Chapter 10 The Perceived Environment and the Psychological Situation

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How to conceptualize the environment of human action continues to be a problematic enterprise in contemporary psychology. The most basic psychological term for the environment—the stimulus—still eludes consensual definition (Gibson, 1960; Jessor, 1956); environmental descriptions borrowed from other disciplines—physics, geography, sociology—appear in psychological research as if their appropriateness were self-evident; and when environmental concepts at very different levels of abstraction are employed in a study, the analysis often fails to consider their causal or logical heterogeneity.

Coming to Terms with Subjectivity

Despite this appearance of intellectual disarray, an evolutionary shift in thinking about the environment can be discerned in the more recent history of psychology and, indeed, of related disciplines. The key dialectic underlying this change seems to have been a recognition of and a coming to terms with the role of subjectivity in science. The "intrusion of subjectivity" (Kessel, 1969) in physical science can be widely documented but, for psychologists raised on the objectivism ostensibly inherent in operational definition, it is perhaps most telling to quote from the last book written by Bridgman (1959), the father of operationism: "Here I shall only reiterate my opinion that a proper appreciation of [first-person report] will alter the

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common picture of science as something essentially public into something essentially private [p. 237]."

In sociology, concern for the subjective had long been a preoccupation of the symbolic interactionists (Blumer, 1966; Rose, 1962; Wilson, 1970) who argued that the environment of action is, in the last analysis, *constituted by the actor*. The classical environmental concept in this perspective is "the definition of the situation" (Thomas, 1928), and it yielded the well-known apothegm: "If men define situations as real, they are real in their consequences [p. 572]." Renewed support for this orientation emerges from a recent review of trends in social psychology; the author (Stryker, 1977), a sociologist, singles out the most important trend as: "…the general surge…of phenomenological thinking," and he concludes that "…the subjective has become respectable [p. 157]."

Within psychology, part of the dialectic was the renewal of interest in inner experience as legitimate psychological data (Zener, 1958). But the more fundamental thrust came from a growing awareness of the psychological implications of human experiential capabilities, namely, their potential for having a transformational impact on the environment. Among personality theorists, Kurt Lewin was probably the most explicit and systematic on this point, his views reflecting the important influence of the philosopher, Ernst Cassirer (1953): "No longer in a merely physical universe, man lives in a symbolic universe...Physical reality seems to recede in proportion as man's symbolic activity advances. Instead of dealing with things themselves man is in a sense constantly conversing with himself [p. 43]." In Lewinian field theory (Lewin, 1951b), this perspective led to an insistence on describing the environment as it is perceived or experienced by the actor: "...to substitute for that world of the individual the world of the teacher, of the physicist, or of anybody else is to be, not objective, but wrong [p. 62]." Cartwright (1978), in his recent Lewin Memorial Award address, recalls Lewin's premise that behavior cannot be properly explained if one does not understand the way in which individuals view the world in which they live, and he notes that Lewin: "...was, in this sense, a subjectivist [p. 174]."

Concern with the environment from the perspective of the actor, that is, concern with its psychological description or its perceived meaning, was a common thread running through the theoretical formulations of the "classical interactionists" (the phrase is Ekehammar's, 1974; see also Jessor, 1956, 1958, 1961; Jessor & Jessor, 1973). Although rather broadly shared, this phenomenological or subjectivist position remained difficult for psychologists of a behaviorist persuasion to assimilate. It seems to have required the throes of the person-situation controversy over the past decade to bring about a widened consensus in which they could also participate. Contemporary social behavior formulations (Bandura, 1978) now do include such acknowledgments as: "...the environment is partly of a person's own making [p. 345]" and "external influences operate largely through cognitive processes [p. 355]" (see also Mischel, 1973). It is sobering to realize, however, that the resolution of the person-situation controversy in interactionism constitutes little more than a rediscovery of the earlier field-theoretical position of Lewin and others (Murray, 1938; Rogers, 1959; Rotter, 1954). In the concluding paragraphs of an historical review of the various issues in the dispute, Ekehammar (1974) notes that the cognitive and perceptual concepts invoked

by the more recent interactionists: "...have essentially the same meaning as the classical interactionists' psychological environment. Although the terminology is different, the common main idea is that the individual's psychological representation and construction of the environment is emphasized [p. 1044]."

