

Chapter 7. Disposition

It is often claimed that creativity entails personality disposition than just a cognitive capacity, a claim that is examined in the current chapter. Do great psychologists exhibit a characteristic set of personality traits, whether motivational or social? A complete response to this question leads to a treatment of the "mad-genius" issue, a classic controversy that assumes an ironic form when applied to psychology's history. Did the principal figures in the emergence of psychology have an inclination toward psychological disorders?

H. Simon, Wolfgang Köhler, and Max Wertheimer vs.

Sigmund Freud, Carl Rogers, Abraham Maslow, R. B. Cattell, and Hans Eysenck

Creativity as intellect vs. creativity as personality (Barron & Harrington, 1981; Dellas & Gaier, 1970; Simonton, 1999a).

- I begin by examining the diverse traits that have been associated with the attainment of eminence in psychology.
- I continue by discussing a specific issue that has provoked much controversy, namely whether creative geniuses have any tendency towards psychopathology.

TRAITS

“every man is in certain respects (a) like all other men, (b) like some other men, (c) like no other men” (Kluckhohn & Murray, 1953, p. 53).

That precaution in mind, the distinctive attributes of great psychologists may be said to fall into two broad categories,

- the motivational and
- the social.

Motivational Attributes

“Great men have great ambitions,” claimed one history text (Lowry, 1982, p. 86), and the research literature concurs. Those who leave a mark on history almost invariably exhibit a profound desire to excel, intimately coupled with the necessary drive and persistence to achieve the desired excellence (Ebersole & DeVogler-Ebersole, 1985; Walberg, Rasher, & Parkerson, 1980).

Cox (1926) conducted the first empirical demonstration of this motivational attribute. She first abstracted from her original 301 geniuses a subset of 100 eminent creators and leaders for whom the biographical data was especially rich.

- The resulting subsample included several notables from psychology’s history, like Francis Bacon, Descartes, Newton, Leibniz, Locke, Benjamin Franklin, Rousseau, Kant, Goethe, Hegel, J. S. Mill, and Charles Darwin.
- Two independent judges then evaluated these luminaries on 67 character traits, as compared against other children their age.
- The 100 were distinguished by such attributes as “persistence,” “tenacity of purpose,” “perseverance in the face of obstacles,” “ambition,” and the “desire to excel.”
- Cox found evidence that this motivational attribute may prove more crucial than intellectual capacities. In particular, “high but not the highest intelligence, combined with the greatest degree of persistence, will achieve greater eminence than the highest degree of intelligence with somewhat less persistence” (p. 187, italics removed).

Admittedly, Cox’s (1926) pioneer study suffers from several drawbacks. Even so, the same general conclusions come from studies that use contrasting samples and methods.

- In science, not only are scientists more achievement oriented and driven, but the more eminent scientists are more driven, achievement oriented, and ambitious than are their less distinguished colleagues (Feist & Gorman, 1998).
- Those studies that focus only on psychologists also demonstrate the significant role that exceptional motivation has in the attainment of distinction within the discipline (Wispé, 1963).
 - One investigation found that the assessed achievement strivings of more than 100 contemporary psychologists were positively correlated with both the number of publications and the rate of citation within the discipline (Helmreich, Spence, & Pred, 1988).
 - Another survey of nearly 200 personality and social psychologists showed that publications and citations were both positively associated with orientations toward work and mastery (Helmreich et al., 1980). That is, higher influence on the field is associated with the tendency to endorse such questionnaire items as “I like to work hard” and “I more often attempt tasks that I am not sure I can do than tasks I believe I can do” (p. 899).

Apparently, the prolific output and productive longevity discussed at great length in chapters 3 and 4 is to a very large extent a function of the exceptional motivation notable psychologists bring to bear on their work (Blackburn, Behymer, & Hall, 1978).

This drive takes the most concrete form of the exceptional amount of time they are willing to devote to research (Manis, 1951).

- Illustrious researchers usually spend 8-10 hours per day for 300-332 days per year (R. J. Simon, 1974).
- Great psychologists are no exception. As noted earlier, E. G. Boring could be placed in the upper ranks of highly productive psychologists. It should come as no surprise, then, to read the following passage in his autobiography:

I do drive perpetually for long-range goals, and my friends, my children, and my students know how I have talked about the eighty-hour week in the fifty-week year (the 4000-hour working year) and I have scorned those forty-hour academicians who take long summers off from work. I have no hobbies, except for a shop in my cellar. My vacations were never successful until I got a little study with a typewriter in it and I could answer eight letters a day and write up the waiting papers. (E. G. Boring, 1961, p. 14)

Boring's time commitment does not even represent the high point in the distribution of effort. Herbert Simon once reported to a colleague that he "spent about 100 hours per week for years doing the work for which he eventually won the Nobel Prize" (Hayes, 1989a, p. 137).

