few published studies of either the positive-incentive value of food or of conditioned taste aversions in anorexics. Vitousek and Gray’s comments about the positive-incentive value of food in anorexics, although intended as an attack on our position, cry out for more research. Anorexics act in some ways as if they are experiencing aversions for food and in others as if food has a very high positive-incentive value—just the sort of ambivalent behavior that one would expect of starving subjects with widespread taste aversions.

We did not suggest that taste aversions are the major causal factor in anorexia nervosa but rather that for some anorexics, taste aversions might make it easier for them to refrain from eating in the face of starvation. Vitousek and Gray (2002) responded by pointing out that the participants in the Keys et al. (1950) study managed to voluntarily starve themselves without apparent taste aversions. In contrast to most anorexics, however, the participants in the Keys et al. study were not continually encouraged to eat. In addition, they requested that they not be asked to perform functions that involved the handling of food “because the temptations under these circumstances were too great” (Keys et al., 1950, p. 832).

Unfortunately, Vitousek and Gray (2002) did not comment on our conclusion that the consumption of meals by anorexics may be contraindicated. The disruptive postigestion effects of meals in starving subjects are well documented. Our suggestion that adverse effects, such as widespread conditioned taste aversions, might be produced in anorexics by meals has immediate implications for the design of treatment programs for anorexia, which often have as their major goal the consumption of meals.

REFERENCES


Implications of the Case Studies of Creative People for Psychometrics

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There are at least three generalizations to be drawn out of the extremely engaging series of case studies of creative people that appeared in the April 2001 issue of the American Psychologist (Sternberg & Dess, April 2001). One is that no profile of scores on a range of psychometric tests, or even such a profile accompanied by a profile of the environment of the kind typically generated from questionnaires designed to measure home, school, and organizational climate, would have made it possible to describe these people in meaningful ways, let alone capture the person–environment interactions described.

The cases thus provide striking illustrations of the proposition that the way in which most psychologists have tried to describe and explain individual differences is not only unduly simplistic but actually inappropriate.

In essence, what these authors actually did was spell out the way in which specific aspects of the environment engaged with the motives of the person concerned to release a subset of the components of competence that make for one type of effective behavior or another. To do this formally, it would be necessary to develop an agreed-on descriptive framework akin to that used by biologists to describe the features of organisms that interact with specific features of their environments to make for different types of effectiveness.

The consequences of not developing such a framework may be highlighted by pursuing the analogy with biology. Where would zoologists have got to if they had tried to account for the bulk of the variance in the animal kingdom in terms of 1 species—5 (Big 5), or even 16 variables? Where would zoologists have got to if they had tried—independently of one another—to describe the variance of effective behavior in terms of 10 or 12 variables? Just where would they have ended up if they had then tried to account for the effects of environments on animals by correlating the scores on the animal variables (taken one at a time) with the environmental variables?

From our present vantage point, such a procedure would be patently absurd. Yet this is precisely what most psychologists concerned with individual differences have sought to do for the past century.

If psychologists wish to move forward, it would behoove them to pay close attention to what the authors of these articles actually did. As I see it, this was first to note the idiosyncratic motives or preoccupations of the individuals they set out to describe. They then moved on to discuss the particular pattern of competencies those individuals brought to bear to translate their motives into effect. While doing this, they looked at the various aspects of the environment reinforced or negated the individuals’ values and led them to release and develop competencies crucial to modifying their environments and translating their motives into effect.

If I am right, what this means, given the analogy suggested earlier, is that psychologists need to develop agreed-on descriptive frameworks, somewhat like those used by chemists and biologists, to describe people, their environments, and the interactions that transform both people and their environments as the environment and the individual engage with each other.

In developing such frameworks, it will be necessary to pay attention to the fact—so far almost completely neglected by psychologists—that groups of people have emergent properties that cannot be determined by adding up the properties of the individuals who compose them any more than it is possible to determine the properties of copper sulfate by adding up the properties of copper, sulfur, and oxygen. What is more, people behave very differently in different contexts, just as copper behaves very differently in an environment consisting of pure water and in an environment of sulfuric acid. Just as both the copper and the sulfuric acid mutually transform each other (while their components remain unchanged), so people and their environments mutually transform each other.

Thus, psychologists not only need to set about mapping the transformational processes that occur in homes, schools, and workplaces, they also need to develop frameworks of descriptors suitable for use at different levels in the system. Psychologists need frameworks equivalent to the hierarchy of frameworks used to classify foodstuffs, digestive systems, animals, and ecological niches.

There is another generalization to be drawn out of the case studies. This is that creativity is a difficult and demanding process that is only engaged in—and thus only becomes visible—while people are engaged in activities that motivate them. Thus, some