Coming to terms with subjectivity implies acceptance of a fundamentally phenomenological perspective in psychology and agreement on the importance of dealing with the psychological environment. Despite the progress in this direction, it constitutes only a necessary starting point for conceptualizing the environment of human action. Basic issues persist, among them the relation of the psychological environment to other environments in more traditional descriptions, the relationship of the psychological environment to behavior and development, the formal or structural properties of the psychological environment, and finally, its content. Some comment on each of these conceptual issues is in order before we turn to a set of research findings that have an empirical bearing on them as well.

The Multiplicity of Environments

It was emphasized in an earlier discussion (Jessor & Jessor, 1973) that every human action can be seen as taking place in multiple and various environments *simultaneously*. The context of action can always be dealt with as a physical context, a geographic context, a cultural context, a social structural context, a psychological context, and more. This inherent multiplicity of the environment precludes any hope of arriving at some ultimate or ontologically most real environment. Instead, the environment has to be seen as capable of being continuously and differentially *constituted* depending on such factors as the conceptual orientation of a particular discipline, the explanatory objectives of a particular researcher, or the guiding purposes of a particular actor.

In this view, it would seem quite reasonable to try to link human action to many different kinds of environments or contextual attributes—humidity, radiation, urban density, normative conflict, bureaucracy, marginality, overprotection, threat, etc. But it is precisely its multiplicity that makes for the problematic status of the environment in contemporary psychology. What is needed are principles for organizing the multiplicity and diversity of environments in relation to the disciplinary goal of achieving *psychological explanation*.

Environment-Behavior Mediation

Two related principles can be invoked toward that end. The first principle has to do with the fact that *explanation* of any observed linkage between environment and action requires some theoretical structure to mediate the linkage and to make it psychologically understandable if not logically inescapable. In the absence of a

psychologically relevant theoretical network to bridge the explanatory gap, such observed linkages as those of climatic variation with aggression, apartment house dwelling with schizophrenia, low socioeconomic status with apathy, or bureaucracy with conforming behavior, remain merely empirical. The degree to which there exist theoretical structures to account for the causal impact of the various environments on action would be one principle that could be useful in determining which environments to explore. At present, social and cultural environments lend themselves more readily to the specification of a theoretical linkage to action than do physical or geographic or genetic environments.

Experiential Proximity of Environments

The second and more important principle is that the multiple and various environments can be ordered along a dimension of conceptual proximity to experience, to perception, to interpretation, or to psychological response. Some environments are relatively (or even absolutely) remote from direct experience; they are generally described in nonpsychological language and are without specific functional significance for the person. The environments of physics, geography, biology, and institutional sociology are examples that are remote from immediate experience; they would fall, therefore, toward the *distal* end of this dimension. Environments that are closer to being directly perceived or experienced fall toward the *proximal* end of the dimension. These latter employ a psychological or, at least, a psychologically relevant language of description, and they refer to attributes that can be perceived or interpreted or that have rather direct implications for perception and meaning. Along this distal-proximal dimension, *the most proximal environment would be the perceived environment*, the environment of immediate significance for the actor.

The idea that the multiplicity of environments can be ordered in relation to their proximity to perception or experience can be found also in the spatial arrangement of Lewin's topological concepts: The psychological environment is most proximal; next is the boundary zone around the life space; and then there is the further differentiation of the region lying outside the boundary zone into the "foreign hull" and the still more remote "alien factors" (Lewin, 1951a).

Invariance of Behavior with the Perceived Environment

Several implications follow from the nature of the distal-proximal dimension. First, environmental variables that are distal will require complex, theoretical structures to link them with experience and, thereby, with action; whatever linkage they do have to action, it follows necessarily, must be mediated by more proximal environmental variables. Second, proximal variables, precisely because they mediate the linkage of distal variables to action, make it possible to account for variation in behavior where the distal environment remains constant. Finally, the most important logical implication of the distal-proximal dimension is that *action or behavior is invariant with the proximal or perceived environment* rather than with the distal environment. The search in psychology for invariant relations requires, therefore, a proximal or perceived environment focus (Jessor, 1961; Jessor & Jessor, 1973). The key *empirical* consequence to be derived from these various implications is that correlations between environmental variables and behavior should be greater the more proximal the environment, and they should be greatest for those variables that are in the perceived environment. This is one of the propositions that will be examined in the data to be presented shortly.

The discussion thus far can be made more concrete by consideration of three different kinds of environments that are commonly used in social-psychological studies and that we ourselves have worked with over the past two decades in relation to our own research on deviance and problem behavior. In distal-to-proximal order, they are the demographic environment, the social structural environment, and the perceived environment.