How do these luminaries even attain that magnitude of daily involvement in their research?

- Vladimir Bekhterev, the illustrious Russian psychiatrist, authored around 600 publications by working 18 hours per day, allotting only 5 hours of the remaining 6 to sleep. He would also accomplish a large amount of writing in bed, his wife sleeping next to him.
- Another bedtime worker was Edward L. Thorndike, who averaged about a publication per month. According to his son, the psychologist Robert L. Thorndike (1991), the father was "in some ways the original workaholic, reading the *Encyclopaedia Britannica* in bed to locate good passages for reading comprehension tests, not ... because he was driven to it but because he would rather be getting or analyzing data than most anything else" (p. 151).

The son's qualification is important. Sometimes the motives of great psychologists have been characterized as most typical of the workaholic, coronary-prone "Type A" personality pattern (e.g., Matthews, Helmreich, Beane, & Lucker, 1980).

Yet detailed analysis reveals that their drive and determination comes from a rather different motivational core.

- The competitiveness, irritability, and impatience so central in conceiving the Type A personality are not what are associated with influential output, but rather the driving components are achievement, mastery, job involvement, and self-efficacy (Helmreich, Spence, & Pred, 1988; M. S. Taylor, Locke, Lee, & Gist, 1984).
- As a result, eminent psychologists derive much more satisfaction from their research than do their less eminent colleagues (Chambers, 1964).
- This positive rather than negative commitment is a feature of distinguished scientists in general. According to Roe (1952), the individuals making up her elite 64 displayed a "driving absorption in their work" (p. 25). Each "works hard and devotedly at his laboratory, often seven days a week. He says his work is his life, and has few recreations" (p. 22). "They have worked long hours for many years, frequently with no vacations to speak of, because they would rather be doing their work than anything else" (p. 25).

Boring, Simon, Bekhterev, Thorndike, and other great psychologists are just exhibiting the motivational profile that best describes all illustrious scientists.

Social Attributes

Another hard-working great psychologist was R. B. Cattell, who authored more than 500 publications over a 70-year period.

- Among his many contributions was the development and application of the 16 Personality Factor Questionnaire (16 PF).
 - This instrument assesses individuals on 16 bipolar personality dimensions. Some of these dimensions have self-explanatory names, such as high versus low intelligence, high versus low dominance, and conservatism versus radicalism.
 - Other dimensions are not so obvious, at least for those who are uninitiated in Cattell's favorite terminology. These include schizothymia versus cyclothymia, desurgency versus surgency, threctia versus parmia, and prazernia versus autia.
- Of special relevance to this book is Cattell's use of the 16 PF to determine the personality profiles of high-achieving individuals, such as creators, leaders, and athletes (Cattell & Butcher, 1968). As part of this research program, Cattell and his colleagues have examined scientists, including highly eminent researchers.
 - Cattell and Drevdahl (1955) administered the 16 PF to 140 notable scientists from the disciplines of physics, biology, and psychology (*ns* of 46, 46, and 52, respectively). Besides exhibiting a conspicuous level of general intelligence, these scientists could be distinguished from the general population according to several factors that concern social rather than motivational traits. Specifically, the eminent researchers tended to be schizothymic, desurgent, dominant, and self-sufficient.
 - Schizothymia signifies the inclination to be "withdrawn, skeptical, internally preoccupied, precise, and critical" (R. B. Cattell, 1963, p. 121), while
 - desurgent indicates the penchant for "introspectiveness, restraint, brooding, and solemnity of manner" (R. B. Cattell, 1963, p. 121). The remaining two traits, dominance and self-sufficiency, have their everyday meanings.
 - Cattell (1963) complemented this psychometric study of contemporary scientists with a historiometric study of famous scientists of the past. The subjects included several major figures from psychology's own history, such as Paracelsus, Francis Bacon, Kepler, Newton, Leibniz, Dalton, Darwin, Freud, and Cannon. Compared to the general population of humanity, great scientists are introverted, serious, contemplative, independent, and autonomous.

