Diverse data challenge and undermine the central assumptions of the traditional trait approach to personality. The implications for conceptions of individual differences and situations in the study of personality are examined. The issues discussed include the nature of behavioral "specificity," the acquired meaning of stimuli, the uses and misuses of traits, and the construction of personality. To move toward a more adequate theoretical approach to persons, the following cognitive social learning variables are proposed as basic units for the study of individuals: cognitive and behavioral construction competencies, encoding strategies and personal constructs, behavior-outcome and stimulus-outcome expectancies, subjective stimulus values, and self-regulatory systems and plans. The specific interactions between these person variables and psychological situations are analyzed within the framework of a cognitive social learning approach.

There has been a curious—indeed alarming—bifurcation between progress in theories regarding complex social behavior and cognition on the one hand, and in conceptualizations regarding the basic nature of personality on the other. Many of the therapeutic implications of social learning (social behavior) theories have become evident in the last few years. There have been notable advances in treatment techniques as well as significant reconceptualizations of the treatment process itself (e.g., Bandura, 1969). These developments are just starting to be accompanied by comparable parallel developments in personality theory. In a second direction, there has been vigorous progress in cognitive psychology (e.g., Neisser, 1967). But while cognitive and symbolic processes have received increasing attention both in the laboratory and in therapeutic applications, their implications for personality psychology have not yet been thoroughly explored and their impact on the basic traditional assumptions of personality psychology until recently has been limited.

During the last 50 years, when basic concepts were changing rapidly in most fields of psychology, the most fundamental assumptions about the nature of personality seem to have been retained with few substantial modifications. Of course there have been many changes in the names and particular characteristics of the trait dispositions advocated by different theorists and personality researchers in the last few decades. But in spite of the heterogeneity of hypothesized dimensions or structures, perhaps the most fundamental assumptions about them have remained almost monolithic until very recently. This paper briefly reviews the central assumptions of global dispositional approaches to personality, considers some of the main misconceptions, issues, and implications arising from recent challenges to those assumptions, and finally attempts a reconceptualization of person variables in the light of concepts from the study of cognition and social learning.

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Assumptions of Traditional Trait Approaches

It has generally been assumed that personality dispositions or traits—the basic units of personality study—are relatively stable, highly consistent attributes that exert widely generalized causal effects on behavior. Whether one uses the language of factors, or of habits, or of basic attitudes, or of dynamics and character structure, this fundamental assumption has been shared: personality comprises broad underlying dispositions which pervasively influence the individual’s behavior across many situations and lead to consistency in his behavior (e.g., Allport, 1937). These dispositions are not directly observed but are inferred from behavioral signs (trait indicators), either directly or indirectly (Mischel, 1968). Guided by this assumption, personality research has been a quest for such underlying broad dimensions, for basic factors, or for pervasive motives, or for characteristic life styles. In personality assessment the trait assumptions regarding structure are seen in the existence of hundreds of tests designed to infer dispositions and almost none to measure situations. The same belief in global traits that manifest themselves pervasively is perhaps best seen in the projective test assumption that responses to vague or minimal stimuli will reveal individual differences in fundamental generalized dispositions (MacFarlane & Tuddenham, 1951).

Empirical Status of Assumptions

Given the pervasiveness of the consistency assumption of dispositional personality theory, its empirical status becomes especially important. There have been several recent reviews of that evidence (e.g., Mischel, 1968, 1969, 1971; Peterson, 1968; Vernon, 1964). The data cannot be summarized adequately here, but several themes emerge. To recapitulate briefly, impressive consistencies often have been found for intellective features of personality and for behavior patterns such as cognitive styles and problem-solving strategies that are strongly correlated with intelligence (e.g., Witkin, 1965). Consistency also is often high when people rate their own traits, as in questionnaires and other self-reports (e.g., E. L. Kelly, 1955). Temporal continuity also has been demonstrated often when the individual’s behavior is sampled at different time periods but in similar situations. When one goes beyond cognitive variables to personality dimensions and when one samples personality by diverse methods and not just by self-report questionnaires, the data change and undermine the utility of inferring global personality dispositions from behavioral signs, as has been documented in detail (Mischel, 1968):

Response patterns even in highly similar situations often fail to be strongly related. Individuals show far less cross-situational consistency in their behavior than has been assumed by trait-state theories. The more dissimilar the evoking situations, the less likely they are to produce similar or consistent responses from the same individual. Even seemingly trivial situational differences may reduce correlations to zero. Response consistency tends to be greatest within the same response medium, within self-reports to paper-and-pencil tests, for example, or within directly observed non-verbal behavior. Intra-individual consistency is reduced drastically when dissimilar response modes are employed. Activities that are substantially associated with aspects of intelligence and with problem solving behavior—like achievement behaviors, cognitive styles, response speed—tend to be most consistent [p. 177].

Psychodynamic Approach to Consistency

Recognizing both the specificity and complexity of behavior, psychodynamic theorists long ago rejected the idea of broad overt behavioral consistencies across situations. Instead, psychodynamic theories emphasize that behavior varies, but diverse behavioral patterns serve the same enduring and generalized underlying dynamic or motivational dispositions. The search for dispositions thus rests on a distinction be-
tween surface behaviors ("signs" or "symptoms") and the motives that they serve. This involves the familiar distinction between the "phenotypic" and the "genotypic" and entails an indirect, rather than a direct measurement model (Mischel, 1968). Indeed, the most common argument for personality consistency in the face of seeming behavioral specificity is the distinction between the phenotypic and the genotypic. Granted that overt behavior is not highly consistent, might it not be useful to posit genotypic personality dispositions that endure, although their overt response forms may change? This genotypic-phenotypic model has been at the crux of dynamic dispositional theories of personality (Mischel, 1969). The psychodynamic model construes behaviors as highly indirect signs of the dispositions that underlie them, because defenses are hypothesized to distort and disguise the true meaning of the observed behaviors. If basic motives express themselves only indirectly after being distorted by defensive maneuvers, then their overt behavioral manifestations have to be interpreted symbolically as indirect signs. Thus, for example, using the white space of an inkblot in a percept may be taken as a sign of negativistic tendencies, or saying the inkblot looks like blood may be interpreted as a sign of a psychopathic personality. The psychodynamic approach thus shares with the trait approach a disinterest in behaviors except as they serve as signs—albeit more indirect signs—of generalized dispositions. While inherently logical, the utility of the indirect sign approach to dispositions depends on the value of the inferences provided by the clinical judge. Consequently, the reliability and validity of clinicians' judgments become crucial. The extensive empirical studies on this issue have investigated in detail the value of clinicians' efforts to infer broad dispositions indirectly from specific symptomatic signs and to unravel disguises in order to uncover the motivational dispositions that might be their roots. As is now generally recognized, the accumulated findings give little support for the utility of clinical judgments, even when the judges are expert psychodynamicists working in clinical contexts and using their favorite techniques. Reviews of the relevant research generally show that clinicians guided by concepts about underlying genotypic dispositions have not been able to predict behavior better than have the person's own direct self-report, simple indices of directly relevant past behavior, or demographic variables (e.g., Mischel, 1968, 1971, 1972).

**Misconceptions and Issues**

The findings on the specificity-consistency of personality traits and the implications of social behavior theory for the psychology of personality may be leading to a paradigm crisis in the field (e.g., Fiske, 1973), and hence it is not surprising that they are easily misunderstood. These misunderstandings are evident in repeated critiques (e.g., Adelson, 1969; Adinolfi, 1971; Alker, 1972; Craik, 1969; Dahlstrom, 1970; Wachtel, 1973) aimed at applications of social behavior theory to the domain of personality (e.g., Mischel, 1968, 1969) and particularly to the issue of the specificity-generality of behavior. The thrust of these reactions is that social behavior theory, especially in its emphasis on the discriminativeness ("specificity") of behavior, implies a "personalityless" view of man.

**Common Misconceptions**

The position developed in Mischel's (1968) *Personality and Assessment* has been widely misunderstood to imply that people show no consistencies, that individual differences are unimportant, and that "situations" are the main determinants of behavior (e.g., Bowers, 1972). For example, Alker (1972) has thoroughly distorted the basic issues (as Bem, 1972, has shown), guarding the traditional personality paradigm against evidence that "behavior varies from situation to situation." But the fact that behavior varies across different situations is not questioned by anyone, including classical trait theorists. More serious issues, instead, are the consistency-speci-
ficity with which the same person reacts to situations that ostensibly are relatively similar (i.e., that are selected to evoke the same trait), and most important, the utility of predictions based on global trait inferences (Mischel, 1968). In the same vein, Wachtel (1973) defended psychodynamic theory against being forever consigned to a "scientific Valhalla" by emphasizing that psychodynamic theories in fact recognize people's responsiveness to variations in stimulus conditions. Unfortunately, he ignored the data and challenges that are relevant, most notably the failure of the psychodynamically oriented clinician to demonstrate the utility of the indirect sign approach when compared to more parsimonious alternatives (Mischel, 1968, 1972, 1973b).

Evidence for the lack of utility of inferring hypothesized global trait dispositions from behavioral signs should not be misread as an argument for the greater importance of situations than persons (Bowers, 1972). Is information about individuals more important than information about situations? The author has persistently refrained from posing this question because phrased that way it is unanswerable and can serve only to stimulate futile polemics. Moreover, in current debates on this topic, "situations" are often erroneously invoked as entities that supposedly exert either major or only minor control over behavior, without specifying what, psychologically, they are or how they function (Alker, 1972; Bowers, 1972; Wallach & Leggett, 1972). But while some situations may be powerful determinants of behavior, others are likely to be exceedingly trivial. The relative importance of individual differences will depend on the situation selected, the type of behavior assessed, the particular individual differences sampled, and the purpose of the assessment. In later sections, an attempt will be made to consider in detail how cognitive social learning person variables interact with conditions and how "situations" function psychologically. But first it is necessary to review further, and hopefully to clarify, some of the main issues and misconceptions regarding the status of global traits.

Moderator Variables and Person-Situation Interactions

Several recent trait studies have investigated the relative separate quantitative contributions of persons and situations as well as the variance accounted for by the interaction of the individual and the environment (e.g., Argyle & Little, 1972; Endler & Hunt, 1966, 1968, 1969; Endler, Hunt, & Rosenstein, 1962; Moos, 1968, 1969). The essential method consists of sampling the behavior of individuals (by questionnaire and/or by observation) across a series of situations and through various response modes. On the whole, these studies have indicated that the sampled individual differences, situations, and response modes when considered separately tend to account for less variance than does their interaction.

