be able to discover some basic facts about them." However, only 11% of the T sample and 17% of the S sample agreed that "the discovery of the laws governing psychic phenomena will be one of the most important discoveries in the history of science." On the other hand, only 8% of the T sample and 9% of the S sample agreed that if psychic phenomena exist they are "probably of little value to mankind because they are so unpredictible" and that "science can probably not either prove or disprove them." Only a handful of respondents opted for the more extremely negative stance that the research is "a bunch of foolishness and nonsense" or that psychic phenomena "are probably the work of the devil."

As a predictor of psi-related experiences, this question related

Торіс	$T (N=354)^{a}$	$S (N = 268)^{a}$
Parapsychological Research		
Sinful	1	2
Foolish	3	0
Unfruitful	8	9
Meaningful	58	69
Important	11	17
No opinion	20	5
Astrology		
A certainty	3	2
A probability	8	6
A possibility	41	35
Unlikely	20	32
Untrue	17	24
No opinion	12	2
Survival		
A certainty	35	32
A probability	13	22
A possibility	29	27
Unlikely	8	13
Untrue	8	5 3
No opinion	7	3
Reincarnation		
A certainty	2	3
A probability	8	9
A possibility	29	34
Unlikely	24	31
Untrue	28	20
No opinion	10	3

Table 3 Percentage of Respondents Holding Various Opinions on Psi-Related Topics

Note: Figures in some percentage columns do not add up to 100 due to rounding error.

^a Sample size varies slightly from question to question due to non-responders.

primarily to items dealing directly with ESP. It was significantly related to waking ESP, ESP agency and $d\hat{e}\hat{j}\hat{a}$ vu in the T sample, and to waking ESP and ESP dreams in the S sample.

Astrology. Only 11% of the T sample and 8% of the S sample considered astrology to be probably or certainly true, while 37% of the T sample and 56% of the S sample considered it to be probably or certainly untrue.

Attitudes toward astrology did prove to be a relatively good predictor of psi-related experiences in both samples. It was significantly related to waking ESP, ESP agency, and apparitions in both samples. In addition, it was significantly related to ESP dreams, RSPK, haunting, and déja vu in the T sample, and to OBEs and

aura vision in the S sample. In neither sample was it significantly related to communication with the dead or past-life memories.

Survival. Forty-eight percent of the T sample and 54% of the S sample considered survival of death to be either probable or certain. In contrast only 16% of the T sample and 18% of the S sample considered survival to be unlikely or not true.

Belief in survival proved to be a very poor predictor of psirelated experiences. The only significant relationship was with $d\acute{e}ja$ vu in the T sample.

Reincarnation. The concept of reincarnation was considered to be probably or certainly true by 10% of the T sample and 12% of the S sample. It was considered unlikely or untrue by 52% of the T sample and 51% of the S sample.

Belief in reincarnation was a much better predictor of psi-related experiences than was belief in survival generally. The relationships with waking ESP, apparitions, hauntings, and (of course) past-life memories were significant for both samples. In addition, relationships with ESP dreams and ESP agency were significant for the T sample, and aura vision for the S sample.

Demographic Variables

Frequency data for these variables are listed in Table 4 and their relationships to psi-related experiences shown in Figure 2. Because these significant relationships are less frequent and also less obvious than those reported previously, they will be presented in somewhat greater detail.

Sex. The T sample was predominantly female (60%), while the S sample was predominantly male (66%). However, in neither sample was there a clear-cut sex difference for any of the psi-related variables. The closest approximation was the tendency for more females to have reported a waking ESP experience than males in the S sample (48% vs. 34%; p = .052).

Race. The T sample contained only 7% blacks and the S sample no blacks. There were too few Orientals in either sample to allow inclusion of this group in the analyses.

Generally speaking, whites and blacks did not differ in the proportions reporting psi-related experiences. However, a significantly higher percentage of blacks than whites reported having at least one ESP dream in the T sample (56% vs. 34%; p < .05).

