Abstract

It is proposed that there are three fundamental adaptive systems that have developed in the course of evolution. One of these, learning, is the only one that is widely recognized. The other two consist of regulation of the energetic aspect of stimulation, and integration of the data of experience into an organized conceptual system. Corresponding to each of the three basic adaptive systems are three basic types of disorder, namely maladaptive learning, which is by far the most common source of behavioral problems; overstimulation, as in the traumatic neurosis; and collapse of the individual's conceptual integrative system, as in acute schizophrenic disorganization. Just as relearning is a natural adaptive process for correcting problems produced by learning, there are inherent processes for correcting the disorders produced by overstimulation and by a maladaptive integrative system. The present article is concerned with the natural process for correcting a poorly organized conceptual system. A second article (Epstein 1978) will be devoted to the natural process of coping with the energetic aspects of stimulation. An acute disorganizational state can provide an opportunity for a new and more effective conceptual system to develop. As a desperate remedy, it is often unsuccessful. Nevertheless, an orderly process can be discerned in such states that can enhance the likelihood that new, and dissociated old, material will be assimilated into a new organization. If all goes well, the new organization will be more resilient than the old one; it will be better able to accomplish the functions of an implicit theory of reality, which are to integrate the data of experience, to maintain a favorable pleasure-pain balance, and to maintain self-esteem.

In the course of evolution, complex systems for the prevention of and recovery from physical illness have developed. It would be strange, indeed, if a similar developmental process did not apply to disorders of the mind. With the emergence of higher order animals, whose adjustment depended upon responding to stimuli based on past experience rather than instinct, new possibilities for disorder emerged. A finely tuned, flexible system can be expected to be more prone to disruption than a cruder, more rigid one. Accordingly, it is more important for such a system to have fail-safe devices and automatic methods of self-correction. If one assumes that natural processes have evolved for coping with behavioral disorders in higher order animals, an examination of these processes should yield interesting insights into the nature of behavioral disorders and could provide important clues for their treatment.

There are three highly general processes with which humans adapt to the world about them, and three corresponding types of psychological disorder. The adaptive processes consist of learning; regulation of the energetic, or arousal, component of stimulation; and maintenance of an integrative conceptual system.¹ Psychodynamic views of the nervous system, such as those of Ferenczi (1933) and of Kretschmer (1925), offer an alternative perspective on the nature of the nervous system. In Ferenczi's view, the nervous system is a complex system of processes that are capable of maintaining an equilibrium or balance between excitation and inhibition. Kretschmer's view is similar, but he emphasizes the role of the nervous system in the maintenance of a favorable emotional balance.

¹This is not to suggest that the three processes are entirely independent. What is experienced as arousing is determined more often by the meaning of stimuli as established by past learning than by their physical energetic properties. Thus, the word “fire” said at low intensity is apt to

Continued
The present article is concerned with the maintenance of an integrative conceptual system as it relates to acute schizophrenic disorganization. It is postulated that such disorganization, like fever, is a natural adaptive process that has evolved in the course of evolution.

Although, like fever, the defensive reaction can be destructive, it can facilitate the emergence of a new cognitive synthesis. Moreover, the process is not random; associated with the dismantling of the old system are reactions that can encourage new perceptions and learning to occur and dissociated old memories to be assimilated.

The view that schizophrenic disorganization can be adaptive under certain circumstances is not a new one. Menninger observed, "Some patients have a mental illness and then get well and then they get weller! I mean they get better than they ever were... This is an extraordinary and little-realized truth" (in Silverman 1970, p. 63). Laing (1965) is well known for his insistence that schizophrenia is often the only sane response to an insane world, and for his establishment of environments in which schizophrenics are encouraged to live through their psychosis in supportive surroundings (cf. Barnes and Berke 1971). Silverman (1970) has observed that there is a particular sequence of experiences in acute schizophrenic disorganization that can serve a constructive end. He suggests that the constructive potential of the disorganizational state can be maximized with appropriate guidance. Bowers (1974) views schizophrenic disorganization as a natural developmental phenomenon that can elucidate the nature of an individual's psychosis in particular, and of human development, in general, but he is doubtful that the state is conducive to the mastery of conflict and psychological growth.