The overall results suggest, as Endler and Hunt (1969, p. 20) noted with regard to their own findings for anxiety, that behavior "is idiosyncratically organized in each individual. . . ." A similar conclusion emerges from Moos's (1968) studies of self-reported reactions by staff and patients to various settings. Consider, for example, his obtained interactions between persons and nine settings with regard to "sociable, friendly, peaceful" versus "unsociable, hostile, angry" behavior. The results revealed that although different individuals reacted differently to the settings, a given person might be high on the dimension in the morning but not at lunch, high with another patient but not when with a nurse, low in small group therapy, moderate in industrial therapy, but high in individual therapy, etc. An entirely different pattern might characterize the next person. These results and interpretations are totally congruent with the conclusions emerging from earlier reviews that emphasize the idiosyncratic organization of behavior within individuals (Mischel, 1968, p. 190).

It would be wasteful to create pseudo-controversies that pit person against situa-
tion in order to see which is more important. The answer must always depend on the particular situations and persons sampled; presumably, studies could be designed to demonstrate almost any outcome. The interaction studies correctly demonstrated that the question of whether individual differences or persons are more important is a fruitless one that has no general answer. The views of Moos (1972, personal communication) regarding the limits of the kinds of interaction studies that he and Endler and Hunt pioneered seem extremely sensible. Moos recognized that these studies can be designed so that:

any result is possible. I think that all one can say is that given relatively real life situations (e.g., patients on wards or in outpatient psychotherapy, or your delay of gratification studies) that the major proportion of the variance simply does not appear to be accounted for by individual difference variables. One could certainly, however, easily design studies in which the major portion of the variance would be accounted for by individual difference variables. Frankly this is why I have stopped doing studies of this sort. It seems to me that the point has now been amply demonstrated, and it is time to get on with other matters.

It is encouraging that recent research on dispositions has started to recognize seriously the extraordinary complexity of the interactions found between subject variables and conditions. The concept of "moderator variables" was introduced to trait theory to refer to the fact that the effects of any particular disposition generally are moderated by such other variables as the subject's age, his sex, his IQ, the experimenter's sex, and the characteristics of the situation (Wallach, 1962). When one examines closely the interactions obtained in research on the effects of dispositions and conditions, the number of moderator variables required to predict behavior and the complexity of their interrelationships (e.g., McGuire, 1968) tend to become most formidable. For example, to predict a subject's voluntary delay of gratification, one may have to know how old he is, his sex, the experimenter's sex, the particular objects for which he is waiting, the consequences of not waiting, the models to whom he was just exposed, his immediately prior experience—the list gets almost endless (Mischel, 1973a). This seems to be another way of saying in the language of moderator variables and interaction terms that what a person does tends to be relatively specific to a host of variables, and that behavior is multiply determined by all of them rather than being the product of widely generalized dispositions. Some psychologists may find these interpretations more palatable if they are not phrased as reflecting the specificity of the acquired meanings of stimuli and the resulting specificity of behavior patterns (Mischel, 1968). Instead, they may prefer to construe the data as highlighting the uniqueness and complexity of personality. To say that what a person thinks, and does, and feels—and hence what he is at any moment—depends on many subject and condition variables is also to underline the complexity and uniqueness of his behavior.

The foregoing discussion does not imply that predictions cannot be made from subject variables to relevant behaviors, but it does suggest severe limits on the range and level of relationships that can be expected. Consider, as a representative example, a recent effort to relate individual differences in young children's expectancies about locus of control to their behavior in theoretically relevant situations (Mischel, Zeiss, & Zeiss, 1973). To explore these interactions, the Stanford Preschool Internal–External Scale was developed as a measure of expectancies about whether events occur as a consequence of the child's own action ("internal control") or as a consequence of external forces ("external control"). Expectancies about locus of control were measured separately for positive and negative events so that scores reflect expectancies for degree of internal control of positive events (I+), of negative events (I−), and a sum of these two (total I). Individual differences in I+, I−, and total I then were correlated with the children's ability to delay gratification under diverse working and waiting conditions. The results provided highly specific but theoretically meaningful patterns of
relationships. To illustrate, relationships between total I and overall delay behavior were negligible, and I+ was unrelated to I−. As expected, I+ (but not I−) was found to be related to persistence in three separate situations where instrumental activity would result in a positive outcome; I− (but not I+) was related to persistence when instrumental activity could prevent the occurrence of a negative outcome.

The overall findings showed that individual differences in children’s beliefs about their ability to control outcomes are partial determinants of their goal-directed behavior, but the relationships hinge on extremely specific moderating conditions, both with regard to the type of behavior and the type of belief. If such moderating conditions had not been considered and all indices of “delay behavior” had been combined regardless of their positive or negative valence, the actual role of the relevant individual differences would have been totally obscured. While the results were of considerable theoretical interest, the number and mean level of the achieved correlations were not appreciably higher than those typically found in correlational personality research. Moreover, the ability of these correlations to survive cross-validation remains to be demonstrated.

The more moderators required to qualify a trait, the more the “trait” becomes a relatively specific description of a behavior-situation unit. That is, the more highly circumscribed, “moderated,” and situation specific the trait, the more it becomes indistinguishable from a specific behavior-situation description. At its extreme, when many strings of hyphenated moderator variables are required, the behavioral “signs” from which the disposition is inferred may become equivalent to the inferred disposition and make the inference gratuitous. As we increasingly qualify the description of a person to specify the exact response modes and conditions in which a particular behavior will occur, we move from characterizing him with generalized traits to describing his behavior in particular forms and under particular conditions.

The language of “interactions” and “moderator variables” provides simply another way of talking about the idiosyncratic organization of behavior and its dependence upon specific conditions unless (as Bem, 1972, p. 21, has noted) one can “predict on a priori grounds which moderators are likely to divide up the world into useful classes. . . .” Demonstrations that both subject and situational moderators can be used predictively, not merely to partial out the variance from each source post hoc, are especially important in light of the negative conclusions reached by Wallach, one of the main formulators of the moderator variable strategy in personality research. Commenting on the extensive results from his decade of work on the problem:

Further analyses and additional data collection by us and others suggest that not only are findings ungeneralizable from one sex to the other, but even when, within sex, one simply tries to duplicate the results of a given study, such attempts do not pan out. . . . we cannot say that use of moderators has successfully pinpointed subgroups for whom consistency among diverse tests will be predictable. . . . The empirical basis for recommending moderators as the answer to the search for consistency thus seems more apparent than real [Wallach & Leggett, 1972, p. 313].

In regard to this last issue, the interaction studies of the sort conducted by Endler and Hunt and Moos, unfortunately, leave perhaps the most important question unanswered: once an individual's idiosyncratic pattern has been identified, can it be used accurately to predict consistencies in his subsequent behavior later in the same or (even more interestingly) in similar settings? While the interaction studies have demonstrated the existence of extensive Person X Situation interactions, they have not yet addressed themselves to the challenge of demonstrating that useful predictions can be made a priori about individual consistencies across a set of specified conditions. Such demonstrations are particularly necessary in light of the frequent failures to achieve replications in this domain (e.g., Averill, Olbrich, &
Moreover, the interaction studies have not in any sense explained the nature of the obtained interactions. Later sections of this paper attempt to analyze the psychological bases for "interaction"; in the absence of such an analysis, an emphasis on interaction is in danger of being little more than the proclamation of a truism.

In sum, when interpreting the meaning of the data on Person X Situation interactions and moderator variables, it has been tempting to treat the obtained interactions as if they had demonstrated that people behave consistently in predictable ways across a wide variety of situations. But demonstrations of the predictive utility of the moderator variable–interaction strategy still lie in the future (e.g., Bern, 1972). The available data on this topic now merely highlight the idiosyncratic organization of behavior within individuals, and hence the uniqueness of stimulus equivalences and response equivalences for each person. Such data provide encouragement for idiographic study (Allport, 1937) but not for the predictive utility of "common" (nomothetic) personality traits.

"Specificity" or Discriminative Facility?

Viewed from the perspective of the traditional personality paradigm, the "specificity" and "inconsistency" found in behavior constitute an embarrassment that is generally attributed to methodological flaws and faulty measurements. Thus empirical evidence concerning the specificity of the relations between social behavior and conditions usually has been interpreted as due to the inadequacies of the tests and measures, faulty sampling, and the limitations of the particular raters or clinical judges. These and many other similar methodological problems undoubtedly are sources of error and seriously limit the degree of consistency that can be observed (e.g., Block, 1968; Emmerich, 1969).

An alternative interpretation, however, and one favored by a specific interaction theory of social behavior, is that the "specificity" so regularly found in studies of noncognitive personality dimensions accurately reflects man's impressive discriminative facility and the inadequacy of the assumption of global dispositions, and not merely the distortions of measurement (Mischel, 1968). The term "discriminative facility" seems to fit the data better than "specificity" and avoids the unfortunate negative semantic connotations of specificity when applied to persons (e.g., the implications of inconsistency, insincerity, fickleness, unreliability; see also Gergen, 1968).

Whereas discriminative facility is highly functional (Gibson, 1969) diminished sensitivity to changing consequences (i.e., indiscriminate responding) may be a hallmark of an organism coping ineffectively. In fact, indiscriminate responding (i.e., "consistent" behavior across situations) tends to be displayed more by maladaptive, severely disturbed, or less mature persons than by well-functioning ones (Moos, 1968). For example, on the basis of their studies of hyperaggressive children undergoing therapeutic treatment, Rausch, Dittman, and Taylor (1959) reported: "there appears to be a trend for social behavior to become more related to situational influences with ego development . . . the children seem to have gained in the ability to discriminate between different situations [p. 368]." Yet although relatively more "indiscriminate behavior" tends to be found in more immature and/or severely abnormal persons, its extent should not be exaggerated. Even extremely autistic behavior, for example, is highly discriminative when closely analyzed (e.g., Lovaas, Freitag, Gold, & Kassorla, 1965).

Discrimination, Generalization, and Idiosyncratic Stimulus Meanings

The discriminativeness found in behavior is not so great that we cannot recognize continuity in people. It is also not so great that we have to treat each new behavior from a person as if we never saw anything like it from him before. But the findings remind us that what people do in any situation may be changed dramatically even by relatively trivial alterations in
their prior experiences or by slight modifications in the particular features of the immediate situation. Rather than argue about the existence of "consistency," it would be more constructive to analyze and study the cognitive and social learning conditions that seem to foster—and to undermine—its occurrence.