Age. The age of our respondents in the T sample also proved to be a poor predictor of psi-related experiences. There was, however, a strong linear tendency for a greater percentage of younger persons than older persons to report $d\acute{e}ja$ vu experiences (p < .00001). The range was from 83% for those under 30 to 52% for

Item	$T (N=354)^{a}$	$S (N=268)^{a}$	
Sex			
Male	40	60	
Female	60	34	
Race			
White	92	98	
Black	7	0	
Oriental	1	2	
Age			
30 and under	26	99	
31-40	23	1	
41-50	23	0	
51-60	14	0	
61-70	10	0	
Over 70	3	0	
Birth Order			
Only child	11	6	
First born	27	27	
Second born	23	30	
Later born	39	37	
Marital Status	57		
Single	9	83	
Married	77	17	
Separated or divorced	7	0	
Widowed	7	0	
Politics	,	v	
Very conservative	5	1	
Conservative	22	11	
Moderate	52	46	
Liberal	18	34	
Very liberal	3	8	
Religion	5	o	
Protestant	74	50	
Catholic	5	16	
Jewish	2	10	
Atheist	28	21	
Other	11	10	
	11	10	
Religiosity Very religious	8	9	
	61	41	
Moderately religious	20		
Slightly religious Not at all religious	20	28 21	
	11	21	
Education (Highest Level)	15	0	
Grade school	15	0	
High school or trade school	28	0	
Some college (undergraduate)	16	63	
College graduate (Bach.)	22 19	0	
Post-graduate	19	37	
Occupation	1	100	
Student	4	100	
Blue collar	11	0	

 Table 4

 Percentage of Respondents in Various Demographic Categories

Item	$T (N=354)^{a}$	S $(N = 268)^{a}$	
Clerical	16	0	
Business	8	0	
Professional (Bach. degree)	14	0	
Professional (Advanced degree)	12	0	
Housewife	23	0	
Retired	7	0	
Other	5	0	
Income ^b			
Under \$5,000	11		
\$5,000-\$10,000	17		
\$11,000-\$15,000	27		
\$16,000-\$20,000	17		
\$21,000-\$30,000	17		
Over \$30,000	11	_	
-			

Table 4 (continued)

Note: Figures in some percentage columns do not add up to 100 due to rounding error.

^a Sample size varies slightly from question to question due to non-responders.

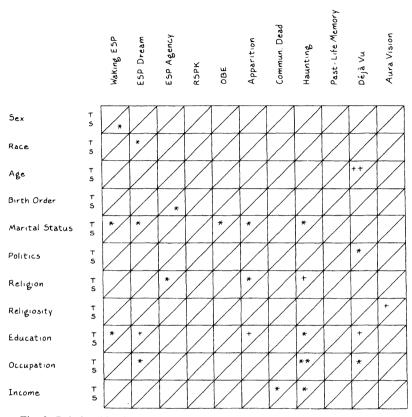
^b Figures for students are not included because some respondents interpreted the item as requesting parental income, while others did not.

those over 50. A similar trend was reported by McCready and Greeley (1976). This pattern is reinforced in our data by the fact that the incidence of $d\acute{e}j\grave{a} vu$ in the S sample, most of whom were under 30, was 88% (similar to the percentage of the "under 30's" in the T sample).

Birth Order. To assess birth order, we classified respondents as only children, first born, second born, or later born. Generally speaking, birth order was not a significant predictor of psi-related experiences. The one exception was ESP agency in the S sample (p < .05). This difference is attributable to the fact that 50% of the 14 "only children" reported ESP agency as compared to only 18% of the others. However, the small number of only children, the marginal significance of the relationship, and the failure of this variable to be a significant predictor of other related variables, suggest caution in interpreting the finding.

Marital Status. Respondents were classified as single, married, separated/divorced, or widowed. In the T sample, there was a general tendency for either the separated/divorced respondents and/or the widowed respondents to report a greater number of psi-related experiences than single or married respondents, but this trend was only significant for five of the 11 experiences. These were waking ESP (p < .05), ESP dreams (p < .05), OBEs (p < .05), apparitions (p < .05), and hauntings (p < .05).

The widowed were responsible for the effect primarily for the



244 Journal of the American Society for Psychical Research

Fig. 2. Relationships between psi-related experiences and demographic variables (*p < .05; +p < .01; **p < .001; ++p < .0001).

survival-related experiences. Compared to the single and married (combined) groups, the widowed had a high incidence of ESP dreams (60% vs. 33%), apparitions (37% vs. 15%), and hauntings (22% vs. 6%). The separated/divorced group had a relatively high incidence of waking ESP (67% vs. 36%), ESP dreams (50% vs. 33%), and OBEs (35% vs. 13%).

