# PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

# Was Gordon Allport a Trait Theorist?

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Contemporary discussions have generally defined a trait as a pervasive, cross-situational consistency in behavior. A careful examination of Allport's (1937, 1961, 1966) writings reveals that he did not believe in such pervasive consistencies. In fact, he maintained that behavior in different situations is frequently inconsistent, even contradictory, because different traits are aroused to different degrees in different situations. Allport was, therefore, an interactionist in the sense that he recognized that behavior is determined by the person and the situation. However, he failed to develop an interactionist process theory that could predict and explain the situational variability that he observed and described. Allport's concept of a trait as well as those of several contemporary theorists are compared and found to differ in terms of (a) the ontological status they ascribe to traits and (b) the type of consistency over situation they require. Distinctions among types of trait concepts are then used to clarify the debate about the existence of traits. It is argued that the evidence for traits as pervasive, cross-situational consistencies is quite negative but that there is considerable evidence for the existence of traits as average levels of responses and as consistent patterns within delimited ranges of situations. Mischel's (1984) concept of a context-bound consistency is shown to be surprisingly similar to Allport's concept of a trait. The future of trait constructs is discussed in relation to the descriptive, predictive, and explanatory functions of traits.

Disenchantment with the trait concept is widespread among personality psychologists and is often attributed to Mischel's (1968) influential critique. Critics of trait psychology have portrayed Gordon Allport as both the originator and the principal exponent of the doctrine of traits (Bem & Allen, 1974; Mischel & Peake, 1982). This article seeks to rehabilitate Allport by demonstrating that he was not a trait theorist, at least in the sense that most psychologists now understand the term. This reexamination of Allport's conceptualization of traits leads to a discussion of some issues in trait psychology that are relevant to contemporary work in personality. In particular, I attempt (a) to delineate the types of definitions of the trait concept that psychologists have used; (b) to compare Allport's definition with those of Mischel (1968), Epstein (1979), Moskowitz (1982), and Buss and Craik (1983); (c) to consider the implications of definitional differences for the ongoing debate about the existence of traits; and (d) to consider the future of trait constructs in personality psychology.

In order to rehabilitate Allport, we must first determine precisely what he has been accused of espousing. In their various writings, both Mischel and Bem have suggested that a belief in pervasive, cross-situational consistency is the defining feature of trait psychology. I will argue that although pervasive consis-

tency defined a trait for Mischel and Bem, it was not implied

by Allport's original use of the term. What, then, have Allport's

critics meant by pervasive consistency? Mischel and Peake (1982) argued that the appropriate empirical index of consis-

tency is the correlation between subjects' behaviors in pairs of

distinct situations. It follows that they believed that trait theo-

ries predict consistency in the rank ordering of subjects across

pairs of situations. The crucial point, however, is that Mischel and Peake (1982) examined the average of all pair-wise corre-

lations. This criterion of traitlikeness implies that a true trait

is manifested throughout an individual's life-space; consistent

behavior in some situations does not meet this criterion and cannot qualify as a trait. Stated differently, Mischel and Peake

(1982) apparently thought that for trait theories, pervasive

means consistency across all or practically all situations. Is this

an accurate representation of trait psychology? Did Allport in fact believe that traits are manifested by a relatively constant rank ordering of individuals across practically all situations?

Answering this question is complicated by Allport's (1937) distinction between nomothetically defined common traits and the defining feature

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<sup>&</sup>lt;sup>1</sup> In a recent article, Mischel (1983) seems to have altered his position and accepted the reliability of measures aggregated over situations as a legitimate measure of traitlikeness. The present article's argument is directed toward Mischel's earlier and highly influential statements. It is also true that at one point Mischel (1968, p. 295) acknowledged that "Allport (1966) recognized the enormous evidence that the behavior of the same person is variable and may change in accord with situations." In general, however, Mischel portrayed trait theory as oblivious to situational influences on behavior.

idiographically defined individual traits. Allport prescribed different procedures for establishing the existence of common traits, which apply (approximately) to many individuals, and individual traits, which exist only in one individual. The stability of the rank ordering of individuals is pertinent to common traits, but not to individual traits. For individual traits, the crucial question is the degree to which the individual's behavior is self-consistent from time to time and situation to situation. Let us set aside the incompatibility between Allport's critics' focus on a nomothetic criterion of consistency (constant rank ordering) and Allport's focus on idiographic criteria (self-consistency). The question then becomes, Does trait psychology predict consistency across practically all situations, for either common or individual traits?