Perry (1974, 1976) considers schizophrenic disorganization to be a natural, adaptive reaction, and cites several cases in which he has used it to therapeutic advantage. He presents a theoretical analysis of the schizophrenic disorganizational state from a Jungian perspective. The adaptive consequences of the state are attributed to bringing the individual into closer proximity with dissociated archetypes, thereby facilitating a new synthesis. The present article provides an alternative, non-Jungian framework to account for adaptive consequences of acute schizophrenic disorganizational states. Not only have psychologists and psychiatrists observed that psychosis can be therapeutic on occasion, but a number of patients who have reported their bouts with psychosis provide direct testimony in support of this thesis (cf. Anonymous 1955; Barnes and Berke 1971; Boisen 1960; Jefferson 1974; Secheye 1970; also see reports of cases in Bowers 1974; Kaplan 1964; Landis and Mettler 1964). Lara Jefferson (1974), who recovered from a bout with schizophrenia, has stated:

Remember, when a soul sails out on that unmarked sea called Madness they have gained release much greater than your loss—and more important. Though the need

---

2 This assumption implies neither that all states of disorganization are adaptive nor that adaptive disorganizational states occur only in schizophrenia. Schizophrenia, as currently diagnosed, includes a wide range of symptoms, undoubtedly produced by varied etiology. The thesis advanced here is simply that there exists a phenomenon of disorganization that can be adaptive in the sense that only by destroying certain maladaptive organizations can new organizations be constructed. The issue of whether one should diagnose such states as schizophrenic is not fundamental to this thesis.

3 Dr. Manfred Bleuler informed me after seeing a preprint of this paper that the views expressed here are compatible with his own and with his father's, Eugen Bleuler's, and that related views are also expressed by a number of European psychiatrists and psychologists, including Jung, Klaesi, and Ey. Manfred Bleuler's views on schizophrenia are now available in a more comprehensive form than they have been to date, with the recent publication of an English translation of his book The Schizophrenic Disorders: Long-term Patient and Family Studies (Bleuler 1978).
which brought it cannot well be
known by those who have not
felt it. For what the same call
"ruin"—because they do not
know—those who have experi-
enced what I am speaking of,
know the wild hysteria of Mad-
ness means salvation. [p. 199]

The question remains of how
best to conceptualize the disor-
ganization of a personality as having the
potential for a constructive resolu-
tion. As more is learned about the
process of acute schizophrenic reac-
tions, it may be possible to deter-
mine when it should be encouraged
and when discouraged, and, in the
latter event, how to maximize the
likelihood that the outcome will be
constructive.

Elsewhere (Epstein 1973, 1976, in
press), I have presented a theory of
personality that assumes that all
humans unwittingly construct an
implicit theory of reality that con-
tains subdivisions of a self-theory
and a world-theory. Just as scienc-
ists need theories to organize the
data of their disciplines and to direct
their search for new information,
humans need theories to organize
the data of their experience and to
direct their behavior in everyday life.
Once it is recognized that individ-
uals have implicit theories that guide
their lives, a number of problems in
psychology that have previously
eluded resolution are readily solved.
Thus, the concept of an executive
self, which James (1910) and Allport
(1961) banished to the realm of phi-
losophy, can be reclaimed into a sci-
etifically based psychology by
noting that all theories influence,
and are influenced by, the accumu-
lation of data. The concept of a growth
principle, postulated by humanists
and phenomenologists and defended
mainly through the use of poetic
analogy, can be explained by noting
that all theories grow in the sense
that they become increasingly dif-
ferentiated and integrated with ex-
posure to new data. Finally, the self-
concept can be viewed in a scientif-
ically acceptable manner, rather
than as a soul or a homunculus resid-
ing in the head, in which a little man
directs a bigger one, by noting that
there is nothing mystical or unsce-
ntific about the self as an integra-
tive conceptual system that is the
nucleus of the individual's more ex-
tensive theory of reality, and that
serves to direct behavior according
to motivational hypotheses and ex-
pectancies, themselves derived from
emotionally significant experience.

Of particular importance to the
thesis advanced here, given a hier-
archically organized personal theory
of reality with minor and major pos-
tulates, the phenomenon of disor-
ganization can be viewed in a new
light. For, if an overall conceptual
organization exists, it is possible for
total collapse of that system to occur.
As a result, the individual would be
virtually helpless, and even the most
fundamental perceptual and psycho-
physiological processes would suffer
impairment so long as they were de-
pendent upon the conceptual inte-
gration of sensory experience.

