

Alice exhibited a bewildering array of problems when she entered psychotherapy. At least three separate conditions in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) — the bible of psychiatry — applied to the 24-year-old woman. Unfortunately, each diagnosis held different implications for how best to help her.

Frequent eating binges followed by induced vomiting qualified Alice for a diagnosis of bulimia. But she also heeded destructive urges to abuse a wide variety of drugs and to seek anonymous sexual encounters, felt intensely self-conscious, careened between anxiety and depression, and showed other signs of what DSM labels borderline personality disorder. And to complete the triple whammy, her extreme inhibition and timidity supported a diagnosis of avoidant personality disorder.

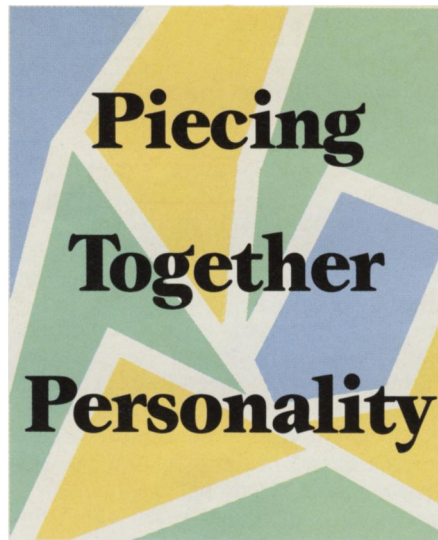
Faced with this morass of distress, Alice's therapist, psychologist Cynthia G. Ellis of the University of Kentucky in Lexington, took a heretical step: She abandoned DSM's guiding principles and instead evaluated her client's behavior, feelings, and motivations along five broad dimensions. This allowed the psychologist to characterize Alice as displaying a single personality disorder marked by introversion and excessive neuroticism — in Alice's case, primarily impulsive acts, emotional vulnerability, and depression.

Ellis then composed a treatment plan. First, she dealt with Alice's immediate symptoms of bulimia. Then, over the next 2½ years, therapy sessions began carefully to explore Alice's longstanding fears of emotional intimacy and their reverberations in her life.

A minority of psychotherapists would take this dimensional approach to treating Alice or anyone else whose personality somehow goes seriously awry. But an increasingly vocal group of scientists is pushing for official recognition of dimensional techniques — particularly the five-factor model employed by Ellis.

"There may never be a consensus on how to define and measure personality," asserts University of Kentucky psychologist Thomas A. Widiger. "But there's enough support for the five-factor model to indicate that it provides a useful point of departure for understanding personality disorders."

In 1980, the DSM's authors elevated personality disorders to a status alongside so-called symptom disorders, such as depression and schizophrenia. In a single stroke, certain personality traits — enduring ways of behaving, perceiving, and thinking about oneself and others — coalesced into medical disorders that lay across a theoretical Rubicon from "normal" personalities. Clinicians diagnose personality disorders



Psychological research presents a challenge to psychiatric diagnosis

By BRUCE BOWER

alone or in combination with symptom disorders. However, the frequency with which personality disorders occur in the general population is unknown.

Widiger served on the task force that developed definitions of the 11 personality disorders in the current DSM and of the 10 that will be retained in the fourth edition, or DSM-IV, slated for publication by the American Psychiatric Association later this year. An appendix in DSM-IV will list two additional personality disorders deemed worthy of further study.

Although many DSM diagnoses have sparked debate, personality disorders quickly achieved the dubious distinction of arousing the most intense controversy. Psychiatrists and other mental health workers disagreed over which personality defects truly belonged in DSM, and tempers flared over proposed diagnoses that carried social and political overtones, such as the self-defeating and sadistic disorders (SN: 2/25/89, p.120).

Studies also found that clinicians often disagreed about which personality disorder to assign to a given individual. Some reports noted that people displaying severely disturbed personalities met DSM criteria for an average of four different personality disorders, a sure recipe for clinical confusion.