No doubt, one can find numerous passages in both Allport's 1937 text and his 1961 revision in which he appears to endorse that belief. He wrote, for example:

The statistical proof for the existence of a trait lies in various measures of reliability. . . . It is likewise essential that if a person shows himself to be ascendant in one situation, he also shows himself (usually) to be ascendant in other situations. (Allport, 1961, p. 341)

Nevertheless, a careful reading of Allport reveals that he was fully conscious, even in 1937, of the variability as well as the consistency of behavior. Allport added a chapter in the 1961 text entitled "Character, Situation, Role," but it did not alter his basic conceptions of traits or the role of the environment. Likewise, Allport's (1966) final statement admitted, "my earlier views seemed to neglect the variability induced by ecological, social, and situational factors" (p. 9), but this admission did not lead to any qualitative changes in his theorizing. Because of the essentially stable nature of Allport's conceptualization of traits, I will present representative quotations from both the 1937 and 1961 books. Consider the following statements about the variability of behavior:

... the ever-changing nature of traits and their close dependence upon the fluid conditions of the environment forbid a conception that is over-rigid or over-simple. (Allport, 1937, p. 312)

Perfect consistency will never be found and must not be expected. (Allport, 1937, p. 330)

- ... trait-names... imply too much. The young teacher is not always "friendly"; he is not uniformly "ambitious" in every direction; his "enthusiasm" surely depends on what and whom he is teaching. (Allport, 1961, p. 333)
- . . . we must admit at the outset that no trait theory can be sound unless it allows for, and accounts for, the variability of a person's conduct. (Allport, 1961, p. 333)

The pull of the situation is, however, so powerful that we are forced to regard personality as never a fixed entity or pattern. . . . (All-port, 1961, p. 181)

How could Allport reconcile his belief in traits with these repeated acknowledgments of situational variability? Allport offered three types of explanations for inconsistencies in people's behavior. In some cases, he regarded situational variability as error variance linked to momentary fluctuations in the person's psychological state, to momentary conditions in the environment, to specific, dissociated habits, or to defensive masking of underlying traits. Another type of explanation viewed apparent inconsistencies as the result of the researcher's imposing an inappropriate common trait concept on the subject's behavior.

Thus, if a given child steals pennies, but does not lie, it might be that the child has two individual traits, one determining one behavior and one the other, rather than a single inconsistent disposition toward honesty (Allport, 1937, p. 251). Both of the first two types of explanation minimize the importance of apparent variability in behavior. Allport's third type of explanation, however, recognized genuine situational differences in people's behavior. He believed that such differences exist because different situations can arouse different traits in a person or, more commonly, different mixtures of traits. In fact, Allport emphasized that directly opposite traits could be activated in different situations:

Every person has conflicts, frequently expressed in antagonistic dispositions. The ever-changing environment raises now one trait and now another to a state of active tension. (Allport, 1937, p. 330)

. . . traits are often aroused in one type of situation and not in another; not all stimuli are equivalent in effectiveness. (Allport, 1937, pp. 331-332)

Sometimes a person may harbor personal dispositions that are exactly opposite. Conquering and yielding, extraverted and introverted, saintly and sinful dispositions may reside within one breast. (Allport, 1961, p. 363)

. . . personality traits often contradict each other. People may be both ascendant *and* submissive, perhaps submissive only towards those individuals bearing traditional symbols of authority and prestige; and towards everyone else aggressive and domineering. (Allport, 1937, p. 330)

The key to understanding Allport's conception of traits is his willingness to accept the notion of contradictory traits. The phrase contradictory traits makes sense only if a trait is understood to imply consistency over a limited range of situations. Thus, in Allport's terminology, a person could be said to display a trait of meticulousness in one set of situations and a trait of disorderliness in another set of situations. Allport (1937) gave the following example:

This man, a teacher, seemed one moment meticulous in his behavior, the next, careless and even slovenly. Measures of neatness in this case would certainly not correspond. But by looking further into the case, the illusion of specificity vanishes, for it appears that (he) is always orderly in respect to his personal possessions, and always disorderly in respect to other people's. (p. 357)

For Allport, then, a trait was inferred to account for a set of equivalent responses that tended to occur in response to a delimited range of situations. He stated that "it is the repeated occurrence of actions having the same significance (equivalence of response), following upon a definable range of stimuli having the same personal significance (equivalence of stimuli) that makes necessary the postulation of traits . . ." (Allport, 1937, p. 340). Allport recognized that traits vary in consistency, that is, the range of equivalent situations in which they are active. He did claim that some few individuals possess a cardinal trait that pervades virtually all their behavior, but he thought that the majority of people display central and specific traits that have lower levels of generality. It follows from the notion that central and specific traits are linked to a definable range of stimuli that a given person can display different traits in different situations and, of course, that different people can vary in the traits activated in those same situations. Stated in this manner, Allport's theory has more in common with what are now called

interactionist theories than with trait psychology as it has been presented by Mischel and Bem.