If expected consequences for the performance of responses across situations are largely uncorrelated, the responses themselves should not be expected to covary strongly, as they indeed do not in most empirical studies. When the probable reinforcing consequences to the person for cheating, waiting, or working differ widely across situations depending on the particular task or circumstances, the behavior of others, the likelihood of detection, the probable consequences of being caught, the frustration induced, the value of success, etc., impressive generality will not be found. Conversely, when similar behaviors are expected and supported in numerous situations, consistency will be obtained.

Because most social behaviors produce positive consequences in some situations but negative ones in other contexts, the relatively low associations found among an individual's response patterns even in seemingly similar situations should not be surprising. Consider, for example, the intercorrelations among measures intended to sample dependent behaviors, such as "touching, holding, and being near." If a child has been rewarded regularly at nursery school for "touching, holding, and being near" with his teacher but not with his father at home, a high correlation between dependency measured in the two situations will not be found and should not be expected.

The consequences for similar content expressed in different response modes also tend to be drastically different. If on a projective test a person tells stories full of aggressive themes, he would be judged to have a healthy fantasy life, but he would be jailed if he enacted those themes in his relations with other people. It therefore should not be surprising that when different response modes are used to sample the individual's behavior (e.g., data from questionnaires, from behavior observation), consistency is even harder to demonstrate (Mischel, 1968).

To the degree that idiosyncratic social learning histories characterize each person's life, idiosyncratic (rather than culturally shared) stimulus equivalences and hence idiosyncratic behavior patterns may be expected. As was noted earlier (Mischel, 1968, p. 190, italics added):

The phenomena of discrimination and generalization lead to the view that behavior patterns are remarkably situation-specific on the one hand, while also evokable by diverse and often seemingly heterogeneous stimuli on the basis of generalization effects. The person's prior experiences with related conditions and the exact details of the particular evoking situation determine the meaning of the stimuli, i.e., their effects on all aspects of his life. Usually generalization effects involve relatively idiosyncratic contextual and semantic generalization dimensions and are based on more than gradients of physical stimulus similarity. . . . one must know the properties or meaning that the stimulus has acquired for the subject. If the history is unknown, the response has to be assessed directly.

Idiosyncratic histories produce idiosyncratic stimulus meanings. In clinical assessment of the individual, it is apparent, for example, that seemingly heterogeneous stimuli may come to elicit similar intense approach or avoidance patterns accompanied by strong arousal (Mischel, 1968). Because the conditions under which stimuli acquire their meaning and power are often both adventitious and unique, and because the dimensions of stimulus and response generalization tend to be idiosyncratic, it may be futile to seek common underlying dimensions of similarity on the basis of which diverse events come to evoke a similar response pattern for all persons. Especially when the individual's prior learning history is unknown, and when he is exposed to multiple and exceedingly complex stimuli as in virtually all life situations, it becomes important to assess the effective stimuli, or "stimuli as coded," which regulate his responses in
particular contexts. These stimuli as coded should not be confused with the totality of objective physical events to which he is exposed. It is hardly novel now to assert that the objective distal stimulus impinging on sense organs does not necessarily correspond to the "effective" stimulus; organisms respond selectively to particular aspects of the objective stimulus event (Lawrence, 1959).

The meaning and impact of a stimulus can be modified dramatically by cognitive transformations. Such transformations are illustrated in research on the determinants of how long preschool children will actually sit still alone in a chair waiting for a preferred but delayed outcome before they signal with a bell to terminate the waiting period and settle for a less preferred but immediately available gratification (e.g., Mischel, Ebbesen, & Zeiss, 1972). We have been finding that the same child who on one occasion may terminate his waiting in less than half a minute may be capable of waiting by himself for long times on another occasion a few weeks earlier or later, if cognitive and attentional conditions are appropriate (Mischel, 1973a).

For example, if the child is left during the waiting period with the actual reward objects (e.g., pretzels or marshmallows) in front of him, it becomes extremely difficult for him to wait for more than a few moments. But through instructions he can cognitively transform the reward objects in ways that permit him to wait for long time periods (e.g., Mischel & Baker, 1973). If he cognitively transforms the stimulus, for example, by thinking about the pretzel sticks as little brown logs or by thinking about the marshmallows as round white clouds or as cotton balls, he may wait much longer than our graduate student experimenters. Conversely, if the child has been instructed to focus cognitively on the consummatory qualities of the reward objects, such as the pretzel's crunchy, salty taste or the chewy, sweet, soft taste of the marshmallows, he tends to be able to wait only a short time. Similarly, through instruction the children can easily transform the real objects (present in front of them) into a "color picture in your head," or they can transform the picture of the objects (presented on a slide projected on a screen in front of them) into the "real" objects by pretending in imagination that they are actually there on a plate in front of them (Mischel & Moore, 1973b).

The results clearly show that what is in the children's heads—not what is physically in front of them—determines their ability to delay. Regardless of the stimulus in their visual field, if they imagine the real objects as present, they cannot wait long for them. But if they imagine pictures (abstract representations) of the objects, they can wait for long time periods (and even longer than when they are distracting themselves with abstract representations of objects that are comparable but not relevant to the rewards for which they are waiting). Through instructions (administered before the child begins to wait) about what to imagine during the delay period, it is possible to completely alter (indeed, to reverse) the effects of the physically present reward stimuli in the situation and to cognitively control delay behavior with considerable precision. But while in experiments the experimenter provides instructions (which our subjects obligingly followed) about how to construe the stimulus situation, in life the "subject" supplies his own instructions and may transform the situation in many alternative (unpredictable) ways. The ability of individuals to cognitively transform the meaning and impact of stimuli in any given situation (e.g., by self-instructions) makes it even more unlikely that the assessor will discover a priori broad equivalence classes of stimulus meanings for many individuals across many situations, unless they all transform the stimuli in the same way.

Recognition of the idiosyncratic organization of behavior in each person suggests that individually oriented assessments are bound to have very limited success if they try to label a person with generalized trait terms, sort him into diagnostic or type categories, or estimate his average position on average or modal dimensions (Mis-
Instead, it may be more useful for the clinician to assess the exact conditions that regularly covary with increments or decrements in the problem-producing behaviors for the particular person. For this purpose in a behavioral analysis, one attempts to sample directly the individual’s relevant cognitions and behaviors in relation to the conditions of particular current concern:

In this sense, behavioral assessment involves an exploration of the unique or idiographic aspects of the single case, perhaps to a greater extent than any other approach. Social behavior theory recognizes the individuality of each person and of each unique situation. This is a curious feature when one considers the “mechanistic S-R” stereotypes not infrequently attached by critics to behavioral analyses. Assessing the acquired meaning of stimuli is the core of social behavior assessment. . . . [Mischel, 1968, p. 190, italics added].

The above point is often misunderstood. For example, Adinolfi (1971, p. 174) asked: “How then does the social-behavioral critic of current clinical and personality theory propose to determine the stimulus conditions to which the observed is responding?” The answer to this question comes from actively enrolling the “observed” person in the assessment process (Mischel, 1968). In collaboration with the assessor, the individual provides hypotheses about the conditions that lead to increases and decreases in his own problematic behaviors. To elaborate, verify, or modify these hypotheses, the stimulus conditions are introduced and systematically varied, and their impact on the person is assessed from his self-report and from other changes in his behavior. In this manner, one can analyze how changes in the particular stimulus conditions are correlated with changes in the behavior of interest. The acquired meanings of a stimulus can only be known by determining what the person does with it verbally and behaviorally, when it is introduced and varied in sampled situations. To reveal the acquired meanings of stimuli, one must assess what the individual says and does when they occur in symbolic form (e.g., when discussed in interviews) and more realistically when presented in hypothetical, role-playing or life situations, as has been discussed in detail (Mischel, 1968). Considerable evidence suggests that in this assessment enterprise, direct information from the person is the best source of data (Mischel, 1972).

Some of the clearest examples of the analysis of stimulus conditions influencing behavior are found in efforts to construct subjective anxiety hierarchies (e.g., Wolpe, 1961). In collaboration with the assessor, the individual can identify the specific conditions that generate fear in him and arranges them on a gradient of severity from least to most intense. For one client, items such as “thinks I only did an hour's work today,” “sitting at the movies,” “going on a casual stroll” and “staying in bed during the day (even though ill)” were some of the events arranged on a subjective continuum of “guilt”-producing stimuli. Such individually oriented assessments lead naturally to the design of individually oriented treatments intended to provide the best possible conditions for achieving each individual's objectives (Bandura, 1969). In the case of the client suffering from guilt, for example, after the subjective hierarchy of guilt-inducing stimuli had been identified, conditions could be arranged to help him make new responses incompatible with anxiety when the problem-producing stimuli are presented cognitively through thought-inducing instructions.

**Uses and Misuses of Traits**

In sum, obviously behavior is not entirely situation specific; we do not have to relearn everything in every new situation, we have memories, and our past predisposes our present behavior in critically important and complex ways. Obviously people have characteristics and overall "average" differences in behavior between individuals can be abstracted on many
dimensions and used to discriminate among persons for many purposes. Obviously knowing how a person behaved before can help predict how he will behave again in similar contexts. Obviously the impact of any stimulus depends on the organism that experiences it. No one suggests that the organism approaches every new situation with an empty head, nor is it questioned by anyone that different individuals differ markedly in how they deal with most stimulus conditions. What has been questioned (Hunt, 1965; Mischel, 1968) is the utility of inferring broad dispositions from behavioral signs as the bases for trying to explain the phenomena of personality and for making useful statements about individual behavior. The available data do not imply that different people will not act differently with some consistency in different classes of situations; they do imply that the particular classes of conditions must be taken into account far more carefully than in the past, tend to be much narrower than traditional trait theories have assumed, and for purposes of important individual decision making, require highly individualized assessments of stimulus meanings (Mischel, 1968, pp. 235-280). The data also suggest that inferences about global underlying traits and dispositions tend to have less utility for most assessment efforts to predict or therapeutically modify individual behavior than do more economical, alternative analyses based on more direct data such as the person's past behavior in similar situations or his direct self-report.

A critique of traits as inadequate causal explanations and an indictment of the utility of indirect trait inferences for many individually oriented assessment and clinical purposes (Mischel, 1968) does not imply a rejection of their other possible uses. The layman as well as the trait psychologist generates and employs trait constructs. The question becomes not "do traits really exist?" but when are trait constructs invoked and "what are their uses and misuses?"