An individual's personal theory of
reality can be viewed as a conceptual
tool that, like a theory in science,
was developed for a purpose. The
purposes of a personal theory of
reality are assumed to be (1) to main-
tain a favorable pleasure-pain
balance over the foreseeable future,
(2) to assimilate the data of experi-
ence into a coherent conceptual sys-
tem, and (3) to maintain self-esteem.
See Epstein (1973, 1976, in press)
for further elaboration of these
motives). It can be assumed that if
the individual's environment were
such that the development of a per-
sonal theory of reality would be self-
defeating in terms of fulfilling the
above purposes, the theory would
not develop. This can account for
cases of childhood autism that are
not organically based. If the theory
of reality, on the other hand, suc-
cceeded in accomplishing its purposes
only marginally during its formative
stages, possibly as a result of the
pitting of one purpose against an-
other, the individual would develop
a fragile theory of reality that is
subject to later collapse.

There are three ways in which a
theory of reality can be weakened,
corresponding to the theory's three
basic purposes. Thus, the theory can
be confronted with unassimilable
data, which can consist either of sig-
ificant experiences in the external
world or of awareness of unaccept-
able aspects of the self. In either
case, there is a threat to the assim-
ilative capacity of the theory. An-
other is by a failure of the theory to
accomplish its function of maintain-
ing a favorable pleasure-pain bal-
cence, and a third is by a failure of the
theory to maintain self-esteem. Be-
fore disorganization occurs, the in-
dividual will resort to extreme
defenses, as almost any theory is
better than none. When faced with a
threat that is not very great, the
individual will tend to become rigid
in his thinking, and to narrow his
range of experience, thereby reduc-
ing the assimilative demands on the
theory. If the threat is greater, more
extreme defenses in the form of
denial, distortion, and withdrawal
will occur. It is only when such de-
fenses fail that disorganization
occurs. Experiences that provide sud-
den, unexpected threats are parti-
cularly apt to produce disorganization
since they reduce the opportunity
for mobilizing defenses. Once dis-
organization begins to occur, restitu-
tive attempts to restore the theory
will tend to take place in the form of
modifying or more extensively re-
pairing the theory. As will be seen
shortly, the sequence of threat, defense, disorganization, and reconstitution of a personal theory of reality is exactly analogous to the process that occurs when a theory in science is invalidated. In both cases, the theory is not simply abandoned, but is replaced with another theory. One could paraphrase Kuhn's (1970) statement, "To reject one paradigm without simultaneously substituting another is to reject science itself" (p. 79), with "To reject a personal theory of reality without simultaneously substituting another is to reject one's psychological existence as a human being."

One of the advantages in recognizing that individuals have implicit theories of reality that function in a manner similar to theories in science is that it is then possible to apply all that is known about the structure and functions of theories in science to personal theories of reality. Elsewhere (Epstein 1973, 1976, in press) I have noted that the requirements of a good theory in science can be directly applied to evaluating the adequacy of an individual's personal theory of reality. The attributes of any good theory are parsimony, extensivity, testability, external validity, internal consistency, and, most important, usefulness in coping with the world, which, to a large extent, is dependent on an effective integration of the other attributes.

Once it is granted that there are important similarities between personal theories of reality and theories in science, it becomes a matter of interest to examine the role of disorganization and consequent reorganization of theories in science for whatever light such an analysis can shed on the disorganization and reorganization of personal theories of reality. At first glance, it would seem that disorganization of a conceptual system cannot possibly be constructive in the progress of scientific knowledge, because the advancement of scientific knowledge appears to follow an orderly and systematic course in which an increasingly accurate model of reality is gradually achieved through successive approximation. Expressed otherwise, it is often assumed that scientific theories gradually evolve, becoming more differentiated and integrated with increasing exposure to data. As will be seen shortly, there is good reason to question this view.