Allport did not, of course, describe his theory as interactionist, but the substance of his theory is consistent with contemporary interactionism. One might object that Allport himself wrote, "I do not believe that traits can be defined in terms of interaction effects," but he went on to explain, "since all tendencies draw their energy from within the person" (Allport, 1966, p. 9). It is clear that his objection was to statistical interactions as explanations of behavior; he did not criticize them as descriptions of behavior.

Allport's conception of a trait can be better understood by comparing it with certain concepts in Rotter's (1954, 1982) social learning theory (SLT), an explicitly interactionist account of personality. In Rotter's SLT, a behavior potential refers to the potential for a given behavior's occurring in a specific situation. Behavior potentials are determined by, among other variables, situation-specific expectancies and situation-specific reinforcement values. This is a highly specific level of analysis, but Rotter went on to hypothesize that various behavior potentials become related (i.e., predictable one from the other) as various situations come to be perceived as related. Rotter's molar concept of need potential refers to the average potential for occurrence of a set of behaviors in a group of related situations; thus, one can speak of need potential for dominance in situations of athletic competition and need potential for dominance in heterosocial situations.

Social learning theory predicts a moderate level of consistency of behavior within a class of situations and a low, but nonzero, level of consistency across classes of situations. One might expect moderate consistency in dominance in different athletic situations and moderate consistency in dominance in different social situations, but one would not be surprised if dominance on the playing field failed to predict dominance in social groups. Allport's concept of a trait is similar to Rotter's concept of a need potential. A teenager who would be said by Allport to possess the trait of dominance in athletic contexts and the trait of submissiveness in social contexts would be said by Rotter to have a high need potential for dominance in athletic contexts and a high need potential for submissiveness in social contexts.

There are, however, important differences between the constructs. Allport viewed traits as causal entities, whereas Rotter did not conceive of need potentials as corresponding to neurophysiological structures. More fundamentally, Allport's analysis of the causes of behavior relied entirely on the trait concept. Social learning theory, in contrast, postulates that need potentials are themselves determined by expectancies and reinforcement values. Thus, SLT provides a deeper level of causal analysis in which traitlike variables (need potentials) are predicted using cognitive and motivational variables that are linked to specific situations. To anticipate a later argument, SLT differs from Allport's theory in that it includes a process theory that describes the effects of the immediate situation on the person. The process theory makes it possible to predict consistencies in behavior; the absence of a process component largely restricted Allport to post hoc descriptions of such consistencies.

# Trait Psychology as Interactionism

Magnusson and Endler (1977) distinguished between two meanings of the expression "person-situation interaction." The

mechanistic sense refers to a statistical interaction between persons and situations in which person and situational variables must be considered conjointly in order to predict behavior accurately. The dynamic sense refers to a "model of behavior in which person mediating variables, person reaction variables, and situations (environments) are integrated in order to describe and explain the *process* whereby individual behavior develops and maintains itself" (Magnusson & Endler, 1977, p. 19). It has already been shown that Allport was an interactionist in the former sense, that is, that he acknowledged that each person's traits are uniquely linked to classes of activating situations. Was he an interactionist in the second sense as well? In order to qualify as a dynamic interactionist, a theorist should be able to describe both the effect of the situation on the person and the effect of the person on the situation.

There is no question that Allport described dynamic processes by which individuals affect the situations in which they find themselves. Like the more recent theorists Wachtel (1973) and Snyder (1981), Allport (1937) proposed that situations are to some extent products of the person because people choose the situations to which they expose themselves:

Traits may be even more self-active. . . . The egotist and the gossip when alone may feel quite restless until they have sought out an opportunity to unburden themselves. They seek an excuse to talk, and put themselves in the way of stimuli that will release the flood. (pp. 321-322)

A still more radical interactionism is embodied in the idea that persons create the situations in which they live and, in turn, are products of those situations (Bandura, 1978; Snyder, 1981; Wachtel, 1973). In this conception, persons are not regarded as fixed entities that simply make choices from an array of fixed, static situations. Situations are created, in part, by the person's own actions. Allport was well aware of this effect of people on situations:

... most people do a good deal to create the situation to which they respond... In brief, the situations we find ourselves in are often the direct product of our previous (and continuing) personalities. (Allport, 1961, p. 179).

Unfortunately, Allport was far less clear about the processes by which situations affect persons. He repeatedly referred to the immediate situation as "arousing" various traits, but he failed to explicate how this arousal took place; arousal remained essentially a neurophysiological metaphor. Absent from his theory is anything analogous to Rotter's description of how situational cues activate situation-specific expectancies and situation-specific reinforcement values, which together determine behavior. It should be emphasized, however, that there is nothing in Allport's account that is inconsistent with a process theory of the effects of the immediate situation; the problem, rather, is that he was unable to develop an explicit theory of such interactions.