Research on the layman's attribution of causation to dispositional versus situational factors helps to clarify when person variables and individual differences are used in the everyday formation of impressions. Person (trait) explanations are invoked when the individual's behavior is "distinctive" (Kelley, 1967), that is, when it deviates from others' behavior in the same situation. Thus, behaviors that are at variance with relevant group norms (e.g., success when others fail, failure when others succeed) are attributed to the person or to "internal causes" (e.g., Frieze & Weiner, 1971; Weiner & Kukla, 1970). Conversely, when a person's behavior is consistent with the norms in the situation (when the person succeeds when others succeed, or fails when others fail), his performance is attributed to situational factors such as task difficulty (Weiner et al., 1971).

Traits are constructs which are inferred or abstracted from behavior. When the relations between the observed behavior and the attributed trait are relatively direct, the trait serves essentially as a summary term for the behaviors that have been integrated by the observer. People emit behaviors and these are perceived, integrated, and categorized by those who observe them, including those who emit them. The process of integrating the observed information is receiving much study but is still not completely understood (e.g., Anderson, 1971, 1972). Regardless of the exact genesis of trait impressions, trait labels may serve as summaries (essentially arithmetic averages) for categories of observed behavior (e.g., "dependent on peers," "physically aggressive with siblings"). For purposes of global characterizations of salient personal qualities, broad, highly abstract categories may be useful with minimal moderators or specific situational qualifiers. But for purposes of more specific communication and for prediction of specific behavior in relation to specific conditions, careful discriminative limits must be included.

Estimates of mean past behavior often are the best predictors of future behavior in similar situations, especially when there are no other bases for prediction (Mischel,
The predictive limitations of traits become evident, however, when one attempts to predict from past behavior to behavior in different new situations. Moreover, when observers categorize an individual's behavior in trait terms, the "salient" (central, mean, primary) features of the behavior may become the basis for the categorization, so that the person becomes labeled as "anxious," for example, even if that term accurately characterizes only a small portion of his total social behavior. Then the "moderators" become omitted and the situation-free trait abbreviations that remain may serve more as global stereotypes and broad character sketches than as accurate bases for the prediction of specific behaviors.

When the consistency issue is viewed in terms of the utility of inferring broad response tendencies and not in terms of the more metaphysical question of the existence or validity of personality dispositions, it becomes evident that the answer must depend on the particular objective or purpose for which the inference is made. For example, while global trait inferences may have little utility for the prediction of the subject's specific future behavior in specific situations or for the design of specific treatment programs, they may have value for the person himself—for instance, when he must abstract attributes to answer such everyday questions as: Is your assistant reliable? or What kind of person is my psychotherapist? or Might this stranger lurking on the next corner be a murderer? or What are you like? Similarly, an indictment of the relative lack of utility of inferring broad dispositions for purposes of predicting and/or therapeutically modifying the individual's behavior does not deny the utility of using such inferences for many other purposes—such as for gross initial screening decisions or for studying average differences between groups of individuals in personality research (Mischel, 1968). The limitations of traditional personality theories which invoke trait constructs as the psychologist's explanations for behavior should not deflect attention from the importance of the layman's everyday use of trait categories. How do trait categorizations function for the layman? Do they serve him well? For what purposes might they be used? In our research my students and I are asking such questions now. For example, we find that when required to predict a person's behavior and given a choice of how to categorize the available behavioral information, subjects overwhelmingly preferred to organize data in terms of traits rather than settings (Jeffrey & Mischel, 1973). But when the perceiver's purpose was structured as memorizing as much information as possible, setting categories were used. Clearly the functions of trait constructs for the layman deserve serious attention and hopefully will inform us further about the psychological uses and abuses of trait categorization.

From Behavior to the Construction of Personality

As Heider (1958) has noted, in the psychology of common sense the subject goes quickly from act to global internalized disposition. While behavior often may be highly situation specific, it seems equally true that in daily life people tend to construe each other as if they were highly consistent, constructing consistent personalities even on the basis of relatively inconsistent behavioral fragments. This discrepancy may reflect in part that people go rapidly beyond the observation of some consistency which does exist in behavior to the attribution of greater perceived consistencies which they construct (e.g., Mischel, 1969; Schneider, 1973). After these construction systems have been generated, they may be adhered to tenaciously even in the face of seemingly disconfirmatory data (Mischel, 1968, 1969).

Many processes contribute to the construction and maintenance of consistent impressions of others. Tversky and Kahneman (1971), for example, contended that both sophisticated scientists and naive subjects intuitively but often erroneously interpret small samples of observations as if they were highly representative. More-
over, after an initial impression of a person has been formed, observations of his subsequent behavior are biased toward consistency with the initial impression (Hayden & Mischel, 1973). Like the clinician (e.g., Chapman & Chapman, 1969), the layman's impressions may perpetuate consistent but invalid "illusory correlations." There even seems to be a substantial bias of memory for the attributes of behavior in the direction of preexisting cognitive structures or implicit personality theories (D'Andrade, 1970, 1973). Consequently, recall-based trait ratings may yield data that are systematic but unrelated to results based on direct observation of ongoing behavior as it occurs (Shweder, 1972).

The overattribution of consistency may be something people do unto others more than to themselves. Jones and Nisbett (1971) noted that when explaining other people's behavior we invoke their consistent personality dispositions: Steve is the sort of person who puts bumper stickers on his car; Jill tripped because she's clumsy. But when asked to explain our own behavior we consider specific conditions: "AAA sent me this catchy bumper sticker in the mail" or "I tripped because it was dark." Thus Jones and Nisbett (1971, p. 58) on the basis of some promising preliminary data theorized that "actors tend to attribute the causes of their behavior to stimuli inherent in the situation while observers tend to attribute behavior to stable dispositions of the actor." Jones and Nisbett analyzed many possible reasons for this seemingly paradoxical state of affairs, including the tendency to treat every sample of behavior we observe from another person as if it were modal or typical for him. It thus seems as if traits may be the consistent attributes that other people have. When describing other people, we seem to act more like trait theorists, but when we attempt to understand ourselves we function more like social behaviorists. Might there be a warning here for clinicians? Do we pin our clients with consistent dispositional labels and trait explanations more than we do ourselves? If that is true it may be because we have more information about ourselves and the multiplicity, variety, and complexity of the situations we encounter in our own lives, whereas we know others in only limited contexts and therefore tend to overgeneralize from their behavior in those instances.

Traits as Causes versus Traits as Summary Labels

According to the traditional trait paradigm, traits are the generalized dispositions in the person that render many stimuli functionally equivalent and that cause the individual to behave consistently across many situations (Allport, 1937). The present view, in contrast, construes the individual as generating diverse behaviors in response to diverse conditions; the emitted behaviors are observed and subsequently integrated cognitively by the performer, as well as by others who perceive him, and are encoded on semantic dimensions in trait terms. Thus while the traditional personality paradigm views traits as the intrapsychic causes of behavioral consistency, the present position sees them as the summary terms (labels, codes, organizing constructs) applied to observed behavior. In the present view, the study of global traits may ultimately reveal more about the cognitive activity of the trait theorist than about the causes of behavior, but such findings would be of great value in their own right.

Cognitive Social Learning Person Variables

The previous sections have considered the limitations of the basic assumptions of traditional global dispositional theories of personality and some of the main misconceptions and issues arising from recent challenges to those assumptions. Progress in the area of personality will require more than criticism of existing positions and hinges on the development of an alternative conceptualization. In this section therefore a set of person variables is proposed, based on theoretical developments in the fields of social learning and cognition.
Given the overall findings on the discriminativeness of behavior and on the complexity of the interactions between the individual and the situation, it seems reasonable in the search for person variables to look more specifically at what the person constructs in particular conditions, rather than trying to infer what broad traits he generally has, and to incorporate in descriptions of what he does the specific psychological conditions in which the behavior will and will not be expected to occur. What people do, of course, includes much more than motor acts and requires us to consider what they do cognitively and affectively as well as motorically.

The proposed cognitive social learning approach to personality shifts the unit of study from global traits inferred from behavioral signs to the individual’s cognitive activities and behavior patterns, studied in relation to the specific conditions that evoke, maintain, and modify them and which they, in turn, change (Mischel, 1968). The focus shifts from attempting to compare and generalize about what different individuals “are like” to an assessment of what they do—behaviorally and cognitively—in relation to the psychological conditions in which they do it. The focus shifts from describing situation-free people with broad trait adjectives to analyzing the specific interactions between conditions and the cognitions and behaviors of interest.

Personality research on social behavior and cognition in recent years has focused mainly on the processes through which behaviors are acquired, evoked, maintained, and modified (e.g., Bandura, 1969; Mischel, 1968). Much less attention has been given to the psychological products within the individual of cognitive development and social learning experiences. Yet a viable psychology of personality demands attention to person variables that are the products of the individual’s total history and that in turn mediate the manner in which new experiences affect him.

The proposed person variables are a synthesis of seemingly promising constructs in the areas of cognition and social learning. The selections should be seen as suggestive and open to progressive revision rather than as final. These tentative person variables are not expected to provide ways to accurately predict broadly cross-situational behavioral differences between persons: the discriminativeness and idiosyncratic organization of behavior are facts of nature, not limitations unique to trait theories. But these variables should serve to demonstrate that a social behavior approach to persons does not imply an empty organism. They should suggest useful ways of conceptualizing and studying specifically how persons mediate the impact of stimuli and generate distinctive complex molar behavior patterns. And they should help to conceptualize person–situation interactions in a theoretical framework based on contributions from both cognitive and behavioral psychology.

The proposed cognitive social learning person variables deal first with the individual’s competencies to construct (generate) diverse behaviors under appropriate conditions. Next, one must consider the individual’s encoding and categorization of events. Furthermore, a comprehensive analysis of the behaviors a person performs in particular situations requires attention to his expectancies about outcomes, the subjective values of such outcomes, and his self-regulatory systems and plans. The following five sections discuss each of these proposed person variables. While these variables obviously overlap and interact, each may provide distinctive information about the individual and each may be measured objectively and varied systematically.