Cattell's basic portrait of the great scientist has been replicated in other studies that use different samples and instruments (e.g., Chambers, 1964; Van Zelst & Kerr, 1951).

- For example, Roe (1952) found that her 64 eminent scientists tended to avoid social activities, and confined their recreation to "fishing, sailing, walking or some other individualistic activity" (p. 22).
- In fact, extensive meta-analyses of the empirical literature have convincingly shown that the distinctive pattern of social traits constitutes a secure empirical generalization about the scientific personality (Feist, 1998; Feist & Gorman, 1998). In general, scientists tend to be more dominant, independent, introverted, and unsociable than the typical human being, and these characteristics all tend to become accentuated in the most eminent scientists.
- If anything, the hard-driving autonomous personality of the great scientist often verges on arrogance and aggressiveness (Feist & Gorman, 1998).
- Moreover, many of these social attributes appear to be deeply rooted in the personality, for they seem to go back to childhood and adolescence.
 - The typical notable in Roe's (1953a) sample "tended to feel lonely and 'different' and to be shy and aloof from his classmates" (p. 22).
 - In fact, individuals who leave their mark on history often display the developmental tendency of "isolation from other children, especially outside the family" (McCurdy, 1960, p. 38).

Of course, this social profile might be expected from what we already know about great scientists. “I am a horse for a single harness, not cut out for tandem or teamwork,” Einstein once admitted, “for well I know that in order to attain any definite goal, it is imperative that *one* person do the thinking and the commanding” (quoted in Sorokin, 1963, p. 274).

Yet there is one perplexing datum that complicates this social profile of the typical great psychologist. Research suggests that psychologists may depart from this profile in a substantial and perplexing manner.

- Roe (1953a) found that the social scientists in her sample were much more gregarious and extraverted than the biologists and physicists. The Rorschach indicated that the social scientists were intensely concerned with human beings, and the Thematic Apperception Test indicated that they possess an unusually intense concern for interpersonal relationships.
- This concern contrasts strikingly with the strong tendency for eminent scientists to be “interested in things more than in persons,” as Galton (1874, p. 125) concluded in his pioneer investigation (also see Barron, 1969).
- Furthermore, this discrepancy between social and natural scientists may appear early in individual development. Terman (1954) reported that those of his intellectually gifted children who grew up to become social scientists were very sociable as children, much more so than those who became natural scientists.
- Although neither Roe nor Terman presented the statistics for the psychologists in their samples of social scientists, Cattell and Drevdahl (1955) compared psychologists directly against physicists and biologists, and a similar pattern emerged. Cattell (1963) summarized the interdisciplinary contrasts in this fashion:

The physicists are even more schizothyme than other researchers, and the psychologists, I regret to say, more dominant and less desurgent. Possibly this greater surgency accounts for the fact that on the whole psychologists have talked more and progressed less than, say, physicists! (p. 126)

SYMPTOMS

Mad-Genius?

- “Those who have become eminent in philosophy, politics, poetry, and the arts have all had tendencies toward melancholia,” Aristotle is reputed to have claimed (quoted in Andreasen & Canter, 1974, p. 123).
- Seneca’s (n.d./1932) “No great genius has ever existed without some touch of madness” (p. 285)
- to Shakespeare’s “The lunatic, the lover, and the poet/ Are of imagination all compact” (quoted in Browning, 1986, p. 77).
- Toward the end of the 19th century, the notion of the “mad genius” began to receive serious scientific endorsements. Thus, Cesare Lombroso (1891), the eminent Italian criminologist, asserted in his *The Man of Genius* that those who make history had personalities associated with “degenerative psychosis,” especially that of the “epileptic group.”
- Indeed, reputable psychiatrists claimed that genius could count among the symptoms of a broad syndrome that betrays inferior genetic endowment. For instance, an article published in the *Journal of Nervous and Mental Disease* listed the four possible repercussions of a single congenital defect:

First, and most prominent in the order of frequency is an early death. *Second*, he may help swell the criminal ranks. *Third*, he may become mentally deranged and ultimately find his way into a hospital for the insane. *Fourth*, and least frequently, he startles the world by an invention or discovery in science or by an original composition of great merit in art, music or literature. He is then styled a genius. (Babcock, 1895, p. 752)