Allport also had little to say about how the environment can,

<sup>&</sup>lt;sup>2</sup> Allport distinguished adaptive from expressive (i.e., stylistic) traits. The comparison with need potential is more apt for the former than the latter. Furthermore, the concept of need potential implies an averaging over situations. It will be seen that definitions of traits in terms of averages are somewhat different from Allport's definition.

over the course of time, transform a person's personality (traits). The fact that adults change was important to Allport, but he thought of such change as resulting from the innate propensity of the organism to grow and develop, rather than as a result of the impact of the environment (Allport, 1960). He denied, in fact, that anything but the most extreme environmental changes could affect a person's basic personality: "Even under conditions of social *anomie*... the person manages to retain his personality system more or less intact" (Allport, 1961, p. 188).

In summary, Allport failed to specify the processes by which the immediate situation affects a person's behavior, although he knew that in some way it did so. He was, in addition, basically unsympathetic to the idea that environments can have transforming effects on persons. It is time for Allport to be recognized as an interactionist in the descriptive (mechanistic) sense, but he cannot be said to have achieved an interactionist theory in the dynamic (process) sense. This shortcoming prevented him from moving much beyond post hoc descriptions of observed regularities in behavior. Nevertheless, the regularities that he described (and hoped to explain) were more situationally dependent than the pervasive consistencies of Mischel and Bem's version of trait psychology.

If Allport was not a trait theorist, who was or is a trait theorist? Cattell's trait theory could be the subject of another lengthy article. For now, it is sufficient to note that Cattell's (1965) specification equation for predicting behavior explicitly takes into account the unique meaning of each situation for each person; behavior is predicted by considering both person and situation variables. Cattell did not claim pervasive consistency in overt behavior. In fact, the specification equation is conceptually very similar to Allport's (1937, p. 327) statement that "the arousal of several dispositions in varying degrees seems to be the rule, each contributing to the convergent conduct in proportion to its degree of arousal."

Is the layperson a trait psychologist, possessed of a commonsense conviction in the reality of pervasive cross-situational consistency (Bem & Allen, 1974; Mischel, 1968; Mischel & Peake, 1982)? Recent evidence brings this conclusion into doubt, too. Allen and Smith (1980) showed that subjects preferred interactional explanations of behavior to either trait or situational explanations. Epstein and Terapulsky (1986) reported that people do not perceive high correlations among the behavioral referents of traits, that they discriminate degrees of relatedness, and that they report relying on situational as well as trait concepts in making such judgments. Lastly, Zuroff (1982) showed that subjects were aware of both situational and personby-situation interaction effects in the behavior of their friends. The layperson, like Allport, may be more accurately described as an interactionist than as a trait theorist. Of course, no one doubts that the lay psychologist draws freely on the lexicon of 18,000 trait terms when describing other people; what is debatable is whether this reflects a belief in pervasive consistencies.

## What Is a Trait?

So far I have argued that neither Gordon Allport nor the person in the street can be called a trait theorist or, to put it less dramatically, that their definitions of trait are quite different from the Mischel-Bem definition. It may be useful for the ongo-

ing discussion of the nature of personality to consider the widely varying definitions that have been proposed for the term *trait*. Several excellent conceptual analyses of trait concepts are available, including those of Alston (1975), Buss and Craik (1984), Hirschberg (1978), Ryle (1949), and Wiggins (1974). For present purposes, it is convenient to distinguish two principal ways in which definitions of trait can vary: the ontological status they accord to traits and the type of consistency over situations that they require.

There are three basic positions on the reality of traits. As is well known, Allport held that traits are real, causal entities that correspond to as yet unknown neurophysiological structures. An opposing view is that traits are purely descriptive; they summarize a person's past behavior, but they have no real existence and are certainly not causal entities (Buss & Craik, 1983; Wiggins, 1974). A third possibility is that traits are dispositional concepts (Ryle, 1949). Hirschberg (1978) summarized this position as follows:

Consider solubility in water: to say X is soluble in water is to say that if X were placed in water, X would dissolve. . . . Similarly, to say X is courageous is to say that in the face of danger X would stand fast. The dispositional form of the definition is that if X were in a certain kind of situation (S), X would emit a certain kind of response (R). (p. 49)

The dispositional view of traits, then, is that they describe a tendency to perform a certain class of acts when the individual is placed in a certain class of situations. Dispositions are distinct from summaries because they do not imply anything about the actual occurrence of behavior; in the absence of the eliciting stimulus, even a strong disposition will not be manifested in the stream of behavior. Although there are some philosophers who view dispositions as causal concepts (Armstrong, 1969; Hirschberg, 1978), they are generally not considered to provide causal explanations and, of course, they are not entities.