Cognitive and Behavioral Construction Competencies

Through direct and observational learning the individual acquires information about the world and his relationship to it. As a result of observing events and attending to the behavior of live and symbolic models (through direct and film-mediated observation, reading, and instruction) in the course of cognitive development the perceiver acquires the potential to generate vast repertoires of organized behavior.
While the pervasive occurrence and important consequences of such observational learning have been convincingly demonstrated (e.g., Bandura, 1969; Campbell, 1961), it is less clear how to conceptualize just what gets learned. The phenomena to be encompassed must include such diverse learnings as the nature of sexual gender identity (e.g., Kohlberg, 1966), the structure (or construction) of the physical world (e.g., Piaget, 1954), the social rules and conventions that guide conduct (e.g., Aronfreed, 1968), the personal constructs generated about self and others (e.g., G. Kelly, 1955), the rehearsal strategies of the observer (Bandura, 1971a). Some theorists have discussed these acquisitions in terms of the products of information processing and of information integration (e.g., Anderson, 1972; Bandura, 1971a; Rumelhart, Lindsey, & Norman, 1971), others in terms of schemata and cognitive templates (e.g., Aronfreed, 1968).

The concept of cognitive and behavioral construction competencies seems sufficiently broad to include the vast array of psychological acquisitions of organized information that must be encompassed. The term "constructions" also emphasizes the constructive manner in which information seems to be retrieved (e.g., Neisser, 1967) and the active organization through which it is categorized and transformed (Bower, 1970; Mandler, 1967, 1968). It has become plain that rather than mimicking observed responses or returning memory traces from undisturbed storage vaults, the observer selectively constructs (generates) his renditions of "reality." Indeed, research on modeling effects has long recognized that the products of observational learning involve a novel, highly organized synthesis of information rather than a photocopy of specific observed responses (e.g., Bandura, 1971b; Mischel & Grusec, 1966). The present concept of construction competencies should call attention to the person's cognitive activities—the operations and transformations that he performs on information—rather than to a store of finite cognitions and responses that he "has."

Although the exact cognitive processes are far from clear, it is apparent that each individual acquires the capacity to construct a great range of potential behaviors, and different individuals acquire different behavior construction capabilities. The enormous differences between persons in the range and quality of the cognitive and behavioral patterns that they can generate is evident from even casual comparison of the construction potentials of any given individual with those, for example, of an Olympic athlete, a Nobel Prize winner, a retardate, an experienced forger, or a successful actor.

The person's behavior construction potential can be assessed readily by introducing incentives for the most complete constructions that he can render on particular performance tasks. In a sense, the assessment conditions here are identical to those in achievement testing (Wallace, 1966). The same strategy can be used to assess what subjects "know" (i.e., the cognitive constructions they can generate, for example, about abstract and physical properties and relationships as in mathematics and geography) and what they are capable of doing (enacting) in the form of social behaviors. For example, to assess what children had acquired from observing a model, attractive rewards later were offered to them contingent upon their reproducing the model's behaviors (e.g., Bandura, 1965; Grucce & Mischel, 1966). The results showed that the children had acquired a great deal of information from observation of the model which they could reconstruct elaborately but only when given appropriate incentives.

For many purposes, it is valuable to assess the quality and range of the cognitive constructions and behavioral enactments of which the individual is capable. In this vein, rather than assess "typical" behavior, one assesses potential behaviors or achievements. One tests what the person can do (e.g., Wallace, 1966) rather than what he "usually" does. Indeed one of the most recurrent and promising dimensions of individual differences in research seems to involve the person's cognitive and beh-
Behavioral (social) competencies (e.g., White, 1959; Zigler & Phillips, 1961, 1962). These competencies presumably reflect the degree to which the person can generate adaptive, skillful behaviors that will have beneficial consequences for him. Personality psychology can profit from much greater attention to cognitive and intellectual competencies since these "mental abilities" seem to have much better temporal and cross-situational stability and influence than most of the social traits and motivations traditionally favored in personality research (e.g., Mischel, 1968, 1969).

The relevance of cognitive-intellec
tual competencies for personality seems evident in light of the important, persistent contributions of indices of intelligence to the obtained networks of personality correlations (Campbell & Fiske, 1959; Mischel, 1968). In spite of extensive efforts to minimize or "partial out" the role of intelligence in personality studies, for example, cognitive competencies (as tested by "mental age" and IQ tests) tend to be among the very best predictors of later social and interpersonal adjustment (e.g., Anderson, 1960). Presumably, brighter, more competent people experience more interpersonal success and better work achievements and hence become more positively assessed by themselves and by others on the evaluative "good-bad" dimension which is so ubiquitous in trait ratings (e.g., Vernon, 1964). Cognitive achievements and intellective potential, as measured by mental age or IQ tests, also are receiving a central place in current cognitive-developmental theories (e.g., Kohlberg, 1969) and presumably are an important ingredient of such concepts as "ego strength" and "ego development." Indeed, it is tempting to speculate that the pervasive and substantial "first factor" found on tests like the MMPI (Block, 1965), often labeled with terms connoting "adjustment" at the positive end and maladaptive character structure at the negative end, reflects to a considerable degree the individual's level of cognitive-social competence and achievement. To the degree that certain demographic vari-
ables (e.g., socioeconomic class, high school graduation) reflect the individual's construction capacities and achievements, they also may be expected to predict "adjustment" and interpersonal competencies, as they often do (e.g., Robbins, 1972). The assessment of competence in response to specific problematic situations in the direct manner developed by Goldfried and D'Zurilla (1969) seems especially promising.

The relative stability of the person's construction capacities may be one of the important contributors to the impression of consistency in personality. The fact that cognitive skills and behavior-generating capacities tend to be relatively enduring is reflected in the relatively high stability found in performances closely related to cognitive and intellectual variables, as has been stressed before (Mischel, 1968, 1969). The individual who knows how to be assertive with waiters, for example, or who knows how to solve certain kinds of interpersonal problems competently, or who excels in singing, is capable of such performances enduringly.

Encoding Strategies and Personal Constructs

From the perspective of personality psychology, an especially important component of information processing concerns the perceiver's ways of encoding and grouping information from stimulus inputs. As discussed in earlier sections, people can readily perform cognitive transformations on stimuli (Mischel & Moore, 1973), focusing on selected aspects of the objective stimulus (e.g., the taste versus the shape of a food object): such selective attention, interpretation, and categorization substantially alter the impact the stimulus exerts on behavior (see also Geer, Davison, & Gatchel, 1970; Schachter, 1964). Likewise, the manner in which perceivers encode and selectively attend to observed behavioral sequences greatly influences what they learn and subsequently can do (Bandura, 1971a, 1971b). Clearly, different persons may group and encode the same events and behaviors in different ways. At a molar level, such individual differences are especially evident in the
personal constructs individuals employ (e.g., Argyle & Little, 1972; G. Kelly, 1955) and in the kinds of information to which they selectively attend (Mischel, Ebbesen, & Zeiss, 1973).

The behaviorally oriented psychologist eschews inferences about global dispositions and focuses instead on the particular stimuli and behaviors of interest. But what are "the stimuli and behaviors of interest?" Early versions of behaviorism attempted to circumvent this question by simplistic definitions in terms of clearly delineated motor "acts" (such as bar press) in response to clicks and lights. As long as the behaviors studied were those of lower animals in experimenter-arranged laboratory situations, the units of "behavior" and "stimuli" remained manageable with fairly simple operational definitions. More recent versions of behavior theory, moving from cat, rat, and pigeon confined in the experimenter's apparatus to people in exceedingly complex social situations, have extended the domain of studied behavior much beyond motor acts and muscle twitches; they seek to encompass what people do cognitively, emotionally, and interpersonally, not merely their arm, leg, and mouth movements. Now the term "behavior" has been expanded to include virtually anything that an organism does, overtly or covertly, in relation to extremely complex social and interpersonal events. Consider, for example, "aggression," "anxiety," "defense," "dependency," "self-concepts," "self-control," "self-reinforcement." Such categories go considerably beyond self-evident behavior descriptions. A category like aggression involves inferences about the subject's intentions (e.g., harming another versus accidental injury) and abstractions about behavior, rather than mere physical description of actions and utterances.

A focus on behavior must not obscure the fact that even the definition and selection of a behavior unit for study requires grouping and categorizing. In personality research, the psychologist does the construing, and he includes and excludes events in the units he studies, depending on his interests and objectives. He selects a category—such as "delay of gratification," for example—and studies its behavioral referents. In personality assessment, however, it becomes quickly evident that the subject (like the psychologist) also groups events into categories and organizes them actively into meaningful units. The layman usually does not describe his experience with operational definitions: he categorizes events in terms of his personal constructs (G. Kelly, 1955), and these may or may not overlap either with those of the psychologist or of other individuals. As previously noted (Jeffery & Mischel, 1973), observers tend to group information about persons with dispositional categories (such as "honest," "intolerant," "freaky," "do gooder"). Skepticism about the utility of traditional trait constructs regarding the subject's broad dispositions in no way requires one to ignore the subject's constructs about his own and other's characteristics. People invoke traits and other dispositions as ways of describing and explaining their experience and themselves, just as professional psychologists do, and it would be strange if we tried to define out of existence the personal constructs and other concepts, perceptions, and experiences of the individuals whom we are studying. The study of personal construct systems (e.g., Little & Stephens, 1973), of implicit personality theories (e.g., Hamilton, 1971; Schneider, 1973), and of self-concepts (e.g., Gergen, 1968) promises to illuminate an important set of still poorly understood person variables.

Cognitive consistency tends to be enhanced by selective attention and coding processes that filter new information in a manner that permits it to be integrated with existing cognitive structures (e.g., Norman, 1969). Cognitive processes that facilitate the construction and maintenance of perceived consistency (e.g., D'Andrade, 1970; Hayden & Mischel, 1973) have been mentioned earlier and are elaborated elsewhere (Mischel, 1968, 1969). After information has been integrated with existing cognitive structures and becomes part of long-term memory, it remains available enduringly.
and exerts further stabilizing effects. For example, the individual's subjective conception of his own identity and continuity presumably rests heavily on his ability to remember (construct) subjectively similar behaviors on his part over long time periods and across many situations. That is, the individual can abstract the common elements of his behavior over time and across settings, thereby focusing on his more enduring qualities.

There is considerable evidence that people categorize their own personal qualities in relatively stable trait terms (e.g., on self-ratings and self-report questionnaires). These self-categorizations, while often only complexly and tenuously related to nonverbal behavior, may be relatively durable and generalized (Mischel, 1968, 1969). Such stable styles of self-presentation and self-description may be reflected in personality test "response sets" like social desirability (Edwards, 1957), and in tendencies to depict oneself in relatively positive or negative terms found in the behavior of so-called "repressers" versus "sensitizers" on the Byrne (1961) Repression-Sensitization Scale (Mischel, Ebbesen, & Zeiss, 1973). While traditional personality research has focused primarily on exploring the correlates of such self-categorizations, in the present view they comprise merely one kind of person variable.