According to Kuhn (1970), scientific progress occurs in two ways, through the practice of normal science and through the occurrence of scientific revolutions. Given a paradigm that is at some point widely accepted by the scientific community, normal science is apt to occur. Normal science consists of systematic observation and experimentation to flesh out the skeleton of an accepted theory. It results in incremental knowledge that increases the specificity of a theory, and results in minor modifications of the theory without challenging its basic stability. Through the continued pursuit of normal science, the theory ultimately leads to its own destruction. Anomalies are uncovered that lead to what Kuhn refers to as paradigm crises. There are two ways in which a paradigm crisis can be evoked. One is that an anomaly is uncovered that invalidates fundamental generalizations or postulates of the paradigm. The other is that the paradigm fails to fulfill significant practical functions. Because any theory is normally viewed as better than none, anomalous data, as well as inconsistencies, are initially reacted to defensively. This results in denial and distortion of reality, as well as desperate attempts to shore up the old theory. However, after many desperate modifications of the theory are made, it finally becomes apparent that the system is not working, and that it has lost much of its initial coherence and elegance. There is a growing awareness of crisis, followed ultimately by a willingness to recognize that the paradigm must be abandoned. After the abandonment of the paradigm, there is a brief period in which scientific effort proceeds randomly, and scientists report feelings of anxiety and despair. Shortly before a new quantum theory was proposed by Heisenberg, Wolfgang Pauli stated: "At the moment physics is again terribly confused. In any case, it is difficult for me, and I wish I had been a movie comedian or something of the sort and had never heard of physics" (in Kuhn 1970, p. 84).
It is important to recognize that a new paradigm involves a reorganization, or "gestalt switch," meaning that even old, familiar data are no longer viewed in the same manner as previously. Kuhn (1970) has stated:

The scientist who embraces a new paradigm is like the man wearing inverting lenses. Confronting the same constellation of objects as before and knowing that he does so, he nevertheless finds them transformed through and through in many of their details. [p. 122]

It is noteworthy that the occurrence of a scientific revolution follows a similar course to that proposed for the disorganization and reorganization of a personal theory of reality. Given the observation that two complementary processes are necessary for the advancement of scientific knowledge, is it not reasonable to assume that similar processes developed in the course of evolution, corresponding to the improvement of personal theories of reality through incremental learning, or normal science, on the one hand, and to reorganization, or scientific revolutions, on the other? If the analogy can be carried further, the instigating situations for the disorganization of personal theories of reality should consist of experiences that invalidate fundamental postulates of the individual's implicit theory of reality, corresponding to a failure of assimilation, or to failures by the theory to accomplish its practical functions of maintaining a favorable pleasure-pain balance and maintaining self-esteem.

That acute schizophrenic disorganization is often preceded by emotionally significant unassimilable experiences, threats to self-esteem, or a loss of hope for future happiness is supported by autobiographical accounts of individuals who have experienced schizophrenic disorganization (cf. Bowers 1974; Kaplan 1964). In an investigation of acute schizophrenic disorganization, Bowers (1974) noted that the psychotic reaction was frequently precipitated by an impasse at a crucial maturational step. The incidents included problems in establishing autonomy, in forming an intimate relationship, in forming a heterosexual relationship, in giving birth to, or taking care of, an infant, and in maintaining a marital relationship. In some cases, disorganization was precipitated by the emergence into consciousness of unacceptable impulses, such as homosexual attraction. In all the cases cited by Bowers, the individual had reached a point in life where it became apparent that without significant change there was little hope of achieving a favorable pleasure-pain balance, self-acceptance, or assimilation of emotionally significant experience. The impasses, which could neither be directly coped with nor escaped from, in addition to contributing directly to tension and misery, can be assumed to have produced feelings of inadequacy and low self-esteem. Further evidence that schizophrenia is associated with an inability to maintain self-esteem and hope for a favorable pleasure-pain balance is provided by the observation that many schizophrenics undergo periods of depression with attendant feelings of hopelessness and self-depreciation, sometimes to the point of being self-mutilative or suicidal. In an investigation of first breakdowns in 105 young schizophrenics, Grinker and Holzman (1973) noted that one of the most salient premorbid characteristics of the patients was "an exquisitely vulnerable sense of self-regard" (p. 168). A blow to self-esteem was the most common precipitating event. They reported:

In most, but not all, schizophrenic patients the precipitating event of the psychosis or of the hospitalization was a challenge to their self-esteem. For some patients it was the breakup of a love relationship; for others it was leaving home for the first time. . . and for still others, it was a rebuff of a person important to them, such as a teacher, an employer, or a doctor. [p. 175]

As for the prospects of achieving a favorable pleasure-pain balance in the foreseeable future, it is noteworthy that Grinker and Holzman, in agreement with Rado (1956) and Meehl (1962), reported that a second salient characteristic of the premorbid schizophrenic is anhedonia:

For the most part these young patients report a pervasive inability to derive much joy from life. . . Further, the view of their own future described by the schizophrenic patients held little prospect of amelioration. [p. 174]

As to an inability to assimilate the data of experience, the eruption into consciousness of unacceptable impulses in the cases reported by Bowers provides a number of such examples. More generally, the impasses that Bowers observed involved conflicting needs and values, such as between autonomy and dependency. Such conflicts obviously pose a problem for the cognitive assimilation of emotionally significant experience.