Note that each of these definitions is potentially compatible with an interactionist psychology or, to put it differently, that a theorist's position on the ontological status of traits does not constrain his or her position on the consistency issue. The summary view of traits can accept traits that summarize over any range of situations, broad or narrow; the dispositional view can define broad or narrow dispositions as traits; and the causal view can postulate neuronal structures that are activated by a broad or narrow class of situational stimuli.

Alston (1975) proposed a distinction that corresponds to that between the causal and dispositional views identified earlier. Alston's T-concepts are dispositional concepts that describe regularities in a person's behavior of the type: If situations of type S are present, then responses of type R will generally occur. Theoretical concepts (or purposive-cognitive concepts, as Alston also referred to them) are causal concepts that are used to explain regularities (or departures from regularity) in behavior. The most familiar examples of T-concepts in psychology are certain trait concepts (e.g., trait anxiety and dominance), and the most familiar theoretical concepts are beliefs, desires, and abilities. Because Allport used trait terminology, one might think that he should be placed in the T-concept camp. In fact, however, Allport's traits were theoretical terms that he regarded as inferred rather than observed and that were intended to provide explanations of observed regularities. Allport's limited success in constructing a predictive theory suggests that he bet on the wrong theoretical horse when he adopted trait concepts, but there is no doubt that his trait concept is as truly a theoretical concept as the beliefs and desires emphasized by Alston (1975). This analysis is consistent with Wiggins's (1974) argument that Allport and most other trait theorists went wrong precisely at the point where they interpreted traits as generative mechanisms rather than as categorical summaries.

With respect to the type of consistency that is required in the definition of a trait, there are four basic positions. The first two positions have already been described. The first requires a pervasive consistency and, in the case of common traits, uses the average of all pair-wise correlations between situations as the criterion for consistency. The second requires a high level of consistency within a delimited range of situations and permits inconsistency or even contradiction outside that range of situations. In Allport's (1961) words:

There must be some demonstrable relationship between separate acts before (a trait's) existence can be inferred. Yet the occurrence of dissociated, specific, and even contradictory acts is not necessarily fatal to the inference. (p. 363)

The third position defines a trait as a person's average level of response over a given range of situations.3 Studies by Epstein (1979, 1980) and Moskowitz (1982) exemplify this approach. Epstein (1979) measured a variety of traits by averaging over multiple occasions of observation. Moskowitz (1982) defined trait levels of dominance and dependency by averaging children's scores in various specific situations. A trait defined in this fashion is not incompatible with the presence of variability within the set of situations over which the averaging takes place. However, the average level should be reasonably consistent. The consistency required of the average level can be assessed by one of two criteria. Epstein's (1979) criterion was that average scores should predict other comparable averages. Moskowitz's (1982) criterion was that the correlations between average scores and behavior in independent situations (i.e., individual scores) should be, on the average, of substantial magnitude.

Allport's conception of traits and that of Epstein and Moskowitz cannot be regarded as antithetical. Both tolerate some inconsistency in trait-relevant behaviors, and both are flexible in the range of situations that are encompassed by traits. I believe that Allport expected a higher level of consistency and was more willing to select compatible (equivalent) situations in order to attain it. For example, Allport might describe a child who takes female peers' toys, threatens male peers, tells female teachers what to do, but avoids male teachers, as having a trait of dominance that extends only to the first three types of situations. Moskowitz (1982) would describe the child as being, on the average, dominant within the entire set of situations. Allport's approach of constructing traits that are highly consistent over a selected group of situations is more feasible given an idiographic examination of a specific individual's life, whereas the Epstein-Moskowitz approach is more readily applied in nomothetic research. Another difference between the definitions concerns the ontological status accorded to traits; Allport viewed them as causal entities, whereas Epstein (1979) and Moskowitz (1982) regarded them as dispositions.

Buss and Craik's (1983) act frequency analysis of traits presents a fourth position on the type of situational consistency to

be expected of a trait. They defined a disposition (trait) as the frequency of occurrence of acts prototypical of that disposition over a fixed period of time.<sup>5</sup> The concept of a prototypical act was derived from recent analyses of the structure of natural language categories and refers to acts that are perceived to be core elements (or good exemplars) of the concept. Organizing a game of charades is a prototypically extraverted act. For any given individual, summing over time is equivalent to averaging over all the situations that are encountered in the interval and, therefore, Buss and Craik's definition is somewhat similar to Epstein and Moskowitz's. Furthermore, Buss and Craik (1983), like Epstein, emphasized that the appropriate criterion for the reliability of a disposition is another, similar aggregate.