Behavior-Outcome and Stimulus-Outcome Expectancies

So far the person variables considered deal with what the individual is capable of doing and how he categorizes events. To move from potential behaviors to actual performance, from construction capacity and constructs to the construction of behavior in specific situations, requires attention to the determinants of performance. For this purpose, the person variables of greatest interest are the subject's expectancies. While it is often informative to know what an individual can do and how he construes events and himself, for purposes of specific prediction of behavior in a particular situation it is essential to consider his specific expectancies about the consequences of different behavioral possibilities in that situation. For many years personality research has searched for individual differences on the psychologist's hypothesized dimensions while neglecting the subject's own expectancies (hypotheses). More recently, it seems increasingly clear that the expectancies of the subject are central units for psychology (e.g., Bolles, 1972; Estes, 1972; Irwin, 1971; Rotter, 1954). These hypotheses guide the person's selection (choice) of behaviors from among the enormous number which he is capable of constructing within any situation.

On the basis of direct experience, instructions, and observational learning, people develop expectancies about environmental contingencies (e.g., Bandura, 1969). Since the expectancies that are learned within a given situation presumably reflect the objective contingencies in that situation, an expectancy construct may seem superfluous. The need for the expectancy construct as a person variable becomes evident, however, when one considers individual differences in response to the same situational contingencies due to the different expectancies that each person brings to the situation. An expectancy construct is justified by the fact that the person's expectancies (inferred from statements) may not be in agreement with the objective contingencies in the situation. Yet behavior may be generated in light of such expectancies, as seen, for example, in any verbal conditioning study when a subject says plural nouns on the erroneous hypothesis that the experimenter is reinforcing them.

In theories based on lower animal behavior, the expectancy construct has served as a limited heuristic (e.g., Bolles, 1972), since rats and pigeons cannot tell us their expectancies. Fortunately, humans are not so handicapped and under appropriate assessment conditions are willing and able to externalize their expectancies. Hence the expectancy construct applied to human rather than animal learning leads readily to measurement operations and to research.
strategies that can take account directly of the subject's hypotheses. Empirically, since direct self-reports seem to be one of the best data sources about the individual (Mischel, 1968, 1972), it should be possible to fruitfully assess behavior-outcome expectancies by asking the subject.

One type of expectancy concerns behavior-outcome relations under particular conditions. These behavior-outcome expectancies (hypotheses, contingency rules) represent the "if——; then——" relations between behavioral alternatives and probable outcomes anticipated with regard to particular behavioral possibilities in particular situations. In any given situation, the person will generate the response pattern which he expects is most likely to lead to the most subjectively valuable outcomes (consequences) in that situation (e.g., Mischel, 1966; Rotter, 1954). In the absence of new information about the behavior-outcome expectancies in any situation the individual's performance will depend on his previous behavior-outcome expectancies in similar situations. This point is illustrated in a study (Mischel & Staub, 1965) which showed that presituational expectancies significantly affect choice behavior in the absence of situational information concerning probable performance-outcome relationships. But the Mischel and Staub study also showed that new information about behavior-outcome relations in the particular situation may quickly overcome the effects of presituational expectancies, so that highly specific situational expectancies become the dominant influences on performance.

When the expected consequences for performance change, so does behavior, as seen in the discriminative nature of responding which was elaborated in earlier sections and documented elsewhere (Mischel, 1968). But in order for changes in behavior-outcome relations to affect behavior substantially, the person must recognize them. In the context of operant conditioning, it has become evident that the subject's awareness of the behavior-outcome relationship crucially affects the ability of response consequences (reinforcements) to modify his complex performances (e.g., Spielberger & DeNike, 1966). As previously stressed, the essence of adaptive performance is the recognition and appreciation of new contingencies. To cope with the environment effectively, the individual must recognize new contingencies as quickly as possible and reorganize his behavior in the light of the new expectancies. Strongly established behavior-outcome expectancies with respect to a response pattern may constrain an individual's ability to adapt to changes in contingencies. Indeed, "defensive reactions" may be seen in part as a failure to adapt to new contingencies because the individual is still behaving in response to old contingencies that are no longer valid. The "maladaptive" individual is behaving in accord with expectancies that do not adequately represent the actual behavior-outcome rules in his current life situation.

In the present view, the effectiveness of response-contingent reinforcements (i.e., operant conditioning) rests on their ability to modify behavior-outcome expectancies. When information about the response pattern required for reinforcement is conveyed to the subject by instructions, "conditioning" tends to occur much more readily than when the subject must experience directly the reinforcing contingencies actually present in the operant training situation. For example, accurate instructions about the required response and the reinforcement schedule to which subjects would be exposed exerted far more powerful effects on performance than did the reinforcing contingencies (Kaufman, Baron, & Kopp, 1966). Presumably, such instructions exert their effects by altering response-outcome expectancies. To the extent that information about new response-reinforcement contingencies can be conveyed to motivated human beings more parsimoniously through instructions or observational experiences than through operant conditioning procedures (e.g., Kaufman et al., 1966), an insistence upon direct "shaping" may reflect an unfortunate (and wasteful) failure to discriminate between the animal laboratory and the human condition.
A closely related second type of expectancy concerns stimulus-outcome relations. As noted previously in the discussion of generalization and discrimination, the outcomes expected for any behavior hinge on a multitude of stimulus conditions that moderate the probable consequences of any pattern of behavior. These stimuli ("signs") essentially "predict" for the person other events that are likely to occur. More precisely, the individual learns (through direct and observational experiences) that certain events (cues, stimuli) predict certain other events. This concept of stimulus-outcome expectancy is similar to the S-S* expectancy representing stimulus-outcome contingencies proposed by Bolles (1972) in the context of animal learning.

Stimulus-outcome expectancies seem especially important person variables for understanding the phenomena of classical conditioning. For example, through the contiguous association of a light and painful electric shock in aversive classical conditioning the subject learns that the light predicts shock. If the product of classical conditioning is construed as a stimulus-outcome expectancy, it follows that any information which negates that expectancy will eliminate the conditioned response. In fact, when subjects are informed that the "conditioned stimuli" will no longer be followed by pain-producing events, their conditioned emotional reactions are quickly eliminated (e.g., Grings & Lockhart, 1963). Conversely, when subjects were told that a particular word would be followed by shock, they promptly developed conditioned heart-rate responses (Chatterjee & Eriksen, 1962). In the same vein, but beyond the conditioning paradigm, if subjects learn to generate "happy thoughts" when faced by stimuli that otherwise would frustrate them beyond endurance, they can manage to tolerate the "aversive" situation with equanimity (Mischel, Ebbesen, & Zeiss, 1972). Outside the artificial confines of the laboratory in the human interactions of life, the "stimuli" that predict outcomes often are the social behaviors of others in particular contexts. The meanings attributed to those stimuli hinge on a multitude of learned correlations between behavioral signs and outcomes.

Just as correlational personality research yields a host of validity associations between behavioral "signs" from persons in one context and their behavior in other situations, so does the perceiver's learning history provide him with a vast repertoire of meaningful signs. For example, as research on person perception suggests, "shifty eyes," "tight lips," "lean and hungry looks," obese body build, age, sex, and an enormous number of even subtler behavioral cues (e.g., regarding the status and power of others) come to predict for observers other correlated behaviors. If it were possible to compute them, many of these correlations probably would not average more than the .30 "personality coefficient" (Mischel, 1968) typically found in correlational personality research, but that may be sufficiently accurate (especially on an intermittent schedule) to assure their persistent use. Some of these stimulus-outcome associations presumably reflect the perceiver's idiosyncratic learning history and his own evolving personal rules about stimulus meanings. Many of these associations, however, are likely to be widely shared by members of a common culture and probably depend importantly on the transcultural semantic associations discussed by D'Andrade (1970) and Shweder (1971, 1972). An adequate study of stimulus-outcome expectancies therefore would require attention to the rule system of the individual as well as to the shared "sign" grammar of the culture and of the transcultural lexicon structure.

Both behavior-outcome and stimulus-outcome expectancies depend on inferences about the intentions motivating behavior (i.e., its perceived causes). For example, a person's reactions to a physical blow from another will crucially depend on whether it was perceived as accidental or deliberate. Similarly, whether praise and attention produces in the recipient a warm glow (and "conditioning" of his preceding behaviors) or suspicion (and a rebuff) depends on whether the behaviors are perceived as sincere or as ingratiating (Jones, 1964).
Extremely subtle social and interpersonal cues affect the interpretation of the motivation (and hence the impact) of these complex human behaviors.

Although expectancy constructs often have been proposed, some of the main formulations have been based entirely on animal research (e.g., Bolles, 1972) which makes their relevance for human personality remote. Rotter's (1954) "subjective expectancy" construct was an important and theoretically influential exception. However, it deals only with one type of expectancy (similar to the present "behavior-outcome expectancies"); it does not consider stimulus-outcome expectancies. Moreover, Rotter's formulation focuses on "generalized expectancies" which are functionally similar to generalized traits and are not posited in the present approach.

In the present view, the person's expectancies mediate the degree to which his behavior shows cross-situational consistency or discriminativeness. When the expected consequences for the performance of responses across situations are not highly correlated, the responses themselves should not covary strongly (Mischel, 1968). As previously noted, since most social behaviors lead to positive consequences in some situations but not in other contexts, highly discriminative specific expectancies tend to be developed and the relatively low correlations typically found among a person's response patterns across situations become understandable (Mischel, 1968). Expectancies also will not become generalized across response modes when the consequences for similar content expressed in different response modes are sharply different, as they are in most life circumstances (Mischel, 1968). Hence expectancies tend to become relatively specific, rather than broadly generalized. Although a person's expectancies (and hence performances) tend to be highly discriminative, there certainly is some generalization of expectancies, but their patterning in the individual tends to be idiosyncratically organized to the extent that the individual's history is unique. (See the earlier section in this paper on generalization, discrimination, and idiosyncratic stimulus meanings).