- With the advent of the psychoanalytic school founded by Sigmund Freud, this centuries-old thesis acquired a new form of documentation – the psychobiography. Starting with Freud’s own (1910/1964) treatment of Leonardo da Vinci, one historic figure after another succumbed to psychoanalytic treatment, including such psychology notables as Socrates, Newton, Rousseau, Goethe, James and J. S. Mill, Charles Darwin, Galton, Nietzsche, Gordon Allport, and B. F. Skinner (Runyan, 1982). By a curious twist of fate, psychoanalysts themselves eventually became psychobiographical subjects, such as Wilhelm Reich, Carl Jung, and Freud himself (Elms, 1994). Given that psychoanalytic theory was built upon clinical cases, it was natural for these psychobiographers to focus on neurotic and psychotic symptoms rather than the healthy aspects. Indeed, many of these analyses were more properly styled “pathographies.”
- Although mainstream thought seemed to side with the association of greatness with sickness, some psychologists have voiced dissent. Humanistic psychologists, especially, were prone to emphasize the healthy aspects of creativity and other forms of high achievement. Proponents of this alternative view include Rollo May (1975), Carl Rogers (1954), and Abraham Maslow (1959). For these theorists, psychopathology was antithetical to the creative life. Hence, Maslow’s (1970) biographical studies of eminent self-actualizing personalities included such luminaries as Spinoza, Benjamin Franklin, Goethe, Emerson, William James, and Jane Addams. These persons were chosen precisely because they exemplified the best that could be attained by the human personality. Oddly, some of Maslow’s self-actualizers were individuals whom others had identified as evincing severe psychological problems. William James certainly suffered from various emotional disorders. Often in and out of schools for diverse complaints, he once dropped out of his medical studies because he was bothered by “insomnia, digestive disorders, eye-troubles, weakness of the back, and sometimes deep depression of spirits followed each other or afflicted him simultaneously” (H. James, 1926, p. 84). Frequently plagued with hypochondriasis, phobic panics, and psychosomatic disorders, he was occasionally struck by depressive episodes so severe that he would contemplate suicide – and perhaps even attempted to do so.

What is the truth of the matter? Are great creative minds “sick souls,” to use a Jamesian term? To address this issue, we will first look at two kinds of scientific evidence, the first drawn from historical populations and the second from contemporary populations.

Historical Populations

It is not difficult to compile lists of historical figures who allegedly suffered from some degree of psychopathology (e.g., Prentky, 1980; Simonton, 1994a). Table 7.1 provides a listing of just those deceased celebrities who have also earned a secure place in psychology's history.

Table 7.1

Eminent Contributors with Supposed Mental Disorders

Schizophrenic disorders (and other cognitive psychoses):

Philosophers – Kant and Nietzsche;

Scientists – Copernicus, Descartes, Linnaeus, Newton, and Pascal;

Psychologists – Jung, Reich.

Affective disorders (depression, mania, or bipolar):

Philosophers – Comte, Goethe, W. James^b, J. S. Mill, Rousseau, and Schopenhauer;

Scientists – C. Darwin and J. P. Müller^a;

Psychologists – D. T. Campbell, J. Cohen, K. Duncker^a, Fechner, G. S. Hall, K. Horney^b, O. H. Mowrer^a, and J. B. Watson.

Personality disorders (including severe neuroses):

Philosophers – Descartes, Hegel, Hobbes, Hume, Kierkegaard, B. Russell, Spencer^c, and Voltaire;

Scientists – Mendel, Pavlov, and Ellis;

Psychologists – Bettelheim^a, S. Freud^{a,c} and Galton.

Note. Egon Brunswik and Else Frenkel-Brunswik both committed suicide, the latter 3 years after her spouse. In Else's case, at least, the suicide may have been provoked by severe depression.

^a Suicide. ^b Attempted suicide. ^c Substance abuse (alcohol, opium, etc.)

The significant issue is whether the rate of disorder is elevated in those who attain greatness.

The first researcher to tackle this question systematically was Havelock Ellis (1926).

- He noted that the incidence of some serious mental illness was 4.2%.
- Moreover, 8% displayed melancholia
- and 5% some type of personality disorder.

These figures, according to Ellis, exceeded the incidence rates found in the general population.

- Ellis also noted that fully 16% of his illustrious figures suffered imprisonment, a statistic that only has relevance if you accept the belief prevalent at the time that criminality, genius, and madness constituted symptoms of the same underlying pathological syndrome.

It is conceivable that the high rates of psychopathology merely reflect the influence of artistic creators, such as poets and painters (Boverman, 1947; Martindale, 1972; Post, 1996; Raskin, 1936).