However, there are also some important divergences. Buss and Craik's (1983) definition required aggregating frequencies of prototypic acts, whereas Epstein and Moskowitz made no commitment to a specific form of measurement prior to aggregation over situations. Epstein and Moskowitz could accept aggregating measures of intensity as easily as aggregating measures of frequency. The most fundamental difference, however, is that Buss and Craik advocated aggregating over time, not situations; the sampling of situations produced by their definition is uncontrolled and unsystematic. The Buss and Craik definition even allows individuals who experience totally different situations to be compared in terms of their summed act frequencies over a given time period.

It could be argued that the Buss-Craik definition has the important advantage of making possible interindividual comparisons of traits, because all that must be controlled is the time interval during which the individuals are observed. The Epstein-Moskowitz definition appears to run into difficulties whenever individuals encounter different samples of situations, which will usually be the case in natural environments. Can one compare aggregate levels of aggression if subjects are free to create or seek aggression-instigating situations? This apparently reasonable question misses the point that Epstein and Moskowitz would not be interested in the actual number of aggressive actions, but instead would be interested in a (aggregated) disposition to aggression. Pragmatic difficulties may exist, but conceptually it is clear how to compare individuals in terms of Epstein-Moskowitz traits; one must observe their behavior in equivalent samples of the situations over which aggregation is to take place.

Returning to the question of situational consistency, one can see that Buss and Craik transcended the debate by defining dispositions independently of evoking situations. There is no requirement of situational consistency in their definition of a disposition (trait); instead, it is replaced by a requirement of temporal consistency. Buss and Craik's focus on units of time rather

<sup>&</sup>lt;sup>3</sup> Average here is meant to include both arithmetic means and weighted averages derived from regression analyses (see Moskowitz, 1982).

<sup>&</sup>lt;sup>4</sup> Epstein (1980, 1983b) and Mischel and Peake (1982) differed on whether Epstein (1979) succeeded in aggregating over situations as well as occasions. For the present purposes, it is only important that Epstein (1979, 1980, 1983a, 1983b) endorsed averaging over situations.

<sup>&</sup>lt;sup>5</sup> Buss and Craik (1983) used the term *disposition*, but in Hirschberg's (1978) terminology, they advocated a summary rather than a dispositional view of traits.

than ranges of situations is in part a reflection of their ontological position that traits are simply summaries of how a person has acted. Epstein and Moskowitz, in contrast, viewed traits as behavioral dispositions defined for classes of situations that might or might not actually occur in a given time interval.

#### Do Traits Exist?

A comprehensive examination of the empirical literature relevant to this question is beyond the scope of this article. However, there are certain aspects of this literature about which there is considerable agreement, and it is to these that I wish to draw attention. These points of agreement become obvious once one insists that the answer to the question depends on how the term trait is defined. If trait is a pervasive cross-situational consistency, then the answer seems to be no. None of the major studies that have measured overt behavior in clearly discriminable situations have found impressive average correlations between behavior in pairs of situations (Dudycha, 1936; Hartshorne & May, 1928; Mischel & Peake, 1982; Moskowitz, 1982; Newcomb, 1929, cited in Bem & Allen, 1974). It is possible, of course, that improved designs would yield higher pair-wise correlations (Block, 1977). Nevertheless, the available data suggest that Mischel was correct, within the terms of the argument as he originally defined it.

One must ask next whether traits defined as average levels of response exist. Mischel and Peake (1982) reported that when behavioral measures of conscientiousness were aggregated over occasions, response forms, and situations, there was an increase from an "average .13 cross-situational consistency coefficient (to) an internal reliability estimate of .74" (p. 738). In other words, the trait measure of conscientiousness defined by averaging over situations would be expected to be highly predictive of another, similarly obtained average measure.6 Moskowitz (1982) studied two traits, dominance and dependency. She found that trait scores, defined as weighted averages over three situations, had an average correlation with behavior in a new situation of .62 for dominance and .26 for dependency. She concluded that dominance could be considered a reasonably consistent trait, but dependency was not traitlike. The need to study other potential traits is evident, but it is also clear that at least some behavioral characteristics can be meaningfully described as traits, provided, of course, that trait is understood to mean an average response level.

Note that Mischel and Peake (1982) dismissed the procedure of aggregating over situations as "bypassing the problem of cross-situational consistency instead of solving it" (p. 738). This argument makes sense if one accepts Mischel and Peake's definition of a trait, because averaging will indeed "hide" lack of consistency between pairs of situations. However, trait need not imply pervasive consistency over pairs of situations, and the appropriate criterion of traitlikeness is not necessarily the average of pair-wise correlations (Epstein, 1983b). From the Epstein-Moskowitz perspective, averaging over situations is not an evasion, but a requirement of the definition of trait.