Politics. Respondents were asked to rate themselves on a fivepoint scale from "very conservative" to "very liberal." There was a slight trend for conservatives to report more psi-related experiences than liberals, but this was somewhat variable and never significant. At best, it is a weak trend. The only significant relationship was a tendency for liberals to report more déja vu experiences than conservatives in the T sample, (p < .02). Eighty-three

percent of those who rated themselves liberal or very liberal reported $d\dot{e}j\dot{a}$ vu, while only 61% of those who rated themselves conservative reported such experiences.

Religion. Respondents were classified as Protestant, Catholic, Jewish, atheist, or "other." In the T sample, the general trend was for those classified as "other" to report a relatively high incidence of psi-related experiences and those claiming to be atheists to report a relatively low incidence. Those classified as Jewish reported a low incidence in both samples. However, their numbers were only six and eight in the T and S samples, respectively, requiring extreme caution in drawing conclusions. These patterns were significant only for ESP agency (p < .05), apparitions (p < .05), and hauntings (p < .01).

Religiosity. Respondents rated themselves on a four-point scale from "very religious" to "not at all religious." Sixty-nine percent of the T sample and 50% of the S sample rated themselves as at least moderately religious. However, religiosity was a poor predictor of psi-related experiences, with no consistent directional trend evident. The only significant finding was a positive relationship between religiosity and aura vision in the T sample (p < .01).

The next three items all measure aspects of socio-economic status, and are highly confounded.

Education. The relationship between level of education and psirelated experiences in the T sample differed sharply for different types of experiences. Significant relationships were found with waking ESP (p < .05), ESP dreams (p < .01), apparitions (p < .01), hauntings (p < .05), and déjà vu (p < .01). For all these relationships except déjà vu, the higher incidence occurred among those with the least education.

Those who reported having no more than a high school education claimed a relatively high incidence of waking ESP and of apparitions. For waking ESP, the incidence in this group was 47% compared to 33% for the other respondents. The comparable figures for apparitions were 23% and 11%, this time including trade school graduates in the less educated group.

The effects for ESP dreams and hauntings were due primarily to those with just a grade school education. Sixty-one percent of this group reported at least one ESP dream, compared to 32% of the other respondents. The comparable figures for hauntings were 18% and 5%.

 $D\dot{e}j\dot{a}$ vu provided a reversal of this pattern, with the highest reported incidence (81%) among those with a graduate degree, and the lowest (48%) among those with only a grade school education.

There were no significant differences on any of the items between undergraduate and graduate students in the S sample.

Occupation. In the T sample, there were significant occupational differences for ESP dreams (p = .05), hauntings (p < .001), and $d\acute{e}j\acute{a} vu$ (p < .05). For ESP dreams and hauntings, there were noticeably high percentages among blue collar workers (50% and 23%, respectively). There was a low percentage of ESP dreams among respondents with advanced degrees (19%). For $d\acute{e}j\acute{a} vu$, this pattern was reversed. There was a high incidence of this experience among professional persons with bachelor or advanced degrees (80%) and a relatively low incidence among blue collar workers (50%).

Income. Total family income before taxes in the T sample was significantly related only to communication with the dead (p = .02) and hauntings (p < .02). In both cases, the trend of the relationship was generally negative, with the highest incidence (15% and 18%, respectively) among those earning less than \$5,000 per year. In both cases, however, there was a relatively high incidence (17% and 13%) among respondents earning between \$16,000 and \$20,000 per year that broke the general linear trend. Data on this variable are suspect in the S sample because it was not always clear whether respondents considered parents' income in their responses.

Sociological Factors

We asked our respondents whether any of their psychic experiences had ever saved them from "a serious or tragic event such as illness, severe emotional crisis, accident, or death." We also asked whether such an experience had ever saved another person in a crisis situation, or whether another person's psychic experience had saved the respondent. As can be seen in Table 5, less than 10% of the respondents in each sample answered these questions affirmatively. Nevertheless, the survey shows that a few respondents considered that at least one psychic experience with which they had been associated was useful in a practical way in a crisis situation.

Further, we asked our respondents whether any of the experiences they had reported had significantly influenced or changed any of their "feelings or attitudes," and also whether any of these experiences had significantly influenced or changed any of the "important decisions" they had made in their lives. As indicated in Table 5, the alternatives we listed for both these questions evoked varying responses. Among attitudes, those regarding the self, humanity, spiritual beliefs, life, and play were most frequently cited as having been changed. As for decisions, our data seem to indicate that psi experiences are most likely to affect one's life style, which