While behavior-outcome and stimulus-outcome expectancies seem viable person variables, it would be both tempting and hazardous to transform them into generalized trait-like dispositions by endowing them with broad cross-situational consistency or removing them from the context of the specific stimulus conditions on which they depend. At the empirical level, "generalized expectancies" tend to be generalized only within relatively narrow, restricted limits (e.g., Mischel & Staub, 1965; Mischel, Ebbesen, & Zeiss, 1973). As was noted before in this paper, for example, the generality of "locus of control" is in fact limited, with distinct, unrelated expectancies found for positive and negative outcomes and with highly specific behavioral correlates for each (Mischel, Zeiss, & Zeiss, 1973). If expectancies are converted into global trait-like dispositions and extracted from their close interaction with situational conditions, they are likely to become just as useless as their many theoretical predecessors. On the other hand, if they are construed as relatively specific (and modifiable) "if , then ___" hypotheses about contingencies, it becomes evident that they exert important effects on behavior (e.g., Mischel & Staub, 1965).

Subjective Stimulus Values

Even if individuals have similar expectancies, they may select to perform different behaviors because of differences in the subjective values of the outcomes which they expect. For example, given that all persons expect that approval from a therapist depends on verbalizing particular kinds of self-references, there may be differences in the frequency of such verbalizations due to differences in the perceived value of obtaining the therapist's approval. Such differences reflect the degree to which different individuals value the response-contingent outcome. Therefore it is necessary to consider still another person variable: the subjective (perceived) value for the individual of particular classes of
events, that is, his stimulus preferences and aversions. This unit refers to stimuli that have acquired the power to induce positive or negative emotional states in the person and to function as incentives or reinforcers for his behavior. The subjective value of any stimulus pattern may be acquired and modified through instructions and observational experiences as well as through direct experiences (Bandura, 1969).

Stimulus values can be assessed by measuring the individual's actual choices in life-like situations as well as his verbal preferences or ratings (e.g., Mischel, 1966; Mischel & Grusec, 1966). Verbal reports (e.g., on questionnaires) about values and interests also may supply valuable information about the individual's preferences and aversions, and appear to provide some of the more temporally stable data in the domain of personality (E. L. Kelly, 1955; Strong, 1955). Alternatively, subjects may be asked to rank-order actual rewards (Rotter, 1954), or the reinforcement value of particular stimuli may be assessed directly by observing their effects on the individual's performance (e.g., Gewirtz & Baer, 1958).

Reinforcement (incentive) preferences may also be assessed by providing individuals opportunities to select the outcomes they want from a large array of alternatives, as when patients earn tokens which they may exchange for objects or activities: the "price" they are willing to pay for particular outcomes provides an index of their subjective value (e.g., Aylon & Azrin, 1965). The concept that any behavior which has a high natural frequency of occurrence can serve as a reinforcer for other less likely behaviors (Premack, 1965) also suggests that subjective reinforcers may be discovered by assessing the individual's naturally occurring high frequency behaviors in particular situations (Mischel, 1968).

A comprehensive assessment of stimulus values must include attention to stimuli that have acquired strong emotion-eliciting powers, as in the conditioned autonomic reactions seen in intense fears. For this purpose, specific self-report inventories, physiological measures, and direct behavior sampling of approach and avoidance behavior in response to the real or symbolically presented emotional stimulus may all be useful (Mischel, 1968).

The measurement operations for assessing stimulus values require considerable specificity. Just as the probable consequences of any behavior pattern hinge on a host of specific moderating considerations, so does the affective value (valence) of any stimulus depend on the exact conditions—in the person and in the situation—in which it occurs. The many variables known to affect the emotional meaning and valence of a stimulus include its context, sequencing, and patterning (e.g., Helson, 1964); social comparison processes (e.g., Festinger, 1945); and the cognitive labels the person assigns to his own emotional arousal state (Schachter & Singer, 1962). Thus, like instrumental responses, emotional reactions also tend to become far more discriminative than dispositional theories have assumed. Lazarus (1963), for example, has noted the specificity of sexual fears in frigid women. For instance, one woman could calmly imagine herself engaged in certain sexual caresses, but only if they occurred in the dark. Or consider the pilot who became debilitatingly anxious when flying, but only when his plane was higher than 9,000 feet (White, 1964), or the young woman who had asthmatic attacks mostly after she had contacts with her mother (Metcalf, 1956). Good illustrations of the analysis of stimulus conditions influencing emotional responses come from attempts to create subjective anxiety hierarchies (e.g., Wolpe, 1961).

Self-Regulatory Systems and Plans

While behavior is controlled to a considerable extent by externally administered consequences for actions, the individual also regulates his own behavior by self-imposed goals (standards) and self-produced consequences. Even in the absence of external constraints and social monitors, persons set performance goals for themselves and react with self-criticism or self-
satisfaction to their behavior depending on how well it matches their expectations and criteria. The concept of self-imposed achievement standards is seen in Rotter's (1954) "minimal goal" construct and in more recent formulations of self-reinforcing functions (e.g., Bandura, 1971c; Kanfer, 1971; Kanfer & Marston, 1963; Mischel, 1968, 1973a).

The essence of self-regulatory systems is the subject's adoption of contingency rules that guide his behavior in the absence of, and sometimes in spite of, immediate external situational pressures. Such rules specify the kinds of behavior appropriate (expected) under particular conditions, the performance levels (standards, goals) which the behavior must achieve, and the consequences (positive and negative) of attaining or failing to reach those standards. Each of these components of self-regulation may be different for different individuals, depending on their unique earlier histories or on more recently varied instructions or other situational information.

Some of the components in self-regulation have been demonstrated in studies of goal setting and self-reinforcement (e.g., Bandura & Whalen, 1966; Bandura & Perloff, 1967; Mischel & Liebert, 1966). Perhaps the most dramatic finding from these studies is that even young children will not indulge themselves with freely available immediate gratifications but, instead, follow rules that regulate conditions under which they may reinforce themselves. Thus, children, like adults, far from being simply hedonistic, make substantial demands of themselves and impose complex contingencies upon their own behavior. The stringency or severity of self-imposed criteria is rooted in the observed standards displayed by salient models as well as in the individual's direct socialization history (e.g., Mischel & Liebert, 1966), although after they have been adopted, the standards may be retained with considerable persistence.

After the standards (terminal goals) for conduct in a particular situation have been selected, the often long and difficult route to self-reinforcement and external reinforcement with material rewards is probably mediated extensively by covert symbolic activities, such as praise and self-instructions, as the individual reaches subgoals. When individuals imagine reinforcing and noxious stimuli, their behavior appears to be influenced in the same manner as when such stimuli are externally presented (e.g., Cautela, 1971). These covert activities serve to maintain goal-directed work until the performance matches or exceeds the person's terminal standards (e.g., Meichenbaum, 1971). Progress along the route to a goal is also mediated by self-generated distractions and cognitive operations through which the person can transform the aversive "self-control" situation into one which he can master effectively (e.g., Mischel et al., 1972; Mischel & Moore, 1973a, 1973b). While achievement of important goals leads to positive self-appraisal and self-reinforcement, failure to reach significant self-imposed standards may lead the individual to indulge in psychological self-lacerations (e.g., self-condemnation). The anticipation of such failure probably leads to extensive anxiety, while the anticipation of success may help to sustain performance, although the exact mechanisms of self-regulation still require much empirical study.

Self-reactions and self-regulation also are influenced by the person's affective state. Following positive experiences, individuals become much more benign both toward themselves and others than after negative experiences. For example, after success experiences or positive mood inductions, there is greater selective attention to positive information about the self (Mischel et al, 1973), greater noncontingent self-gratification (e.g., Mischel, Coates, & Raskoff, 1968; Moore, Underwood, & Rosenhan, 1973), and greater generosity (e.g., Isen, Horn, & Rosenhan, 1973).

In conceptualizing the organization of complex self-regulatory behavior, it will be necessary to consider the individual's "priority rules" for determining the sequencing of behavior and "stop rules" for the termination of a particular sequence of behavior. The ideas concerning "plans"
as hierarchical processes which control the order in which an organism performs a sequence of operations, proposed by Miller, Galanter, and Pribram (1960), seem relevant. Subjectively, we do seem to generate plans, and once a plan is formed (to go on a trip, to marry, to move to a new job, to write a paper) a whole series of subroutines follows. While intuitively plausible, the concept of plans has not yet stimulated the necessary personality-oriented cognitive research. Promising steps toward the study of plans are the concepts of behavioral intentions (Dulany, 1962), intention statements, and contracts (e.g., Kanfer, Cox, Greiner, & Karoly, 1973). Although self-instructions and intention statements are likely to be essential components of the individual’s plans and the hierarchical organization of his self-regulatory behavior, at present these topics provide perhaps the largest void and the greatest challenge in personality psychology.

To summarize, a comprehensive approach to person variables must take account of the individual’s self-regulatory systems. These systems include: the rules that specify goals or performance standards in particular situations; the consequences of achieving or failing to achieve those criteria; self-instructions and cognitive stimulus transformations to achieve the self-control necessary for goal attainment; and organizing rules (plans) for the sequencing and termination of complex behavioral patterns in the absence of external supports and, indeed, in the face of external hindrances.

**Overview of Person Variables**

In sum, individual differences in behavior may reflect differences in each of the foregoing person variables and in their interactions, summarized in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Summary of Cognitive Social Learning Person Variables</th>
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<tr>
<td>1. Construction competencies: ability to construct (generate) particular cognitions and behaviors. Related to measures of IQ, social and cognitive (mental) maturity and competence, ego development, social-intellectual achievements and skills. Refers to what the subject knows and can do.</td>
</tr>
<tr>
<td>2. Encoding strategies and personal constructs: units for categorizing events and for self-descriptions.</td>
</tr>
<tr>
<td>4. Subjective stimulus values: motivating and arousing stimuli, incentives, and aversions.</td>
</tr>
</tbody>
</table>

To construct the preferred response. For example, due to differences in skill and prior learning, individual differences may arise in interpersonal problem solving, empathy and role taking, or cognitive-intellective achievements. Response differences also may reflect differences in how individuals categorize a particular situation (i.e., in how they encode, group, and label the events that comprise it) and in how they construe themselves and others. Differences between persons in their performance in any situation depend on their behavior-outcome and stimulus-outcome expectancies, that is, differences in the expected outcomes associated with particular responses or stimuli in particular situations. Performance differences also may be due to differences in the subjective values of the outcomes expected in the situation. Finally, individual differences may be due to differences in the self-regulatory systems and plans that each person brings to the situation.

**Cognitive Social Learning View of Interaction**

In this final section, some issues in current theorizing about personality will be reconsidered and interpreted in light of the proposed cognitive social learning person variables. These issues concern the role
When Do Individual Differences Make a Difference?