It seems that the debate about the existence of traits can be brought to an end and that the field is ready to move on to new questions (Epstein, 1983a; Funder, 1983; Mischel, 1983). In recent articles, Epstein (1983a) has clearly stated that behavior is highly situationally specific, in the sense that behavior in pairs

of situations tends to be weakly related, and Mischel (1983) has clearly stated that behavior is stable, in the sense that one aggregated sample of behavior is able to predict another sample. Mischel (1983) suggested that although this pattern of results has been well documented, "It is the implications that continue to be read in quite different ways" (p. 598). Specifically, one can conclude either that traits do or do not exist, depending on whether one adopts the Epstein-Moskowitz or the Mischel-Bem definition of traits.

Perhaps because the act-frequency approach is relatively new, there is little evidence that bears directly on the question of whether frequencies of prototypical acts are stable over time. There is, of course, considerable evidence for the temporal stability of various traits, a point that Mischel did not dispute. However, the operations employed to measure traits in studies of temporal consistency do not correspond precisely to the act-frequency conceptualization, so their results are difficult to interpret. At present, I am aware of only one study that has directly assessed the stability of an act-frequency disposition. Mischel and Peake (1982) reported statistically significant levels of temporal stability for conscientiousness, although the stability of more prototypical acts did not appear to exceed that of less prototypical acts. The need for more research on act-frequency dispositions is evident.

Lastly, let us consider whether traits in Allport's sense of the word can be shown to exist. This question can be approached by considering the relation between Allport's definition of a trait and the Epstein-Moskowitz definition. Because Moskowitz (1982) averaged over all available situations, and Allport only required consistency within a subset of situations, Allport's definition is less stringent and should be easier to satisfy. In effect, the existence of Epstein-Moskowitz traits guarantees the existence of at least some Allport traits. A recent reanalysis of Mischel and Peake's (1982) observational study of conscientiousness provides empirical support for this conclusion. Jackson and Paunonen (1985) obtained mean correlations between pairs of situations that exceeded .65, corrected for attenuation, by aggregating within subsets of the 19 situations. They conceptualized this procedure as identifying facets within the domain of conscientiousness. It is interesting to observe that one and the same data set (Mischel & Peake, 1982) has been used to demonstrate that average correlations between pairs of situations are low, that correlations between broad aggregates are substantial, and that pair-wise correlations within meaningful subsets of situations can be quite high.

A major stumbling block for Allport's approach has been the inability of the theory to predict groupings of situations within which consistency should be high. In the absence of such predictions, Allport's definition requires either idiographic post hoc identification of meaningful groups of situations or the use of broad, culturally shared groupings of situations (Rotter, 1955). In principle, however, it should be possible to identify

<sup>&</sup>lt;sup>6</sup> Epstein (1979) reported apparently similar increases in stability of a variety of variables after aggregation, but there is some controversy as to whether he aggregated over different situations or simply different occasions of the same situation (Epstein, 1983b; Mischel & Peake, 1982). I find Epstein's (1983b) arguments to be generally persuasive, but certainly future research should attempt to sample clearly discriminable situations.

useful traits by defining them within groups of situations that have either similar meanings for a particular individual or that have similar meanings for most individuals within a culture. Situations that have a similar meaning (e.g., situations in which affectional needs can be met with little danger of rejection) should generally lead to similar behavior. This should be true regardless of whether the similar meaning reflects an idiosyncratic perception of the individual or a perception that is widely shared within the culture. Of course, the burden of demonstrating this possibility empirically remains with Allport's intellectual descendants.

Help in shouldering that burden appears to be on the way, but from a somewhat unexpected quarter. Mischel (1984) recently proposed that personologists begin to study what he termed context-bound (or *specific* or *local*) consistencies. Mischel (1984) suggested that

Instead of seeking high levels of consistency from situation to situation for many behaviors in a wide range of contexts or looking for broad averages, one might try to identify unique "bundles" or sets of temporally stable prototypic behaviors, key features, that characterize the person even over long periods of time but not necessarily across most or all possibly relevant situations. (p. 362)

This is clearly a contemporary reformulation of Allport's concept of a trait, but in one important respect Mischel (1984) advanced beyond Allport's work; he provided a theoretical rationale for the selection of a class of situations within which the consistency of a class of behaviors should be high. On the basis of his cognitive social learning theory, he predicted that the level of problematic behavior displayed by emotionally disturbed children would be relatively consistent within the class of situations in which task demands exceeded the subjects' competencies and that it would be relatively inconsistent in other situations. Mischel and his doctoral student, Jack Wright, empirically confirmed the prediction of high average correlations between pairs of situations with high-competence requirements. It appears, therefore, that Mischel has provided some of the strongest available evidence that Allport's conception of traits is a viable one. He has also demonstrated the possibility of predicting the boundaries of a trait on theoretical grounds, a type of prediction that generally eluded Allport.