Hence, it is necessary to separate the psychologists, or at least separate the scientists or social scientists.

Two recent historiometric studies come close to attaining this (also see Juda, 1949; Raskin, 1936).

- The first looked at 291 world-famous scientists, thinkers, artists, composers, and politicians (Post, 1994). Of these, 45 were scientists and 50 thinkers, including Gauss, Babbage, Darwin, Helmholtz, Mendel, Galton, Charcot, Mach, Pavlov, and Schopenhauer, Comte, J. S. Mill, James, Nietzsche, Freud, Ellis, and Jung (*sic!*). For the scientists, psychopathology was severe in 17.8%, marked in 26.7%, mild in 24.4%, and absent in 31.1%. For the thinkers, the corresponding figures were 17.4%, 41.3%, 26.1%, and 15.2%. The incidence rates for the other achievement domains were much higher. At the same time, even the scientists experienced rates that exceeded expectation. “Scientists had the lowest prevalence of psychic abnormalities,” concluded the investigator (Post, 1994), “but even in their case these were absent or trivial in only one-third. The amounts of psychopathology increase steadily from composers, politicians, artists, and thinkers through to writers” (p. 24). For the last group, 37.5% displayed severe psychopathology, 18.8% marked, 29.1% mild, and only 14.6% none.
- The second investigation focused on a larger and more recent sample of luminaries, chosen on the basis of whether they had biographies written about them that were reviewed in the *New York Times* (Ludwig, 1995). The subjects were subdivided into the following categories: architecture, art, business, exploration, sports, musical composing music performance, military, public office, natural sciences, social activism, social figure, companion, social sciences, theater, nonfiction, fiction, and poetry. The social scientists numbered 73, and consisted mostly of psychoanalysts and psychiatrists (e.g., Sigmund and Anna Freud, Carl Jung, Melanie Klein, Otto Rank, Hélène Deutsch, Karen Horney, Harry Stack Sullivan, and Wilhelm Reich). But the group also encompassed psychologists (e.g., Havelock Ellis, William James, and Cyril Burt), philosophers (e.g., Frederick Nietzsche, John Dewey, and Jean-Paul Sartre), sociologists and anthropologists (e.g., Herbert Spencer, Max Weber, Ruth Benedict, and Margaret Mead). Although this category is clearly heterogeneous, at least the social scientists are separated from the natural scientists. According to this inquiry, the lifetime rate of any mental disorder was 51% for the social scientists, which is comparable to the social activists (49%) and business figures (49%), but noticeably higher than the natural scientists (28%). On the other hand, the rate was lower than seen in the arts, which got as high as 87% (for the poets). The study also did a breakdown of the most common pathologies for the various domains. For the social scientists these rates fell in the following order: depression (32%), alcoholism (10%), anxiety (8%), drug abuse (7%), psychosis (4%), suicide (4%), and mania (1%). All in all, the rates for the first few diagnoses exceed what would be anticipated in the general population.

One final finding in this second historiometric investigation deserves consideration (Ludwig, 1995). The subjects were scored on the magnitude of psychology displayed and the level of their lifetime creative achievement. The two variables were positively associated. Therefore, not only do eminent personalities exhibit higher than average rates of mental illness, but in addition psychopathological symptoms predict ultimate success (for additional evidence, see Juda, 1949; Raskin, 1936).

Contemporary Populations

Results of stronger scientific validity should be obtained from the direct assessment of eminent contemporaries.

One potential approach is to conduct surveys that determine whether illustrious individuals are more likely to seek or require therapy as the result of their psychological difficulties.

- This line of attack has been applied with to artistic personalities, such as the creative writers who have attended the famed Iowa Writers Workshop (Andreasen, 1987). Such studies have again found that artistic creators exhibit higher rates of mental illness than expected, according to the frequency that they require intervention, whether therapy or medication (Andreasen, 1987; Jamison, 1983).
- Something like this has been conducted for contemporary psychologists as well (Wispé & Parloff, 1965). The study surveyed all members of the American Psychological Association who had received their PhDs between 1945 and 1951, obtaining usable responses from 966. Approximately one third of all respondents had received some form of psychotherapy (with the clinical psychologists disproportionately represented among those who had received treatment). This is about the same rate as observed in a sample of eminent British artists and writers (Jamison, 1983). To assess whether psychopathology contributed to the differential success of the surveyed psychologists, publication counts were compiled from *Psychological Abstracts*. When the productivity of those who had received therapy was compared to the productivity of a comparison group that had not, no significant difference was found.

