

Trait Theory as Personality Theory: Can a Part Be as Great as the Whole?

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Pervin has performed a valuable service by examining an important and timely issue—the sufficiency of trait theory (and, more specifically, Big Five trait theory) as a general theory of personality. At the very least, he has framed the important issues for debate.

Recently, there has been a great deal of headiness among some trait theorists—instigated by impressive, convergent evidence that five fundamental traits organize a great deal of the descriptive domain of personality. The enthusiasm has fostered extravagant claims by some that the Big Five has laid bare the structure of personality and provided the basis for a total theory of personality encompassing motives, thoughts, emotions, and everything else of any importance in personality.

Pervin concludes that trait theorists have indeed found an impressive degree of orderliness in behavior that can be attributed to traits, but the picture, according to him, is far less sanguine than some trait theorists would have us believe. Predictive validity is at best modest, there is considerable disagreement as to what some of the Big Five are, and there is not even agreement among trait theorists about what a trait is. In addition, trait theories, according to Pervin, fall short in the following fundamental ways: They fail to consider the patterning of personality, they fail to take into account the difference between motivational and descriptive constructs, they fail to consider the dynamic interplay among constructs, and they fail to consider that traits fare far better as descriptive rather than explanatory constructs.

Although I agree with almost everything Pervin has said, I do not agree with his view that trait theorists cannot represent organization, or patterning, in personality. Given all the permutations and combinations possible with five variables, there is a lot of room for patterning. Moreover, the patterning can be vastly extended by adding facets to the Big Five, as Costa and McCrae (1985) did. Thus, patterning per se is not the issue, but the content of what is patterned. The problem with trait theory in general and Big Five trait theories in particular is that they don't have the right units for establishing useful patterns for understanding how people operate. Their units are useful for describing what people are like (structure) but not for how they operate (process).

From my perspective, there are several reasons why a trait approach is not sufficient for an adequate theory of personality, not all of which coincide with the rea-

sons listed by Pervin. Included are the following, not necessarily independent, limitations of trait theories—limitations inherent in a purely descriptive approach, limitations inherent in a nomothetic approach, limitations inherent in a psychometric approach, and limitations inherent in an empirical, atheoretical approach.

Limitations of a Descriptive Approach

I can best illustrate the limitations of a purely descriptive approach with the following story. Once upon a time, there was a psychologist, Sam, who decided to study cars rather than people. He believed it is more scientific to study cars because they are more controllable and easier to understand than people. Sam pointed out that, because cars have much in common with people—including moving, eating (i.e., ingesting gasoline), breathing (i.e., taking oxygen into their filters to use for combustion), elimination (i.e., exhaust), individual personalities, and malfunctioning—the knowledge he would gain from cars should be transferable to people. "First things first," he said, "After I learn how to represent the personality of cars, I shall be ready to turn to people."

So Sam set about establishing the fundamental attributes of cars. With the aid of factor analysis, he uncovered five orthogonal attributes—color (black, white, red, blue, etc.), type (station wagon, sport coupe, sedan, recreation vehicle, etc.), size (compact, subcompact, full size), maximum speed, and robustness (as operationally determined by service record). The results were most impressive. Judges could reliably use the classification, it was highly inclusive (encompassing all known types of cars), the system held up subculturally and cross-culturally, and all kinds of interesting observations correlated with it. For example, large families with pets were more likely to drive station wagons, and single individuals with a high need for stimulation were more likely to drive sport cars.

The solution was actually not as easy as it might seem. Sam had to work hard to finally establish the basic attributes, but, thanks to high-powered computers, the task was finally completed. As an example of some of the difficulties that arose, Sam originally had included other dimensions that he thought were important, but factor analysis informed him they were worthless as basic dimensions because they were intercorrelated. These included such scientifically useless variables (because they are intercorrelated) as

weight, length, width, and height. When he factor-analyzed these variables, they coalesced into a single factor of density. At first, that seemed to him to be an elegant solution, but then he found that density was not independent of size (compact, subcompact, etc.), which accounted for more of the variance than density did (in a regression equation), so he had no choice but to drop density.

Sam was very proud of the degree of organization he was able to bring to the classification of cars with only five factors. One day, when he was on a trip to present his latest findings at a psychological convention, his car broke down. Unfortunately, he hadn't the foggiest idea of what to do about it. He knew nothing about how the car functioned. In fact, he had never looked under the hood, which he equated with the deep, dark unconscious in humans, and therefore unimportant. He had to work with what he had, which was all kinds of research findings about how the basic attributes of his car correlated with breakdown. Color routinely produced non-significant relations with service record, although there was a nonsignificant tendency for people who drove red cars to have slightly more accidents than those who drove black cars. Robustness was obviously a relevant variable, and, to be sure, it predicted future breakdowns better than chance. So now he understood why his car had broken down—it was low on robustness. It occurred to him that this could readily be transferred to human behavior by substituting neurosis. He now could explain why humans had psychological symptoms—they were neurotic. People developed symptoms because they were high in neuroticism just as cars broke down because they were low in robustness. However, his car, not sharing his enthusiasm over this insight, budged not an inch.