The convergence between Mischel and Allport's views is less surprising when one recognizes that they share certain important pretheoretical commitments. Like Allport, Mischel is committed to understanding the nuances and particularities of individual lives. Again like Allport, Mischel is committed to a proactive view of the person that emphasizes the meanings that the individual finds in the situation and the purposes that the individual brings to the situation. Both men's pretheoretical commitments led them to seek constructs that could be linked to the person's purposes and perceptions and that respected the uniqueness of the patterning of each person's life. Trait served these ends for Allport and local consistency serves them for Mischel.

### Do Trait Constructs Have a Future?

Different scientific purposes lead psychologists to create different kinds of constructs (Rotter, 1954, 1975). It follows that different types of constructs can coexist peacefully when they

serve different purposes. The apparently incommensurate definitions of trait reviewed earlier can be seen to be the servants of different scientific purposes; more specifically, the summary, dispositional and causal views of traits serve the descriptive, predictive, and explanatory purposes of science. It is naive, therefore, to ask, "Do people have traits?" or "Are traits real?" The question of the merits of trait constructs is better posed as, "Are traits useful in describing, predicting, or explaining behavior?"

Although description may be a subordinate scientific goal to explanation, it is hard to see how personality psychology can exist without traits (or a conceptually equivalent term) as a descriptive unit (Briggs, 1985; Wiggins, 1974). I do not mean to imply that familiar, highly generalized traits such as introversion—extraversion or dominance will play a prominent role; it may be that narrower traits (Mischel's local consistencies) will turn out to be more fruitful.

Will applied psychologists persist in using traits as predictive tools? The predictive value of both generalized (aggregated) dispositions and narrowly defined dispositions has been questioned (Epstein, 1983a; Mischel, 1983). However, we must remember that different predictive purposes are served by different kinds of constructs. For example, the prediction of dominance in specific situations is best accomplished with a narrowly defined construct; the prediction of dominance in a range of situations is best accomplished with a broadly defined construct (Moskowitz, 1982). Similarly, some clinical problems may require the assessment of narrow dispositions, whereas others may require the assessment of broad dispositions. The coming years should bring increased recognition of the possibility—in fact, the necessity—for the development of trait concepts and measures of varying generality. Of course, the burden of demonstrating the utility of a trait construct will remain on the psychologist who defines it.

What is the trait construct's future as an explanatory concept? Allport's attempt to use traits as explanatory terms was not especially successful. I suggested that the principal shortcoming of Allport's theory was that it failed to describe the processes by which persons and situations interact. In particular, it failed to provide explicit accounts of how traits develop and are transformed over time and how they are activated in particular situations. Consequently, Allport's theory did little more than describe observed regularities in behavior. Allport's traits may explain behavior in the sense that they identify the cause of behavior as an internal property of the organism (Briggs, 1985; Hirschberg, 1978), but this explanation is too vague to be satisfying or heuristically valuable. As Briggs (1985) put it, "traits themselves require further explanation; they are, after all, only promissory notes (for causal explanations)" (p. 17). An explanatory system that makes use of trait concepts must embed the trait terms in a process theory that redeems the promissory

<sup>&</sup>lt;sup>7</sup> Interestingly, Mischel's proposal is strikingly similar not only to Allport's view of traits, but also to Bern and Allen's (1974) description of how the layperson uses trait terms. Bern and Allen (1974) credited the layperson (but not trait psychologists!) with an "intuitive process [that] automatically finesses the problem of situational specificity by embracing in a common equivalence class only those behaviors and situations which cohere for the individual, thereby excluding a priori any maverick behaviors and situations" (p. 310).

notes if it is to generate new findings and deeper understanding. Social learning theory's (Rotter, 1982) treatment of the traitlike concept of need potential has been mentioned as one model of how this can be done. Briggs's (1985) analysis of shyness illustrates how psychobiological as well as learning and cognitive variables can be linked to a trait that is viewed as a cause of behavior.

Once a trait has been embedded in a process theory, does it contribute anything further to the explanation of behavior? Realistically speaking, it is difficult to think of any trait that has been so fully studied that it has become a redundant part of a theoretical network. Trait terms will therefore continue to serve a useful function by directing investigators' attention to places in nomological networks where important questions about the causes of behavior can be asked.

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