The Demographic Environment

The environment of demography is made up of a variety of *descriptive* (rather than theoretical or analytic) concepts referring to quite obvious or phenotypic attributes that serve to classify persons or locate them in positions in societal space. Age, sex, race, religious membership, rural-urban residence, family composition, education, and occupation are the most frequently used, and they lend themselves readily to epidemiological purposes that are of interest to the discipline and to society at large. It is in regard to their *causal or explanatory contribution*, however, that the distal remoteness of such attributes becomes apparent. Demographic concepts do not convey univocal experiential significance, and none of them carries any necessary theoretical significance that would imply a particular influence on behavior. On both of these grounds, demographic concepts need to be seen as highly distal; at best, they can have only indirect and quite uncertain consequences for variation in action.

Perhaps most invoked in psychological research is the demographic concept of social class or socioeconomic status, a position in the hierarchical organization of society that is usually indexed by level of occupation and amount of education. A forceful claim for the importance of this aspect of demography has been made by Kohn (1976): "In actuality, social class embodies such basic differences in conditions of life that subjective reality is necessarily different for people differentially situated in the social hierarchy [p. 179]," and "...members of different social classes...come to see the world differently... [p. 180]." If this were in fact the case, the distal environment of social class would constitute an extremely useful concept in accounting for variation in behavior. Its utility, as Kohn makes clear, would derive from the implications it would have for the perceived environment, that is, for differences in "subjective reality." The distal environment of social class has not proved

to be useful in this way, however. Social classes are not (or are no longer) insulated from each other; there is mobility between classes; all classes are exposed to the same homogenizing mass communication media; and there have even been secular changes in the defining criteria of class. Further, the complexity of social life and experience is such that it defies summary by a simple index of years of education or status of occupation. Said otherwise, there is enormous heterogeneity of experience *within* class, perhaps as great as that between classes, at least in some areas. In light of these remarks the distal environment of social class is not an appropriate index or map of the perceived environment, and therefore it should have little necessary consequence for behavior.

To sum up this perspective on the demographic environment, it is too distal from experience to yield strong linkages with behavior; it conveys little in the way of analytic understanding of behavioral variation; and whatever linkage can be established between it and behavior must remain essentially empirical unless there is also an account—and, ideally, an assessment—of its mediation by the perceived environment.

The Social Structural Environment

The second environment to be considered—the environment of social structure—is more proximal to experience and to behavior than is the environment of demography. By virtue of the fact that it is constituted in *theoretical* (rather than descriptive) terms, it does convey particular implications for the perceived environment and, thereby, for behavior. The concepts that are employed in constituting the social structural environment tend to have experience and behavior relevance precisely because they were invented to account for variation in social behavior. They tend to emphasize those properties of the environment that would be expected to shape the perceptual field and the possibilities for action. The distinction being drawn here can be illuminated by a different aspect of Kohn's approach to the work situation. Instead of a demographic concern with the status level of an occupation, Kohn and Schooler (1973) focus on the "structural imperatives" of the job, for example, the actual conditions of work, its substantive complexity, and its routinization, and their findings emphasize: "...the social psychological importance of the structural imperatives of the job that impinge on the man most directly, insistently, and demandingly...[p. 116]." In sum, the social-structural environment is constituted of those attributes of the social context that have a high degree of *potential* significance for experience and behavior.

A major concern of our earlier research in a tri-ethnic community was to elaborate a conceptualization of the social structural (we called it *sociocultural*) environment that would yield a logical account of both interethnic and intraethnic variation in deviant behavior. That environment, defined as a system, is shown in Fig. 10.1 (the personality system and the socialization system that were part of the

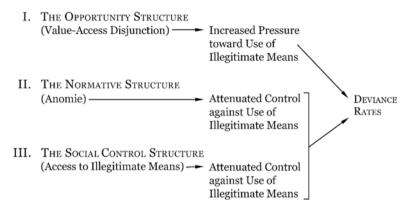


Fig. 10.1 The sociocultural system and deviance rates (Reprinted from Jessor et al., 1968, p. 78)

overall conceptual framework are omitted). Three component environmental structures were designated in the theory—a structure of opportunity, a structure of norms, and a structure of social controls—and the location of a person (or of an ethnic group) in each of these structures specified the likelihood of occurrence of problem behavior (Jessor, Graves, Hanson, & Jessor, 1968). Each structure included variables that had potential significance for perception. For example, the social control structure included three such variables: "exposure to deviance" (the prevalence of models for deviant behavior in the ecology); "absence of sanction networks" (nonparticipation in or exclusion from social interactions, such as those in church groups, that negatively sanction transgression); and "opportunity to engage in deviance" (the availability of time and of access to places and materials [e.g., cars or alcohol] that make certain behaviors possible).

