

Opening Skinner's Box Causes Controversy

March 01, 2006

A team of behavioral researchers has published a study that questions the authenticity of a chapter from Lauren Slater's book, *Opening Skinner's Box*, in which the author resurrects a volatile experiment that for years damaged the public's faith in psychiatric assessment. In the November 2005 issue of the *Journal of Nervous and Mental Disease*, Robert Spitzer and his co-authors were unable to confirm Slater's re-creation of David Rosenhan's 1973 experiment, in which people feigned psychosis to get into mental hospitals. A rebuttal written by Slater argues that the researchers are inappropriately using academic research to criticize a book from the popular press.

The controversy dates back to Rosenhan's paper, "On Being Sane in Insane Places," which appeared in *Science*, about eight pseudo-patients who gained admission into mental hospitals by pretending to hear voices saying "empty," "hollow," or "thud." With one exception, the pseudo-patients were diagnosed with schizophrenia, despite behaving regularly in every other way. They were confined for an average of 19 days, with one participant remaining stuck for 52. Doctors labeled the patients "in remission" upon release — a stigma that can follow a person throughout a lifetime. Rosenhan, who was among the pseudo-patients, concluded that psychiatric diagnoses might exist as much in the minds of the observer as in the behavior of the observed.

Psychiatrists erupted with indignation over Rosenhan's experiment. "It was an embarrassment," said Spitzer in an interview at his laboratory on the medical campus of Columbia University. The uproar lingered until about 1980, when the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* — a project that Spitzer directed — increased diagnostic rigidity. But Rosenhan's study remains a scar on the field, and sometimes even finds its ways into general psychology textbooks. "Many people still interpret the Rosenhan paper as the diagnostic process being so arbitrary that it's meaningless," says Scott O. Lilienfeld, Emory University, who co-authored the 2005 study with Spitzer.

In Slater's book — which looks at great psychological studies from the 20th century — she reports that Spitzer told her that Rosenhan's experiment could never be recreated, given the improved guidelines of the DSM-III. After this discussion, the incredulous Slater enters an emergency room and tells a doctor that she's heard a voice say "thud." During her nine total visits, Slater is "prescribed a total of 25 antipsychotics and 60 antidepressants" and, in "most" cases, receives a diagnosis of "depression with psychotic features." Slater then calls Spitzer to share her results, telling him: "The zeal to prescribe drives diagnosis in our day, much like the zeal to pathologize drove diagnosis in Rosenhan's day."

Fearful that the chapter could be interpreted as a re-validation of Rosenhan's paper, Spitzer, Lilienfeld, and Michael Miller, University of Minnesota, studied Slater's conclusions. The researchers sent a vignette describing Slater's symptoms to 431 emergency room psychiatrists and asked each to make a diagnosis. Of the 73 respondents, 86 percent ruled out "psychotic depression" — the diagnoses Slater most commonly received. About one-third of the respondents recommended antipsychotic medication, but none recommended an antidepressant.

“It’s not true that diagnostic entities are not measurable,” Lilienfeld said. “The very fact that the DSM continues to evolve and improve is evidence of [its] self-correcting nature. It’s dangerous to mental health consumers to imply that diagnosis is as arbitrary as Slater seems to imply it is.”

In her rebuttal to the November 2005 article, Slater accuses behavioral researchers of ganging up on her, thanks them for giving her book publicity, and argues that the chapter cannot be considered a study. Slater, who chose not to comment for this story, insists in her rebuttal that the book should not be taken as a scientific text, calling her colorful characters and personal involvement “enough to make abundantly obvious to any and all readers that we are not here dealing with an academic inquiry.” She also contends that Spitzer’s study wastes public tax dollars. Spitzer called the study a “low-cost questionnaire” and believes the implications of a valid Rosenhan recreation merited the research.

“What’s so amazing and upsetting is, of all the reviews [of the book], there wasn’t one that said, ‘Gee, that Rosenhan chapter was strange,’ ” says Spitzer. “None of those readers were psychiatrists with any experience. Anyone would know there’s no way you’d give a diagnosis of ‘psychotic depression’ based on a single voice saying ‘thud.’ ”

The journal article says that educators could include the chapter in classroom study, and that the general public could interpret it as a sign of diagnostic decline. “These books do shape popular opinion about psychology,” Lilienfeld said. “All one has to do is look at Dr. Phil. They have shaped the popular opinion of psychology far more than all of our peer review journals put together.”