Sam finally decided that cars were too complicated, so he went back to studying people. He entertained the dream that, by factor-analyzing the separate factors and uncovering more facets, he would eventually be able to attach labels to all conditions, which for him meant complete understanding.

The point of the story is obviously that a description of surface attributes, although useful for some purposes, provides a poor basis for understanding process. If one wishes to understand what makes people tick, and what to do about off-beat ticking, a more dynamic, interactive approach capable of elucidating cause-and-effect relations is necessary.

Limitations of a Nomothetic Approach

There are two important branches of personality that together define personality psychology as a discipline—individual differences (identified with a nomothetic approach) and organization and interaction of

variables within individuals (identified with an idiographic approach). Trait theory is of value for the first approach and largely irrelevant for the second. For purposes of classifying, screening, and personnel selection, a nomothetic, trait approach has obviously much to offer. For understanding how people operate, it is very limited. It stands to reason that, if one wants to know how individuals operate, it is necessary to examine how variables are patterned and interact with one another within individuals. There is no reason to assume that relations established among individuals are the same as those within individuals, and there is considerable evidence that they often are not (e.g., Epstein, 1983).

As noted by Pervin, trait theorists in general and Big Five theorists in particular have paid little attention to the organization of variables within individuals. This raises an interesting challenge for Big Five theorists. If a factor analysis were conducted on data obtained within individuals over situations and occasions, would the Big Five factors emerge? That is, would individual behavior be found to vary over occasions and situations meaningfully and independently along dimensions of introversion–extroversion, neuroticism–good adjustment, open-mindedness–close-mindedness, friendliness–belligerence, and conscientiousness–irresponsibility? Considering that a fundamental attribute of traits is that they are relatively stable dispositions, it seems unlikely that the five-factor model would be applicable to the in-depth study of individuals. On the other hand, research examining emotions in an intrasubject design has produced some very informative findings. People's emotions do vary meaningfully over time, and they establish different relations and have a different factor structure from the same emotions examined in an intersubject design (Epstein, 1983).

It may be concluded that Big Five trait theories, at best, leave out half the field of personality psychology. Being relevant to the other half of psychology is, of course, not all that bad.

Limitations of a Psychometric Approach

We sometimes forget that psychometrics are simply tools and that their use should be guided, whenever possible, by theory. Not very long ago, I read a review by a trait theorist of an article that had been submitted for publication. The trait theorist, who apparently was a Big Five proponent, recommended that the article be rejected because the examined self-report scales had not been correlated with the Big Five, and he or she apparently believed that the Big Five should serve as the standard against which all other variables are rou-

tinely evaluated. Of particular concern to this reviewer was that a coping scale might be so highly correlated with Neuroticism that it could be dispensed with. No consideration was given to the content of the scale and to the remedial use to which the information derived from it, which included several facets of coping, might be put. All that mattered was psychometric considerations. It did not occur to the reviewer that the coping scale might be highly correlated with neuroticism because it measured the cognitive basis of neuroticism, which could provide some very useful information for remediation that a Neuroticism score alone could not. After all, Neuroticism, as measured by factor-analytic scales, is a conceptual hodgepodge of intercorrelated items including cognitions, behavior, emotions, and symptoms. Apparently, the differences among these processes are of no interest to some because they are highly correlated and therefore can presumably be treated as interchangeable. For some purposes, an atheoretical psychometric, empirical hodgepodge scale like Neuroticism is obviously useful. For others, it has little more to offer than a label.

It may be concluded that psychometric and conceptual validity do not always coincide and that a blind adherence to psychometric considerations is highly limiting.

Limitations of an Empirical, Atheoretical Approach

There is no substitute for a good theory of personality that can draw attention to important processes, such as goal-directed behavior and levels of information processing. Not only, as Pervin and others have well pointed out, does trait theory fail to consider that the interaction of motives can account for ego-alien behavior, for the same behavior occurring for different reasons, and for different behavior occurring for the same reason, but it also fails to take into account different levels of processing.

Trait theorists have been silent on the issue of levels of information processing—this despite the fact that there is now virtually universal agreement among cognitive psychologists that most information processing occurs automatically, outside awareness. Moreover, there is good reason to believe that different principles guide information processing at preconscious and con-

scious levels. Surely, any serious theory of personality must take this observation into account. At the very least, it has implications with respect to limitations in self-report techniques, which have been the major source of data for trait theories.

A further problem with following a purely empirical approach is that, in the absence of a guiding theory, the units that are selected for classification may or may not be the most theoretically meaningful ones. As an example, consider what would happen if one attempted to classify animals in the absence of theory. It is highly likely that whales and porpoises would be grouped with sharks and other fish and not with mice and other mammals.

Conclusion

There are obviously serious limitations in any trait theory meant to serve as a general theory of personality. This is not meant to deny that the findings supporting the Big Five model are highly impressive. Not only does the model provide information empirically useful for classification, screening, and predicting individual differences in behavior of various kinds, but it has theoretical implications with respect to the inheritance of temperament and the nature of individual differences. Thus, it provides a model that any complete theory of personality must seriously consider. However, it is one thing to provide a model that should be considered in a complete theory of personality and another to consider the model as the foundation for the complete theory.

Note

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