The theory behind this environmental conceptualization is that value-access disjunctions in the opportunity structure tend to instigate deviance, whereas anomie in the normative structure and access to illegitimate means in the social control structure tend, to attenuate controls against deviance; the balance among the three structures is what generates the environmental dynamic for behavior. This effort sought to capture a behavior-relevant dimension of the social structural environment—what might be called *its conduciveness to deviance*. (In this connection, see Sells' concern [1963] that behavior-relevant dimensions of the environment be identified and his employment of one such dimension which he called "conduciveness to academic achievement.")

Although theoretically relevant to deviant behavior, and although referring to properties of the social environment that are potentially amenable to experience, conduciveness to deviance nevertheless remains distal from the perceived environment. As a description of the environment it is in perceivable but still not in perceived terms. Although this approach to the environment was successful for the purposes of the Tri-Ethnic Project and accounted for more of the variance than did

the more obvious demographic attributes such as ethnic group membership or socioeconomic status, it still left considerable variance unaccounted for. This was part of the impetus for our move to assessing the perceived environment in our next major research effort.

The Perceived Environment

The third environment—the one that is the main focus of this chapter—is the perceived environment, the environment that is most proximal to experience along the distal-proximal dimension. The perceived environment refers to the socialpsychological constitution of the environment out of the perceptions, definitions, reports, or responses of the actor. To borrow Brunswik's (1943) very apt phrase, it is the environment that is "post-perceptual and pre-behavioral [p. 266]." Reflecting socially organized and shared dimensions of potential meaning as well as personally organized and idiosyncratic dispositions to perceive and to process information, the perceived environment is the one that, logically, is most invariant with or causally closest to action. The notion of "causal closeness" as used here is quite different from physical or biological closeness. For example, a physical-language description of the immediate context in which a person is located, or a description of such biologically close aspects of the person's environment as obesity or skin color, remain causally distal because they do not specify their experiential relevance or the actual significance they have for the person. It is the meanings of attributes or the definitions of situations that are causally closest because they are most immediately prebehavioral in a chain of causal linkages.

In the empirical portion of this chapter, we deal with essentially the same environmental dimension that was explored earlier in the Tri-Ethnic Study—its conduciveness to problem behavior—but this time the dimension is treated as an aspect of the perceived environment rather than the social structural environment. Before turning to the research, however, it is useful to elaborate some of the formal or structural properties that emerge from an effort to conceptualize the perceived environment. The task of conceptualizing the perceived environment is, in fact, not very different from what has to be done when conceptualizing personality. Questions to be answered concern its structure, its organization, its enduringness, its development, and its content.

The Property of Depth

The first of the properties of the perceived environment needing mention is its *depth*. When a specific behavior or class of behavior is at issue, some aspects of the perceived environment are "closer" to it than others; they are those aspects

that directly and obviously implicate that behavior. For example, in predicting the use of marijuana from perceived environment variables, the perception that friends use marijuana is considered conceptually closer to the use of marijuana than the perception that friends are generally warm and supportive. The notion of depth always obtains in relation to specific behavior, and variables can be allocated to a closer or a more remote "region" within the perceived environment depending on the immediacy of their import for that behavior. As might be expected, these closer and more remote regions are referred to, respectively, as proximal and distal regions. The very same logic that was applied to the proximal-distal dimension underlying the different kinds of environments is applied to these two regions, but now within the perceived environment. Variables in the proximal region of the perceived environment are those with an obvious connection to behavior. They refer to models for it, or approval for it, or sanctions against it, etc., and all of them actually specify the behavior in the definition of the variable itself, for example, "perceived models for marijuana use." Variables in the distal region of the perceived environment are unconnected to any specific behavior. Whereas they clearly have implications for variation in behavior, those implications depend on theory rather than being immediately obvious, for example, "perceived support from friends."

Depth is an important property because it indicates that even the perceived environment is not homogeneously relevant to a specific action. A consideration of the property of depth enables the ordering of perceived variables in relation to their closeness to specific behaviors. It also clarifies why some perceived variables, namely those that are proximal, are more likely to have powerful associations with behavior than others, namely those that are distal. It is worth pointing out, parenthetically, that the association of a distal perceived variable with behavior, although it is usually weaker, may be more *interesting* than the association of a proximal perceived variable precisely because the connection of the former is so much less obvious.