Having considered the precipitating factors in acute disorganizational states, let us turn to the symptoms of disorganization as viewed from the perspective that it is a natural adaptive process. One way of understanding how the precipitating circumstances lead to disorganization is to assume that stress induces biochemical changes that interfere with the functioning of the cerebral cortex (cf. review by Epstein and Coleman 1970). An interesting ques-
tion, in this regard, is whether any state of tension, if sufficiently intense and enduring, will ultimately induce cognitive disorganization, or whether a particular kind of stress that is a direct consequence of a strain on the integrative capacity of the brain is particularly apt to lead to disorganization. It remains for future research to determine whether there is a cognitive stress that is different from other kinds of stress. Some preliminary findings with normals suggest there is. In a study of emotions in everyday life (Epstein 1976), it was found that anxiety was included in two different factors. In one factor, anxiety occurred along with anger, depression, and tiredness, indicating that people vary on a dimension of experiencing dysphoric emotions, in general. The second factor, which was independent of the first, included anxiety along with feelings of unworthiness, a tendency to go to pieces, and feelings of being blocked, indicating that people also differ on a dimension of self-esteem combined with a tendency to disorganize. It will be recalled that one of the functions of a personal theory of reality was said to be the maintenance of self-esteem. In our hypothesis, when an individual's theory of reality cannot maintain the individual's self-esteem, anxiety is generated and the individual's theory of reality is under pressure to disorganize, which in everyday life is experienced as confusion.

When stress mounts to the point that cognitive functioning is impaired, two types of symptoms appear. One is a direct consequence of a loss in integrative capacity, while the other is produced by the release from inhibitory control of lower order functions that are normally inhibited by the cerebral cortex. When an individual's conceptual system disorganizations, extremely fundamental functions are impaired. Because these functions are so fundamental, it is often incorrectly assumed that their impairment is the result of an underlying organic deficit. An excellent example of a psychologically mediated loss of basic perceptual and integrative functions is provided in the following account by a young schizophrenic girl, who refers to her therapist as "Mama":

> I perceived a figure of ice which smiled at me. And this smile, showing her white teeth, frightened me. For I saw the individual features of her face, separated from each other. Perhaps it was this independence of each part that inspired such fear and prevented my recognizing her even though I knew who she was. . . . Then I heard this marvelous voice which, like a talisman, could give me again a moment of reality, a contact with life. . . . Warmed again, encouraged, softly repeating Mama's words, I went home. Once in the street, however, I saw again the pasteboard scenery of unreality. [Schechaye 1970, pp. 37-38]

In addition to the lack of perceptual integration referred to in the above passage, there are two observations of interest. One is that there is a loss of depth perception, as revealed in the reference to a "pasteboard scenery of unreality." Depth perception requires inferences from distance and size cues. With the loss of integrative capacity, the ability to make such inferences breaks down, and a fundamental symptom appears. Interestingly, the same patient reports frightening distortions of the size of people, which can also be explained by a failure to take into account distance cues. The second point of interest is that reality comes and goes according to whether warm contact with another human being is established. This is consistent with the view that an individual's conceptual system exists for a purpose, and when the conceptual system has nothing to offer, it is under pressure to disorganize.

Let us now turn to the second type of symptom, the disinhibition of lower order functions, including suppressed emotions and repressed memories. When there is a partial breakdown in cortical control, the individual tends to experience current situations with a sharpened intensity. This is one of the most common symptoms in the cases of schizophrenic disorganization described by Bowers, and can be understood as resulting from a reduction in cognitive modulation. When sensory experience is not organized into concepts, it is experienced with heightened intensity (cf. Bowers 1974; Kaplan 1964; McGhie and Chapman 1961). This, together with a release from inhibition of repressed memories and impulses, confronts the individual with the raw data of new experiences and with unassimilated old experiences that can no longer be ignored, and that can now be experienced uninfluenced by the biasing lenses of the old conceptual system. The weakened inhibitory control may also foster abreaction. The overall process provides an unusual opportunity for new learning and the assimilation of old learning to occur. This is well illustrated in the following example:

> And once the great Madness in me found a voice, there was no stopping it. It rolled out in such a tumult I was amazed at it myself; wondered where it all came from. It seemed obscene and terrible that I should answer in adult language, things said to me in my childhood. Things I had forgotten, until they again began to pour about me in a flood of bitter memories. . . . As I fitted answers to all those unimportant and for-
to uncovering the variables that determine how the disorganization is resolved. It is difficult to imagine an area of research that gives more promise of yielding insights into the nature of personality, in general, and certain cases of schizophrenia, in particular.