Spitzer, who in 1976 published what many consider the definitive critique of Rosenhan’s study, also disputes a scene from Slater’s book where he is told that Rosenhan has severe health problems and remarks, “That’s what you get for conducting such an inquiry.” Spitzer says he does not recall that part of his conversation with Slater, which took place over the phone, but that if he did say such a thing he meant it in a joking way.

Spitzer says the chapter contains other inaccuracies that could be interpreted as a validation of Rosenhan. Skeptical that Slater received so much medication — a total of 85 prescriptions — Spitzer said he had his sister write a letter to the book’s editor and found that Slater had actually been referring to the number of pills, though this distinction is unclear in the text. In the book, when Slater tells Spitzer she received Risperdal, Spitzer is quoted saying the drug is a “very light antipsychotic” in an attempt to downplay the prescription. But Spitzer says he could not have made such a response because “there’s no such thing as a light antipsychotic.”

Other behavioral researchers have questioned the book’s accuracy. Among them, Elizabeth F. Loftus, University of California, Irvine, who had an entire chapter devoted to her prominent memory research, wrote a letter to the president of W. W. Norton, the book’s publisher, in February 2004 listing 10 examples of “extremely serious” errors. Among them, Loftus denies being called a “whore” at an airport and insists that her house has never been egged despite a vivid description of “yolks drying to a crisp crust” on a window.

The contention was not always so heated. In a letter to Spitzer dated February 26, 2004, Slater apologizes for any distress the chapter might have caused him. She defends her reporting but suggests that future versions of the book would remove Spitzer's remark about Rosenhan, inserting in its place a paraphrased comment that "Spitzer doesn't say or much sound sorry" when he hears of Rosenhan's poor health. The tone changed two months later, when Slater's attorney sent Spitzer a letter accusing him of "a campaign to impugn Ms. Slater's reputation" and threatening legal action.

Slater is described in various bio sketches as having a master's degree in psychology from Harvard and an EdD from Boston University. She has won writing awards for creative nonfiction and has taught creative nonfiction writing at Goucher College. She has published several books, including *Prozac Diary*, and *Lying: A Metaphorical Memoir*. In her rebuttal, she says that she writes for "fashion magazines almost exclusively," though she has also written for *The New York Times Magazine*.

Spitzer points out that Slater's recreation contains key divergences from Rosenhan's original study. She did not shower or brush her teeth before going to the emergency room and she wore a t-shirt bearing the words "I hate my generation" to at least one of the hospitals. Even if Slater had repeated the study exactly, Spitzer believes that Rosenhan's paper had flaws of its own. "He claimed all but one patient was diagnosed as schizophrenic, which is possible," says Spitzer. "But a diagnosis of 'schizophrenic in remission' when discharged is practically never used." Spitzer says he called record rooms of several hospitals to confirm this point.

One of Rosenhan's original pseudo-patients, Harry Lando, University of Minnesota, said he bathed and brushed regularly in the days leading up to the experiment. Lando received a diagnosis of "chronic undifferentiated schizophrenia," which was consistent with the other pseudo-patients, but he found his hospital visit a more pleasant experience than the ones Rosenhan describes in the study. Ironically, Lando said his data were not included in the paper because Rosenhan felt Lando had falsified aspects of his personal history. "A day before I went into hospital, I went over [my story] with Rosenhan, and he didn't object," Lando says. "He never told me why I was left out."

In addition to Spitzer's study and Slater's rebuttal, the journal published a response to the rebuttal to the rebuttal written by the authors, as well as a commentary from Mark Zimmerman, who reviewed Spitzer's paper for publication. Zimmerman, who is the director of outpatient psychiatry at Rhode Island Hospital, acknowledged that vignette research has limitations but decided that the research could add to the larger discussion of the method's validity. "You're trying to generalize from reading the vignette to what's going on when a patient's in front of you," Zimmerman said recently. "If their vignette method is so flawed as to render their study meaningless, it raises the question of whether any study based on vignette can be meaningful."

In his commentary, which agrees with Spitzer's findings, Zimmerman disputed Slater's theory that hospital doctors prescribed her medications and then tossed in a diagnosis, as if for ballast. "It becomes fairly clear to me that medication drives the decisions," Slater writes in the book. That conclusion is inaccurate, as far as Zimmerman can tell, in part because many medications can treat disorders beyond their primary purpose. This common practice, known as "off-label" prescribing, suggests that psychiatrists wouldn't need to adjust diagnoses to fit the prescription.

Spitzer, Lilienfeld, and Zimmerman each voiced disappointment with Slater's refusal to provide the

researchers with hospital records that could be used to evaluate her findings. “If, in fact, [Slater] did replicate Rosenhan, she has an obligation to report this,” says Zimmerman, “because this is very disconcerting for the field.”