The Property of Texture

A second property, *texture*, has to do with the degree to which the perceived environment as a whole and its distal and proximal regions are differentiated into component variables and attributes. Texture is thus a direct reflection of the degree of theoretical articulation that has been accomplished for the perceived environment. Instead of lending itself only to global or generalized characterization, the perceived environment can be differentiated according to content (e.g., perceived supports and controls), according to social agents (e.g., perceived parental supports or friends controls), according to opportunities to learn behaviors (e.g., perceived models for it), and according to instigations to engage in behaviors (e.g., perceived social approval for such actions). The more texture it has, the more the perceived environment is likely to yield analytic understanding.

The Property of Enduringness

A third property of the perceived environment is its *enduringness*. It is possible to specify the perceived environment in relation to a given place at a particular moment of time-near the end of a party, perhaps, or just as the instructor is calling on a student in class. This is the usual meaning of the concept of the psychological situation, the situation as it exists at a moment in time, and the situation in which the psychological concern is with understanding the actor's very next behavior. It was this momentary perceived environment that Kurt Lewin sought to represent in his diagrams of the psychological situation in hodological space. But it is also possible to consider a more extended, more generalized, more enduring perceived environment, one that has reference to a broader and longer segment of life. Enduringness refers to quite different perceptions of the environment by the same person. Thus, "I have a lot of support in my marriage" is different from "This particular interaction is threatening." The former example illustrates the perception of a relatively enduring aspect of the environment, and it contrasts sharply with the perception of the momentary situation in the latter example. In interviews and questionnaires, it is usually the more enduring perceived environment we are seeking to characterize rather than the immediate situation of the inquiry. W. I. Thomas seemed to be reaching for this kind of property in relation to his notion of definitions of the situation when he stated in Ball (1972): "Not only concrete acts are dependent on the definitions of the situation but gradually a whole life-policy and the personality of the individual himself follow from a series of such definitions [p. 62]."

The Property of Developmental Change

Fourth, it is useful to conceive of the perceived environment as having the property of *developmental change*. Because the perceived environment reflects socially organized dimensions of potential meaning and personally organized dispositions to perceive, and because there are developmental tendencies in both of these sources of influence, the perceived environment can be expected to evidence systematic and predictable changes over time or at different life stages. In the social environment, for example, the operation of the social process of age grading implies systematic changes in demands, expectations, and opportunities as young people grow older. There will also be a predictable increase in the prevalence of friends who are models for certain behaviors as adolescence is reached and passed. It makes sense even to conceive of "growth curves" for attributes of the perceived environment in the same way as it does for attributes of personality or ability. A similar point has been made by Nesselroade and Baltes (1974), who have introduced the concept of "environmental ontogeny [p. 64]" in their work.

The Question of Content

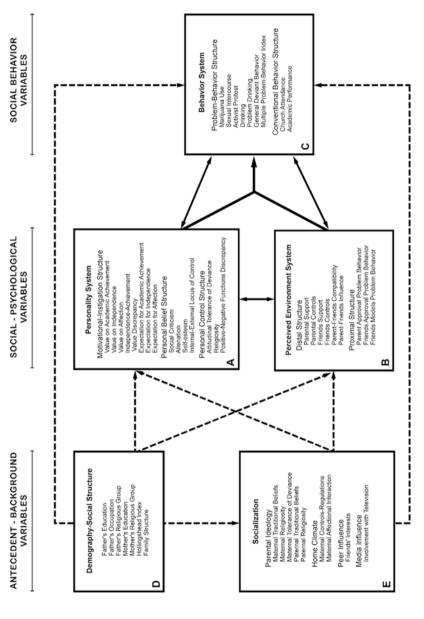
A final concern with the perceived environment would be with its *content*. Although Lewin never really elaborated the content of the psychological environment, a number of the classical interactionists did propose approaches to formulating content as well as actual systems of content. Murray's (1938) notion of beta press provided perceived environment content in direct analogy to the need concepts in his theory. As another example, Rotter (1954, 1955) has suggested describing the reinforcements or goals in situations, as well as the complexity and the novelty of situations. In the final analysis, content would seem to be partly a matter of theory—both theory of the person and theory of the social environment—and partly a matter of the particular problem the theory is being applied to. There is no single mapping of the content of the psychological environment that would make sense given the diversity of the enterprise of psychology.