The creator may dwell at the borderline between normality and pathology. As John Dryden (1681) expressed it, “Great Wits are sure to Madness near ally’d,/ And thin Partitions do their Bounds divide” (p. 6).

To test this hypothesis requires that any disposition toward psychopathology be measured along a continuous scale that covers the extremes, from the normal to the abnormal.

- Fortunately, psychology can boast a rich inventory of psychometric instruments that have just this diagnostic capacity, such as the Minnesota Multiphasic Personality Inventory, or MMPI. This measure has actually been applied to the eminent personalities invited to undergo intensive assessment at UC Berkeley’s Institute for Personality Assessment and Research, or IPAR (MacKinnon, 1978). The results conform to expectation (MacKinnon, 1978). The creative writers, for example, scored in the top 10% of the general population on the scales gauging Depression, Hypomania, Schizophrenia, Paranoia, Psychopathic Deviation, Hysteria, and Hypochondriasis, and Psychoaesthesia (Barron, 1969). Yet the scores were not so elevated that the writers could be considered mentally ill or emotionally unstable.
- Another psychometric instrument that has proven useful in addressing this hypothesis is the Psychoticism scale of the Eysenck Personality Questionnaire (Eysenck, 1995). Hans Eysenck (1993, 1995) has argued that elevated but not extreme scores on Psychoticism should be positively associated with creativity. For example, Psychoticism scores are correlated with several cognitive capacities lined to the creative process, such as the ability to generate unusual associative connections between ideas (Eysenck, 1994; Woody & Claridge, 1977). More important is the fact that Psychoticism is linked with creative eminence in the arts (e.g., K. O. Götz & K. Götz, 1979a, 1979b; Pearson, 1983). These results corroborate IPAR.

Nonetheless, these findings cannot be immediately generalized to psychologists, at least not without knowing whether psychologists fall closer to the artist rather than scientist end of the dispositional spectrum.

Historiometric studies show that psychopathology is more common among artistic than scientific creators, and psychometric investigations find the same (Feist, 1998).

On the average, artistic creators are more emotionally unstable, sensitive, and anxious than scientific creators are.

At the same time, psychologists tend to display certain characteristics that place them more toward the artistic end of the continuum.

- As just noted earlier, psychologists seem to have undergone psychotherapy at rates comparable to what holds for artists and writers (Wispé & Parloff, 1965).
- In addition, compared to physical scientists, psychologists are more likely to be introverted, bohemian, unconventional, and imaginative (Chambers, 1964).

So where does psychology fit in this picture?

The beginning of an answer is to be found in a two-part study of psychologists who were professors at Canadian research universities (Rushton, 1990).

- In the first part, 52 full-time professors of psychology at the University of Western Ontario were assessed on personality traits associated with Psychoticism. A weighted composite score was then shown to correlate .26 with a creativity measure that combined publication and citation rate.
- The participants in the second part were 69 psychologists who responded to a mail survey of 9 leading psychology departments at English-speaking universities. Once more the Psychoticism score was based on a weighted composite of personality traits, but the creativity assessment was defined according to four measures: “(a) total number of publications, (b) mean number of publications in last 5 yr, (c) number of hours spent on research, and (d) rated enjoyment of research” (Rushton, 1990, p. 1296). Despite the changes in sample and variable definition, the findings in the second study endorsed those in the first. Psychoticism correlated .43 with creative achievement. Yet should be stressed that none of the psychologists in either inquiry could be considered psychotic.

All told, a fairly consistent picture has emerged from both historiometric and psychometric inquiries.

This picture should place in scientific context our appreciation of those who have made major contributions to our discipline.

Ironically, in his classic book *The Varieties of Religious Experience*, James (1902) himself offered practically the same response to the mad-genius question:

The nature of genius has been illuminated by the attempts ... to class it with psychopathological phenomena. Borderline insanity, crankiness, insane temperament, less of mental balance, psychopathic degeneration (to use a few of the many synonyms by which it has been called), has certain peculiarities and liabilities which, when combined with a superior quality of intellect in an individual, make it more probable that he will make his mark and affect his age, than if his temperament were less neurotic. (pp. 22-23)

From what we know of James' life and career, such a bold conclusion may have been predicated as much on his personal experience as on mastery of the scientific literature of his day.