It may be of some value to offer speculations about the kinds of cases and conditions that are apt to be associated with a favorable resolution of schizophrenic disorganization from the viewpoint of the theory proposed. One is that individuals who have attained some degree of success and self-esteem before their breakdowns are the ones most apt to have a constructive experience. It can be assumed that such individuals have the elements that are needed for a successful theory of reality, but, for some reason, have not been able to successfully organize the elements into a well-integrated and integrative conceptual system. A second hypothesis is that those individuals who would have favorable prospects for fulfilling the functions of a new personal theory of reality because they would enter into an environment compatible with the theory are the ones most apt to profit from reorganization. This follows from the consideration that an individual’s implicit theory is a conceptual tool for accomplishing certain purposes, and that it is resilient only to the extent that it can fulfill its functions. A third hypothesis is that individuals whose disorganization is produced by the breakthrough of discrete dissociated elements into an otherwise adequately integrated conceptual system are the ones most apt to have a constructive experience. This follows from the consideration that the assimilation of a single dissociated element is less demanding than rebuilding a personality that rests upon a generally weak foundation. Expressed otherwise, the fewer the units that need to be reorganized, the greater the likelihood that the reorganization will succeed.

A second important area for research is the establishment of how the disorganizational state can best be treated in order to maximize the likelihood of a favorable resolution. Perry (1976) reports a research program that will be devoted exactly to this question, and it will be interesting to see the outcome of this project. It is known that drug-induced psychedelic states can be either highly rewarding or horrifying experiences, depending upon the context in which the experience takes place. For example, if such a state is induced without the knowledge of the individual, it is apt to be extremely frightening, as it represents a loss of control and a journey into the unknown from which there may be no return. There is enough fear produced by schizophrenic disorganization without adding to it the fear that the journey is incomprehensible to patient and profession alike, and serves no function other than to signal a breakdown of the personality. If the same experience were viewed as a natural phenomenon that could have therapeutic consequences, then the terror associated with it would be mitigated. It would be interesting to see what could be accomplished by teaching patients about the nature of the disorder they are undergoing with the aid of case histories of patients who have benefited from the experience. Patients undergoing such an experience might possibly become allies to the therapist in devising ways to maximize whatever constructive potential there is in the experience. It might be worthwhile to employ therapeutic assistants to serve as guides while the patient is under-
going a state of disorganization, much as guides function during psychedelic experiences. How the guide might best function would have to be determined through experimentation. Questions need to be answered as to whether the guide should enter into the fantasies of the patient or should be a solid representative of external reality. Should the guide attempt to help the patient assimilate new elements as they intrude into consciousness, or is the disorganizational state not a time for such assimilation, but only a time for catharsis, and perhaps for experimenting with new modes of perceiving, feeling, and behaving? Should it turn out that assimilation during a state of partial disorganization is impossible, can methods be devised for facilitating assimilation at a later time? Patients often report that they can recall little or nothing of what they said and did during such states. Would it be useful to make tape recordings of some of the utterances of the patient during such a state, and review the tape with the patient at a later time, when assimilation is more feasible?

In conclusion, once the assumption is made that certain acute, schizophrenic disorganizational states are the consequence of a natural, adaptive process, albeit a desperate one, there is the hope that much of value can be learned through studying these states.

Acknowledgment
The preparation of this article was supported by NIMH Research Grant MH-01293. I would like to express my appreciation to Professor James Averill for his helpful criticisms of an earlier draft of the article.

References
Epstein, S. "Natural Healing Processes of the Mind: II. Coping With the Energetic Component of Stimulation." Unpublished manuscript, Department of Psychology, University of Massachusetts, Amherst, Mass. 1978.
Epstein, S. The self-concept: A review and proposal of an integrated theory of personality. In: Staub, E.,


The Author

Seymour Epstein, Ph.D., is Professor, Department of Psychology, University of Massachusetts, Amherst, Mass.