The Perceived Environment and Problem Behavior

Our own effort to map the perceived environment has been shaped, as indicated earlier, by an interest in the dimension of environmental proneness or conduciveness to problem behavior. It has involved the specification of both a proximal and a distal set of variables within the perceived environment system, all the variables having theoretical implications for problem behavior. The perceived environment system is shown as Box B in Fig. 10.2 (which also presents the larger conceptual structure for our problem-behavior research).

The content of the distal and proximal variables in Box B of Fig. 10.2 continues the theoretical emphases that had been represented in the social structural system in the earlier Tri-Ethnic Study. The present concern with the compatibility between parents and friends in their expectations, and with the relative influence of these two reference groups, continues our earlier interest in normative consensus and in the degree of anomie that may obtain in the social environment. The present concern with generalized supports and controls, and the focus on models and on approval-disapproval for specific behaviors, reflects a continuity with our earlier interest in social controls and in access to illegitimate means in the social environment. However, all the variables shown in Box B of Fig. 10.2 are now derived from the respondent's perception and are based on direct reports or descriptions of those relatively enduring aspects of the perceived environment. (Other aspects of the perceived environment relevant to problem behavior were also assessed, for example, the perception of friends' interests [Finney, 1979], but they are not represented in Fig. 10.2 and will not be discussed further.)

Conduciveness to problem behavior in the perceived environment system was conceptualized as the balance between the perception of social controls against





problem behavior, on the one hand, and the perception of models and support for problem behavior on the other. In the distal structure, conduciveness theoretically implies low parental support and controls, low friends controls, low compatibility between parents' and friends' expectations, and low parent influence relative to friends influence. In the proximal structure, conduciveness implies low parental disapproval of specific problem behaviors, and high friends models for and approval of engaging in specific problem behaviors. The more that these separate variables pattern together in a theoretically conducive way, the more likely the occurrence of problem behavior.

The remainder of the chapter is concerned with three major objectives. The first is an empirical appraisal of the explanatory effectiveness of this particular conceptualization of the perceived environment in relation to problem behavior in youth. The second is to demonstrate that the perceived environment, because of its causal closeness to behavior, accounts for a substantially larger portion of the variance in youthful problem behavior than the demographic environment. And the third objective is to show that, within the perceived environment, the proximal variables account for more of the variance in problem behavior than the distal variables. We have the opportunity in these analyses to test some of the logical implications of the preceding discussion.

Measuring the Perceived Environment

Measures of four separate but related behavioral domains will constitute the "dependent" or criterion variables: excessive alcohol use, involvement with marijuana, experience with sexual intercourse, and engagement in protodelinquent actions such as stealing or aggression. Two entirely independent data sets are employed in the analyses, thereby enabling a complete replication of the tests of the major propositions. The first data set is from a 4-year longitudinal study of problem behavior and psychosocial development (Jessor & Jessor, 1977) carried out in a small city in the Rocky Mountain region of the United States. It is referred to in this chapter as the High School Study. Questionnaires were administered annually to cohorts who were initially in grades 7, 8, and 9; by the fourth testing in 1972, the cohorts had reached grades 10, 11, and 12. It is the cross-sectional data from this fourth testing of 188 males and 244 females that are considered in this chapter. The questionnaires contained a wide variety of measures of personality, the perceived environment, and behavior, but our focus will be restricted to the measures of the demographic environment, the perceived environment, and the four areas of behavior.

The second data set is from a national sample study carried out by the Research Triangle Institute in the spring of 1974 (Donovan & Jessor, 1978; Rachal, Hubbard, Williams & Tuchfeld, 1976; Rachal et al. 1975). It is referred to in this

chapter as the *Nationwide Sample Study*. Over 13,000 students in grades 7–12 in a stratified random sample of high schools in the 48 contiguous states and the District of Columbia filled out questionnaires that included many of the measures that we had devised earlier for use in the High School Study. Although the High School Study was carried out in a local community and was based on a largely middle-class, Caucasian sample, the Nationwide Sample Study, by contrast, included a wide diversity of socioeconomic status, ethnic status, and geographic location. Replication across such different samples can prove especially compelling.