As psychiatrists grappled with these issues, psychologists undertook intensive studies of individual differences in personality traits for the first time in more than 20 years. This work had fallen out of favor during the 1960s and 1970s, which featured behaviorists' examinations of conditioned responses to various rewards and punishments and social psychologists' emphasis on how specific sit-

uations mold thoughts and behaviors.

Amid the current resurgence of personality research, some psychologists contend that attempts to chart unchanging traits fail to illuminate the ways in which the same personality changes from one social situation to another. Others argue that individuals construct multiple selves, a theory that questions the entire notion of stable, measurable personalities.

Nevertheless, trait theories of personality — exemplified by the five-factor model — enjoy considerable prominence. Their proponents treat personality disorders as instances in which traits that are present to some degree in all people reach inflexible and harmful extremes. DSM's partitioning of personality disturbances into medical conditions ignores the underlying links between well-functioning and disrupted personalities, these researchers hold.

The five-factor model focuses on the extent to which personality traits vary across five broad dimensions: neuroticism, or proneness to various forms of psychological distress and impulsive behavior; extroversion, the tendency to seek interactions with others and feel joy and optimism; openness to experience, a measure of curiosity, receptivity to new ideas, and the ability to experience emotions; agreeableness, which indicates the extent to which someone shows both compassion and antagonism toward others; and conscientiousness, the degree of organization and stick-to-itiveness regarding personal goals.

One set of questionnaires to measure these traits comes from studies of adjectives used to describe personality. Factor analyses, which mathematically divvy up such adjectives into as few coherent groups as possible, identified five independent personality dimensions as early as 1934. In the January 1993 *AMERICAN PSYCHOLOGIST*, Lewis R. Goldberg, a psychologist at the University of Oregon in Eugene, describes attempts to develop ratings scales for the five factors based on factor analysis.

Perhaps the bulk of research now focuses on one particular questionnaire inspired by the five-factor model. Paul T. Costa Jr. and Robert R. McCrae, both psychologists at the National Institute on Aging's Gerontology Research Center in Baltimore, devised this instrument to elicit self-reports as well as observations by spouses, peers, and clinicians. It consists of 181 statements that describe personality attributes; those who complete the questionnaire rate their level of agreement with each statement on a scale of 0 to 4.

Costa and McCrae's questionnaire breaks down each of the five factors into a number of component parts, or facets. An overall neuroticism score, for instance,

consists of items that provide separate measures for anxiety, hostility, depression, self-consciousness, impulsiveness, and emotional vulnerability.

Studies of large groups administered this questionnaire indicate that numerous personality traits and factors proposed by other scientists – which have often created a sense of disarray in personality research – fall within the bounds of the five-factor model, Costa and McCrae argue.

On the heels of these findings comes a book in which researchers and clinicians apply the five-factor model to personality disorders. Costa and Widiger edited the volume, titled *Personality Disorders and the Five-Factor Model of Personality* (1994, American Psychological Association).

One chapter describes research supporting the view that the five-factor model accounts for both broken-down and finely tuned personalities. Directed by Lee Anna Clark, a psychologist at the University of Iowa in Iowa City, this work finds that people diagnosed with various personality disorders stretch one or more of the five basic traits to maladaptive extremes.

Clark's group administered trait questionnaires developed by Goldberg, Costa and McCrae, and her own scales derived from DSM criteria for personality disorders to groups of college students and psychiatric patients. All three inventories, particularly the one informed by DSM symptoms, accurately identified people in each population who suffered from personality disorders, Clark contends.

More specifically, in cases of borderline personality disorder, data on the five factors gleaned from Costa and McCrae's questionnaire offer valuable insight to clinicians, according to Cynthia Sanderson and John F. Clarkin, both of Cornell University Medical College in New York City. In a study of 64 women assigned this diagnosis, Sanderson and Clarkin find extremely high levels of neuroticism, as evidenced by anxiety, depression, self-consciousness, and a wide range of impulsive behaviors.

The same women also display low conscientiousness, reflected in aimlessness and a lack of clear goals, and low agreeableness, marked by cynicism, vengefulness, and constant attempts to manipulate others. Not surprisingly, psychotherapists encounter many difficulties in treating borderline personalities and need to monitor their problem traits from the start, the researchers maintain.