From the present viewpoint, the conditions or "situational variables" of the psychological environment provide the individual with information which influences the previously discussed person variables, thereby affecting cognitive and behavioral activities under those conditions. "Situations" thus affect behavior insofar as they influence such person variables as the individual's encoding, his expectancies, the subjective value of stimuli, or the ability to generate response patterns. In light of the proposed set of person variables, it is now possible to return to the question of when situations are most likely to exert powerful effects and, conversely, when person variables are likely to be most influential.

Psychological "situations" and "treatments" are powerful to the degree that they lead all persons to construe the particular events the same way, induce uniform expectancies regarding the most appropriate response pattern, provide adequate incentives for the performance of that response pattern, and instill the skills necessary for its satisfactory construction and execution. Conversely, situations and treatments are weak to the degree that they are not uniformly encoded, do not generate uniform expectancies concerning the desired behavior, do not offer sufficient incentives for its performance, or fail to provide the learning conditions required for successful construction of the behavior.

Individual differences can determine behavior in a given situation most strongly when the situation is ambiguously structured (as in projective testing) so that subjects are uncertain about how to categorize it and have no clear expectations about the behaviors most likely to be appropriate (normative, reinforced) in that situation. To the degree that the situation is "unstructured," the subject will expect that virtually any response from him is equally likely to be equally appropriate (i.e., will lead to similar consequences), and variance from individual differences will be greatest. Conversely, when subjects expect that only one response will be reinforced (e.g., only one "right" answer on an achievement test, only one correct response for the driver when the traffic light turns red) and that no other responses are equally good, and all subjects are motivated and capable of making the appropriate response, then individual differences will be minimal and situational effects prepotent. To the degree that subjects are exposed to powerful treatments, the role of individual differences will be minimized. Conversely, when treatments are weak, ambiguous, or trivial, individual differences in person variables should exert significant effects.

There have been several empirical demonstrations of these points. Mischel and Staub (1965) examined some of the conditions determining the interaction and relative importance of individual differences and situations. Adolescent subjects were assessed on a measure of their expectancies for success in ability areas. Three weeks later, they worked on a series of problems and in one treatment obtained success, in a second, failure, and in a third, no information. Next, they had to make many choices, including one between a noncontingent but less preferred reward and a more preferred reward whose attainment was contingent upon their successful performance on a task similar to the one on which they had previously either succeeded, failed, or received no information. On this choice, situational success and failure had the expected effects: subjects who had succeeded chose much more often to work for the contingent preferred reward than did those who had failed. The effects of situational success and failure were so strong that they wiped out the role of individual differences in preexperimental expectancy for success. But in the "no-information" condition (in which subjects obtained no feedback about their performance quality in the situation) preexperimental expectancy was a highly
significant determinant of their choice to work for contingent rewards. Thus situational manipulations which provided new expectancies minimized the effects of relevant preexisting individual differences, but when situational variables were weak or ambiguous (the no-information about-performance condition) the expectancies that persons brought to the situation affected their behavior. Similar conclusions come from a recent study investigating the influence of success and failure experiences on subsequent selective attention to information about the self (Mischel et al., 1973).

The complex social settings of life also may be construed as varying in the degree to which they prescribe and limit the range of expected and acceptable behavior for persons in particular roles and settings and hence permit the expression of individual differences (e.g., Barker, 1966). In some settings the rules and prescriptions for enacting specific role behaviors impose narrow limits on the range of possible behaviors (e.g., in church, at school, in a theatre, at a conference), while in others the range of possible behaviors is broad and often the individual can select, structure, and reorganize situations with minimal external constraints. Because in particular settings certain response patterns are reinforced while others are not, different settings become the occasion for particular behaviors in different degrees. Raush (1965), for example, found that in a sample of normal American boys, friendly acts led to unfriendly responses in 31% of the instances in game situations but in only 4% of the time at mealtimes.

Person–condition interactions are never static, but environmental stabilities can be identified which help to account for continuities in behavior and permit useful predictions (e.g., Mischel, 1968). While it would be bizarre to ignore the person in the psychology of personality, behavior often may be predicted and controlled efficaciously from knowledge about relevant stimulus conditions, especially when those conditions are powerful (Mischel, 1968). The potency of predictions based on knowl-
involve people and reciprocal relationships (e.g., with spouse, with boss, and with children). The person continuously influences the "situations" of his life as well as being affected by them in a mutual, organic two-way interaction. These interactions reflect not only the person's reactions to conditions but also his active selection and modification of conditions through his own cognitions and actions.

As the analysis of complex social interactions illustrates (e.g., Patterson & Cobb, 1971), the person continuously selects, changes, and generates conditions just as much as he is affected by them. The mutual interaction between person and conditions (so easily forgotten when one searches for generalized traits on paper-and-pencil tests) cannot be overlooked when behavior is studied in the interpersonal contexts in which it is evoked, maintained, and modified.

Generally, changes in behavior toward others tend to be followed by reciprocal changes in the behavior of those others (Raush et al., 1959). In Raush's (1965) studies of naturalistic interactions, for example, "the major determinant of an act was the immediately preceding act. Thus if you want to know what child B will do, the best single predictor is what child A did to B the moment before [p. 492]." Construed from the viewpoint of Child A, this means that A's own behavior determines B's reactions to him. In that sense, the person is generating his own conditions. Such subject variables as the person's expectancies, self-regulatory rules, plans, and constructs presumably guide the situations which he selects, generates, and structures for himself.

The proposed cognitive social learning approach to person variables emphasizes most strongly the need to study the individual's behavior in specific interaction with particular conditions. Indeed, the conceptualization of behavior, whether psychologist defined (as in research) or subject defined (as in clinical, individually oriented assessment) must be embedded in relation to the specific conditions in which the behavior occurs. Rather than talk about "behavior," it may be more useful to conceptualize behavior-contingency units that link specific patterns of behavior to the conditions in which they may be expected. Accurate descriptions require specifying as precisely as possible the response mode of the behavior as well as the contingencies in which it is expected to be of high or low frequency, as was discussed in earlier sections on situational moderator variables. Thus rather than describe a person as "aggressive," it would be necessary to qualify the mode of aggressive behavior (e.g., verbal insults but not physical attacks) and the specific contingencies (e.g., when criticized for poor athletic performance on playground but not in class). Such cumbersome, hyphenated descriptions (e.g., Mischel, 1969) would lack the "thumbnail sketch" appeal of global trait portraits. But they would remind us of the discriminativeness and complexity of the individual's behavior, its idiosyncratic organization, its dependence on conditions, and the hazards of attempting to abbreviate it grossly.

The previously discussed person variables should make it plain that a cognitive social learning approach does not construe the individual as an empty organism buffeted entirely by situational forces. Yet it should be equally apparent that the nature and effects of these person variables depend on specific interactions between the individual and the psychological conditions of his life. Construction capacities cannot be adequately understood without linking them to the cognitive social learning conditions through which they develop and are maintained and to the behaviors which they yield. Similarly, the study of expectancies must not lose sight of their roots in the individual's direct and vicarious experiences and of their ready modifiability in the light of changes in behavior-outcome and stimulus-outcome relationships. While subjective stimulus values and the individual's preferences and aversions may have a greater degree of stability, their meaning and impact also hinge on the specifics of the conditions in which they occur. Self-regulatory
rules, standards, and plans serve to impose additional continuity and consistency upon behavior and guide the individual in the absence of immediate situational forces. Yet such standards, rules, and plans also are not situation free, and their flexibility in response to changing conditions provides further testimony to human adaptiveness.

Perhaps substantial immunity to situational changes is shown by some of the individual’s personal constructs. The “theories” formed about behavior (as in the subject’s implicit personality theories about self and others) may be some of the most stable and situation-free constructions. That has double-edged consequences; the person’s constructs provide a measure of perceived stability in an otherwise excessively complex, disorganized, and unstable world, but they also may become hard to disconfirm. Yet even in the realm of constructs, consistency is far from pervasive. For example, Gergen’s (1968) findings reveal that contrary to the popular belief, when it comes to their self-perceptions people do not have a consistent, unitary self-concept. Indeed, he concludes with regard to the phenomena of self-concepts that “inconsistency” rather than “consistency” seems to be the natural state of affairs.5

The proposed approach to personality psychology emphasizes the interdependence of behavior and conditions, mediated by the constructions and cognitive activities of the person who generates them, and recognizes the human tendency to invent constructs and to adhere to them as well as to generate subtly discriminative behaviors across settings and over time. It emphasizes the crucial role of situations (conditions) but views them as informational inputs whose behavioral impact depends on how they are processed by the person. It focuses on how such information processing hinges, in turn, on the prior conditions which the individual has experienced. And it recognizes that the person’s behavior changes the situations of his life as well as being changed by them. The term “personality psychology” need not be preempted for the study of differences between individuals in their consistent attributes: it fits equally well the study of the individual’s cognitive and behavioral activities as he interacts with the conditions of his life.

Three Perspectives in Personality Study

The study of persons may be construed alternatively from three complementary perspectives. Constrained from the viewpoint of the psychologist seeking procedures or operations necessary to produce changes in performance, it may be most useful to focus on the environmental conditions necessary to modify the subject’s behavior and therefore to speak of “stimulus control,” “operant conditioning,” “classical conditioning,” “reinforcement control,” “modeling” and so on. Constrained from the viewpoint of the theorist concerned with how these operations produce their effects in the subject who undergoes them, it may be more useful to speak of alterations in processed information and specifically in constructs, expectancies, subjective values, rules, and other theoretical person variables that mediate the effects of conditions upon behavior. Constrained from the viewpoint of the experiencing subject, it may be more useful to speak of the same events in terms of their phenomenological impact as thoughts, feelings, wishes, and other subjective (but communicable) internal states of experience. Confusion arises when one fails to recognize that the same events (e.g., the “operant conditioning” of a child’s behavior at nursery school) may be alternatively construed from each of these perspectives and that the choice of constructions (or their combinations) depends on the construer’s purpose. Ultimately, conceptualizations of the field of personality will have to be large enough to encompass the phenomena seen from all three perspectives. The present cognitive social learning approach to persons hopefully is a step in that direction.

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5 In the same vein, in their analysis of sources of variance in personal constructs, Argyle and Little (1972) found that the average variation attributable to persons was only 16.1%, whereas the percentages for situations and interaction were 43.6 and 40.2, respectively.
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