The measures that were obtained for the demographic environment, for the perceived environment, and for behavior were quite comparable in both the High School Study and the Nationwide Sample Study, although the wording and the number of items in a particular scale (and, hence, the score range) could differ in the two studies. The demographic measures included the conventional indicators of socioeconomic status—father's education, mother's education, father's occupation, and the Hollingshead index of social position-and a measure of the degree of liberalism-fundamentalism of the parents' religious group membership. Measurement of the distal structure of the perceived environment was somewhat more elaborate in the High School Study than in the Nationwide Sample Study. It included four two-item scales to measure: perceived parental support (e.g., "Would you say that your parents generally encourage you to do what you are interested in doing and show interest in those things themselves?"); perceived friends support (e.g., "Do you feel free to talk to your friends about personal problems when you want to?"); perceived parental controls (e.g., "If you act in a way your parents disapprove of, are they likely to make things tough for you?"); and perceived friends controls (e.g., "Compared to most other students, how strict would you say your friends are about standards for how to behave?"). In both studies, identical scales were employed for the other two variables in the distal structure: perceived parents-friends compatibility (e.g., "With respect to what you should get out of being in school, would you say that your parents and your friends think pretty much the same way about it?"); and relative parents-friends influence, (e.g., "If you had a serious decision to make, like whether or not to continue in school, or whether or not to get married, whose opinions would you value most-your parents' or your friends'?").

Measurement of the proximal structure of the perceived environment was behavior specific in relation to the different behaviors. It included three scales in both studies. To illustrate for the drinking area, these were: perceived *parental approval disapproval for drinking* (e.g., "How do your parents (or your family) feel about people your age drinking?"); perceived *friends approval for drinking* (e.g., "How do most of your friends feel about people your age drinking?"); and perceived *friends models for drinking* (e.g., "Do you have any *close* friends who drink fairly regularly?").

Psychometric properties of the various perceived environment measures were at least adequate as far as Scott's homogeneity ratio and Cronbach's alpha reliability are concerned. Because of the longitudinal nature of the High School Study, it is possible also to report on the temporal stability of the measures across the annual testings. The average interyear correlations are very satisfactory, falling for the most part at about .40 or better. Further details about the different scales, the number of items in each, and their score range may be found in Jessor and Jessor (1977) for the High School Study and in Donovan and Jessor (1978) for the Nationwide Sample Study.

Measuring Problem Behavior

With respect to the measures of behavior, the measure of frequency of drunkenness was a single item: "During the past year, about how many times have you gotten drunk?" The measure of marijuana involvement was a four-item Guttman scale: "Have you ever tried marijuana?"; "Have you ever been very high or 'stoned' on marijuana to the point where you were pretty sure you had experienced the drug effects?"; "Do you or someone very close to you usually keep a supply of marijuana so that it's available when you want to use it?"; and "Do you use marijuana a couple of times a week or more when it's available?" The coefficient of reproducibility and the coefficient of scalability were, respectively, .96 and .86 in the High School Study and .94 and .68 in the Nationwide Sample Study. Sexual intercourse experience was not assessed in the Nationwide Sample Study; in the High School Study, the index of virgin-nonvirgin status was based on the single question: "Have you ever engaged in sexual intercourse with someone of the opposite sex?" Finally, the measure of general deviant behavior included 26 items in the High School Study and 12 items in the national study. Items asked how often in the past year the respondent had: "broken into a place that is locked just to look around"; "taken as much as \$5 or \$10 from your parents' wallet or purse when they weren't around"; and "threatened a teacher because you were angry about something at school," etc. Psychometric properties are good in both studies, and temporal stability is excellent in the High School Study where it could be examined.

Linking Environments with Behavior

It is possible now to address the main empirical concerns of the chapter. The strategy we follow is to present Pearson bivariate correlations and multiple correlations of the demographic environment measures and the perceived environment measures with each of the behavioral criteria, by sex, for the two independent studies separately. The data for the High School Study are shown in Table 10.1. Section A of the table consists of the variables of the demographic environment categorized into

Measures A. Demographic Fuvironment								
taphic	Times drunk in past year	in past year	Marijuana involvement	olvement	Deviant behavi	Deviant behavior in past year	Virgin-nonvirgin status	n status
A. Demographic Environment	Males ^b	Females ^b	Males ^c	Females ^c	Males ^c	Females ^c	Males ^d	Females ^d
Environment								
Socioeconomic status								
Father's education	11	.01	.01	.03	04	01	22**	14*
Mother's education	24**	00	.01	05	06	04	28***	11
Father's occupation	06	.01	.02	.11+	14+	.06	23**	07
Hollingshead index ^a	09	.01	.01	.08	12	.03	25**	11
Multiple R	.25**	.02	.02	.17	.16	.12	.30***	.15
Religious group								
grp.	.02	.08	16*	.02	06	03	.02	.01
Mother's relig. grp.	.01	.01	18*	.02	06	02	.03	04
Multiple R	.02	.10	.18*	.02	.06	.03	.03	.06
Combined demographic								
Multiple R	.26	.10	.19	.17	.19	.13	.30**	.17
B. Perceived								
Environment								
Distal structure								
Parental support	18*	02	31***	21**	28***	13*	11	19**
Parental controls	19*	.02	15+	07	04	01	17*	13*
Friends support	.01	.16*	.00	.13+	11	$.14^{*}$.04	.06
Friends controls	19*	06	43***	35***	24**	22***	18*	24***
Parent-friends comp.	24**	07	31***	33***	25***	25***	08	24***