Widiger, Costa, and their colleagues propose five-factor profiles of each DSM personality disorder. Their profile of paranoid personality disorder, for instance, stresses excessively low agreeableness, characterized most strongly by suspiciousness and antagonism. Hostility, one facet of neuroticism, also shows

up consistently in people diagnosed with this disorder, they contend.

Agreeableness also plummets in both narcissistic and antisocial personality disorders, the researchers note. The exorbitant self-importance and arrogance typical of the former condition translate into low scores on the agreeableness facets of modesty, altruism, and empathy, they assert. The latter disorder, marked by repeated criminal, aggressive, and irresponsible acts, features low altruism



Viola Frey, *Big Man*, 1990-1991, Courtesy Nancy Hoffman Gallery, New York

and a copious supply of extroversion, particularly as measured by items that signal a constant need for excitement and sensory stimulation.

Five-factor descriptions of paranoid personality disorder and other diagnoses that involve odd or eccentric behavior may be improved by rewording the openness-to-experience items to address such peculiarities directly, Widiger says. Auke Tellegen, a psychologist at the University of Minnesota in Minneapolis, has completed such a revision and changed the name of the dimension from “openness-

to-experience” to “unconventionality.”

Unlike its predecessor, Tellegen's unconventionality scale assesses, for instance, the tendency to read hidden and threatening meanings into others' remarks, one symptom of a paranoid personality. This scale also considers the magical thinking and perceptual illusions that often characterize schizotypal personality disorder.

Tellegen also proposes adding two new factors to the five-factor model; these tap into highly negative and positive qualities attributed to the self, such as a propensity for evil, treachery, excellence, and superiority.

A more far-reaching challenge to the five-factor model comes from research directed by C. Robert Cloninger, a psychiatrist at Washington University School of Medicine in St. Louis. In the December 1993 ARCHIVES OF GENERAL PSYCHIATRY, Cloninger and his coworkers describe the seven dimensions that they deem crucial to understanding healthy and disordered personalities.

Four dimensions account for temperament: novelty seeking, harm avoidance, reward dependence, and persistence. Individuals largely inherit their temperamental styles, which are triggered by perceptions of their surroundings, Cloninger's group theorizes. Temperament orchestrates the habitual behaviors that a person carries out unthinkingly throughout the day, they suggest.

The St. Louis scientists also devised three character dimensions: self-directedness (a measure of commitment to goals and purposes), cooperativeness, and self-transcendence (associated with deeply held spiritual beliefs and feelings of connection with nature or the universe). Character development leans heavily on a conscious sorting out of one's memories and experiences, the investigators argue. This process picks up steam during adulthood as misfortunes and death more frequently intrude on people's lives, they note.

Cloninger and his colleagues administered a true-false questionnaire consisting of 107 temperament items and 119 character items to 300 psychologically healthy adults. Volunteers ranged in age from 18 to 91. The seven personality dimensions clearly emerged in the sample, they contend. Character dimensions assumed increasing importance and complexity in older age groups.

The researchers also obtained questionnaire responses from 66 psychiatric patients who ran the gamut of DSM personality disorders. Low self-directedness and low cooperativeness emerge as core features of all personality disorders, they report. Moreover, each personality disorder displays a unique pattern of temperament and character scores, the investigators contend.

Most clinicians, and particularly psychiatrists, who deal with people suffering from personality disorders remain skeptical of the five-factor model and other dimensional measures of personality.

Theodore Millon, a psychiatrist at Harvard Medical School in Boston, considers it best to view the symptoms that make up each DSM category as a prototype, or most typical example, of that personality disorder. Individuals assigned the same diagnosis usually differ to some degree from the prototype, Millon asserts.

So, for example, a diagnosis of borderline personality disorder may apply to someone exhibiting five of the eight required symptoms listed in the current DSM. Other cases of borderline personality disorder may include more than five symptoms and may feature shifting mixes and different intensities of the various symptoms.

