FRONTIERS

CREATIVE OR DEFECTIVE?

t the IONS international conference in September 2003, the Institute's research department conducted a pilot survey exploring relationships among bodily sensitivities, creative expression, transformational

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practices, and transpersonal experiences. From 500 returned questionnaires, we were able to determine predictors of transpersonal experience. By "transpersonal" I mean a broad brush of numinous experiences, everything from telepathy to encounters with angels or UFOs. We found that people are likely to have experienced some aspect of the transpersonal if they are (a) feeling types (as compared to thinking types), (b) practice one or more of the creative arts, (c) engage in some form of mental discipline (like meditation), (d) are open to unconventional claims, and (e) are interested in possibilities more than facts.

These factors resemble creative personalities in general, suggesting that the perceptions and experiences of the highly creative minority differ—sometimes dramatically—from the experiences and resulting worldviews and belief systems of the less creative majority.

Creative perceptions can be challenging to conventional minds. Indeed, from an orthodox perspective, creativity gone wild is synonymous with madness. For many academic psychologists, the public's persistent belief in the paranormal, for example, is explained by one of three hypotheses: ignorance, defect, and/or deprivation.

The "ignorance hypothesis" asserts that people believe in the paranormal because they're uneducated or stupid. The "deficiency hypothesis" asserts that such beliefs arise because people are mentally defective in some way, ranging from low intelligence or poor critical thinking ability to full-blown psychosis. The "deprivation hypothesis" proposes that these

beliefs exist to provide a way to cope in the face of psychological uncertainties and physical stressors.

Studies conducted to examine these hypotheses have produced mixed results. Some authors claim that their results show that paranormal beliefs do indeed provide a feeling of control over life's uncertainties, but that such control comes with a high price: the tendency toward dissociative experiences, anxiety, and more serious psychopathologies. Other investigators report complex relationships between personality factors such as extraversion and beliefs about precognition. Still others have examined traditional beliefs about the so-called "religious paranormal" (miracles as described in religious doctrine) versus the "secular paranormal" (telepathy or UFOs) and found no support for any of the traditional explanations. There have even been studies of belief and reported paranormal experiences among psychotic populations (both manic-depressives and schizophrenics) and healthy people. Again, no clear picture has emerged from these studies.

So perhaps there's another, simpler reason for the persistent belief in the paranormal: Maybe some of those experiences are real. And maybe the reason that creative people report higher levels of belief in the paranormal is that they see things that others don't.

A recent experiment supports this idea. In 2003, Harvard University psychologists Shelley Carson and Daniel Higgins, and University of Toronto psychologist Jordan

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Peterson, published an interesting study in *Journal of Personality and Social Psychology*. They examined a property known as *latent inhibition*, which refers to an unconscious process that degrades our future ability—and possibly our need—to pay attention to stimuli that have had no consequences in the past.

Imagine, for example, that Pavlov's dogs were exposed to ringing bells without being fed. The dogs will quickly learn to ignore ringing bells, because the sounds have no meaningful consequence (no association with food). Pavlov then decides to train his dogs to salivate whenever they hear a bell by ringing those same bells and then feeding them. Unfortunately, these dogs have already learned to ignore bells, so they're going to have a very hard time learning that there is now a meaningful association between bells and food. Dogs that hadn't previously heard the irrelevant bells will quickly learn to salivate.

Latent inhibition serves an important perceptual function in our brains. It allows us to talk on a phone, sip coffee, and drive a car on a busy highway, all at the same time and without a second thought. If we hadn't previously learned what is worth paying attention to while driving, we'd quickly become overwhelmed with information and paralyzed with uncertainty.

Latent inhibition is robust in healthy people, but when it goes wrong it can lead to serious problems. It has been studied extensively in schizophrenic patients because a key symptom of that disease is perceiving meaningful relationships everywhere, even when there aren't any. Distorted associations are associated with low latent inhibition because it reveals that the mind is having trouble ignoring irrelevant information. The 2001 movie *A Beautiful Mind*, about the life of Nobel Laureate John Nash, suggested how this might appear from a first-person perspective. The tagline for the movie was "He saw the world in a way no one could have imagined."

That line is also a good description of creative people in general, so perhaps they, too, exhibit low latent inhibition. Previous experiments have indeed shown that low latent inhibition is associated with the personality trait "open to experience," which is in turn associated with divergent thinking and creativity.

But not all creative people are, or become, psychotic. Carson, Higgins, and Peterson proposed that "some psychological phenomena might be pathogenic in the presence of decreased intelligence... but normative or even abnormally useful in the presence of increased intelligence." They tested this idea on Harvard undergraduates who were given creativity measures, IQ tests, personality tests, and a latent inhibition test. They found that the high-creativity group had significantly lower latent inhibition scores than the low-creativity group, and that the most eminently creative achievers (a subset of students who had published a novel, patented an invention, and so on) had both lower latent inhibition and higher IQ scores compared to the other students.

Their finding supports the well-known association between genius and madness. Highly creative people have greater access to more of what the world presents; high intelligence helps one successfully navigate through this flood of perceptions. Low intelligence struggles in vain, and the result may lead to psychosis. And even with high intelligence there is always the risk of becoming overwhelmed by a persistent state of expanded perception.