In this approach, the personality disorders shade into one another as they veer farther away from their prototypes. Clinicians must determine the degree to which a person's symptoms match prototypes of relevant personality disorders in order to come up with a primary diagnosis, Millon argues.

Dimensional models deal with surface characteristics that may only illuminate the few personality disorders that create

moderate problems, adds John G. Gunderson, a psychiatrist at McLean Hospital in Belmont, Mass. Severe personality disorders, including borderline and antisocial disorders, occur most frequently and involve complex underlying problems that elude trait questionnaires, Gunderson asserts.

Other psychiatrists harbor more practical concerns. Although the dimensional approach holds much promise for analyzing personality disturbances, its acceptance and sophisticated use by clinicians "will require a monumental educational effort," according to Allen J. Frances of Duke University Medical Center in Durham, N.C. Frances directed work on DSM-IV.

What's more, notes five-factor proponent Thomas Widiger, many clinicians fear that discarding DSM categories for a dimensional focus on normal traits gone bad will result in denial of insurance coverage for treatment of serious personality disturbances.

Ongoing research aims to establish cutoff points at which scores on five-factor questionnaires signify major personality problems, Widiger says. Some psychologists have proposed that the American Psychological Association issue a rival DSM that takes this approach. Widiger, however, hopes that the next edition of DSM will include the five-factor

model as a supplement to traditional personality disorder categories.

DSM-IV includes a statement acknowledging the existence of several dimensional models of personality but fails to recommend any of them for clinical use, Widiger says.

Michael H. Stone, a psychiatrist at Columbia University, would welcome a hybrid approach to treating personality disturbances.

"Sophisticated clinicians use both categories and dimensions all the time in thinking about their patients," Stone asserts. "But psychiatrists have largely ignored the research of personality psychologists."

In a book titled *Abnormalities of Personality* (1993, W.W. Norton), Stone lists 500 negative and 100 positive personality adjectives that he considers components of the five-factor model. He often administers to his patients questionnaires that inquire about these qualities; the results greatly assist in diagnosis and treatment planning, he says.

For the most part, though, psychiatrists prefer that personality dimensions take a backseat to DSM's personality disorders. "The general psychiatric public may not be ready for a sea change in diagnostic practice," Stone contends.

But true to form, personality disturbances continue to make waves. □

**To order by phone, call:
1-800-544-4565**

(Visa or Mastercard Only)
In D.C. Area: 202-331-9653

Addison Wesley, 1993, 109 pages,
5 1/4" x 8 1/4", paperback, \$12.95

"It took me over forty years to learn from experience
what can be learned in one hour from this guide."
— Carl Djerassi

A Ph.D. Is Not Enough!

A Guide to Survival in Science

Shrewd Advice for Aspiring Scientists:

- * Choose a career path and the right advisers
- * Establish an identity; communicate effectively
- * Win a research job and keep it
- * Select a viable research program; get it funded

An invaluable pocket mentor!

Peter J. Feibelman

Despite your graduate education, brainpower, and technical prowess, your career in scientific research is far from assured. Permanent positions are scarce, science survival is rarely part of formal graduate training, and a good mentor is hard to find. This exceptional volume explains what stands between you and a fulfilling long-term research career. Bringing the key survival skills into focus, *A Ph.D. Is Not Enough* proposes a rational approach to establishing yourself as a scientist. It offers sound advice on selecting a thesis or postdoctoral adviser, choosing among research jobs in academia, government laboratories, and industry, preparing for an employment interview, and defining a research program. This book will help you make your oral presentations effective, your journal articles compelling, and your grant proposals successful. *A Ph. D. Is Not Enough* should be required reading for anyone on the threshold of a career in science.

—from Addison Wesley

Science News Books, 1719 N Street, NW, Washington, DC 20036

PhDNotEnough

Please send me _____ copy(ies) of *A Ph. D. Is Not Enough*. I include a check payable to Science News Books for \$12.95 plus \$2.00 postage and handling (total \$14.95) for each copy. Domestic orders only.

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____

(used only for problems with order)

RB2022