From this perspective, it is easier to understand why creative people report more psychic experiences, and why the paranormal is often associated with psychopathology. People who believe in the transpersonal are not necessarily

ignorant, mentally deficient, or deprived. They just see farther into the depths of the world than "normal" people do. Of course, for the sake of mental health, the trick for every creative person is learning how to peer comfortably into that abyss without becoming swallowed up by it.

DEAN RADIN, PHD IONS Senior Scientist

CONSCIOUSNESS AND HEALING: A CALL TO ACTION

ealthcare is in a time of crisis. Health insurance costs are skyrocketing while millions of people have no insurance at all. More and more people are seeking alternative treatments that most physicians are not well informed enough about to take part in. And a heavy reliance on technology has served to dehumanize healing. Indeed, there is growing frustration and despair among health professionals and consumers alike. In the halls of hos-

pitals, clinics, and conferences, the question keeps echoing: Has medicine lost its soul?

IONS continues to be a voice for positive change in society, of which healthcare is a vital part. In our

efforts to answer the call to action, we have initiated a series of research and educational programs around a consciousness shift in medicine. These include a new book, a series of transformational learning programs, and research that addresses the role of consciousness in health and healing.

In our new book, Consciousness and Healing: Integral Approaches to Mind-Body Medicine (Churchill Livingston/Elsevier, 2005), we offer a possible roadmap for healthcare in the 21st century. Consciousness and Healing is a collection of 47 essays that integrate mainstream

medical knowledge with recent developments in the emerging areas of frontier sciences and insights from alternative healing perspectives. It promotes a model of healing in which personal relationships, emotions, meaning, and belief systems are viewed as fundamental points of connection between body, mind, spirit, society, and nature. Integral medicine embraces the recognition that human beings possess emotional, spiritual, and relational dimensions that are essential in the diagnosis and treatment

of disease and the cultivation of wellness.

We are also answering the call to action by sponsoring a series of transformational learning programs on consciousness and healing. It is our intention to encourage

health professionals and patients alike to consider the view that the scientific quest is incomplete without data from many domains of inquiry, and that human transcendence can occur in the face of illness and disease.

From April 2 to 8, 2005, we will be offering a learning program for health professionals to explore the transformation that is needed to change medicine for the better. Faculty include Dean Ornish, Elliott Dacher, Sylver Quevedo, myself, and others.

We have also launched a new series of online experiments called the "Halls of Healing." Here participants have

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the opportunity to experiment with their own intuitive diagnostic abilities, intentionality and healing, and the role of attention. Beneath the game-like interface are scientific experiments about the role of consciousness in

affecting the physical world. To play these new games, visit IONS' website at www.noetic.org.

> MARILYN SCHLITZ, PHD Vice-President for Research and Education (**)



CONSCIOUSNESS AND HEALING: INTEGRAL APPROACHES TO MIND-BODY MEDICINE

(Churchill Livingston/Elsevier, 2005)

BOOK REVIEW BY DORIS LORA

"If I only had a heart," the Tin Man laments in The Wizard of Oz. All the while he is unaware of the deep compassion already infusing his own behavior. Lest we think that modern medicine has completely lost its heart—and its practitioners their humanity—in a system gone mad, a recently released book highlights the research and insights of healing experts who not only speak from their science, but also from their compassionate hearts.

Opening with Ken Wilber's brilliant introduction calling for "more effectively setting the stage for the extraordinary miracle of healing," followed by Marilyn Schlitz's eloquent, articulate statements inviting us into the emerging consensus of an integral medicine, Consciousness and Healing had my adrenaline pumping within the first few pages.

Schlitz and her co-editors Tina Amorok and Marc Micozzi state that the goal of integral healing is to bring into awareness a health and healing model that, in addition to using the best strategies of physical science, recognizes "personal relationships, emotions, meaning, and belief systems as fundamental points of connection" to the physical body. To that end, these essays and accompanying DVD geared to the academic and layperson alike offer both a sympathetic critique of the prevailing medical paradigm and a variety of well-researched alternatives that specify the role of conscious awareness in healing. Contributors range from such experts in the medical field as Deepak Chopra, Dean Ornish, Candace Pert, Larry Dossey, Jon Kabat-Zinn, Stanislav Grof, and Rachel Naomi Remen to a multiethnic group of scientists, philosophers and healers, including William Braud, Thomas Berry, Willis Harman, Michael Lerner, Brian Swimme, Honglin Zhang, Sogyal Rinpoche, Nancy Maryboy, and IONS' own James O'Dea.

How many physicians and nurses realize that they do not need formal training in "spirit nurturing," a key ingredient of integral medicine? As hinted at in this collection of essays, being a "human, comma, being" automatically forges a heart-to-heart connection with each patient. Healing happens by being present and letting go. Add to this a physician's up-to-date medical knowledge and modern medicine's technological wizardry, and we have the potential for dynamite integral healers.

This book demonstrates connection and cooperation between all health providers and their patients, which oils the mechanism of courageous change. Contributors compassionately report their careful observations of what works and what doesn't in the healing arts. Through this approach, conventional and complementary healers alike are encouraged to step up to the uncertain adventure of transformation of consciousness, a concept made less daunting and esoteric as one experiences the heartfelt personal accounts, simple daily exercises, and multitude of empirical data this book offers.

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