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Multinle R	.05	.11	.29***	.18**	.16*	.25***	.11	.15*
	.36*	.22	.52***	.53***	.34**	.43***	.26*	.39***
Proximal structure								
Parent approval	11	06	.36***	.33***	.08	60.	.16*	.16*
	.27**	.15*	.68***	.72***	.32***	.42***	.14+	.23***
	.23**	.20**	.69***	.69***	.40***	.52***	.45***	.54***
Multiple R	.31***	.24*	.74***	.76***	.41***	.55***	.46***	.55***
Combined perceived								
Multiple R	.44***	.30+	.76***	.78***	.45***	.59***	.47***	.59***
C. Demographic plus								
Perceived environment								
Multiple R	.50**	.32	.77***	.79***	.49***	.59***	.54***	***09.
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^aThe Hollingshead index was deleted from the multiple R that includes its components

^bData are based on drinkers only; male N = 142, female N = 177

^cResults are based on all respondents: 188 males and 244 males ^dResults are based on 186 males and 242 females

socioeconomic status variables and religious denomination variables. Multiple correlations for each category and for the combined demographic variables are shown in italics and underlined in Section A. Section B lists the separate variables in the distal structure of the perceived environment and their multiple R when combined; it also lists the three variables in the proximal structure and their combined multiple correlation; finally, it shows the multiple R for the entire set of variables in the perceived environment. Section C, the last line in Table 10.1, shows the multiple R for the demographic and perceived environment variables combined. Each of the variables listed has been correlated with each of the four behavior measures.

The implications of the findings in Table 10.1 can best be developed by following through the correlations for a single behavior measure. The data for marijuana involvement measure in Table 10.1 are discussed because they represent an almost paradigmatic outcome. With the exception of parental religious denomination for males (the more fundamentalist the parental religious denomination, the less involvement with marijuana), none of the other demographic measures shows a relationship with marijuana use, and the multiple correlation of the combined demographic variables is not significant for either sex. By contrast, most of the measures in the distal structure of the perceived environment show a significant relation in the expected direction with variation in marijuana involvement (lesser parental support and controls, greater friends support and lesser friends controls, less parent-friends compatibility, and greater friends-relative-to-parents influence), and their multiple correlation accounts for slightly over 25% of the criterion measure variance for both sexes. Finally, when we turn to the proximal structure variables, all measures are significant, and friends approval and friends models reach substantial magnitude. The multiple correlation for the combined proximal structure is .74 for males and .76 for females; it accounts for more than twice the variation in marijuana involvement that the distal structure does. When the variables in both structures are combined, the perceived environment as a whole accounts for about 60% of the variance in this drug-use criterion. And as seen in the last line in Section C of the table, there is no real increment achieved by adding the demographic variables.

With some variation in both the patterning of the results and the magnitude of the correlations, the findings for the other three criterion measures in Table 10.1 are consistent with those for the marijuana measure. With respect to the measure of times drunk in the past year, the distal variables of the perceived environment are considerably weaker, especially for the females, and the overall multiple R is only modest; and with respect to the measure of sexual experience, there is a real departure from the general pattern in the significant relations of the socioeconomic variables for the males. On the other hand, the findings for the measure of deviant behavior in the past year are very similar in pattern to those for marijuana use. In general, these data from the High School Study do provide support for the three empirical objectives that were specified earlier. They make clear that the measures of the perceived environment provide a significant and at times substantial explana-

tion of variation in problem behavior; they sustain the expectation that the perceived environment, being more proximal, will account for more of the variance than the distal demographic environment does; and they confirm the greater explanatory contribution, *within* the perceived environment, of the proximal variables over the distal variables. What was noteworthy was the fact that the demographic environment made almost no contribution to an account of the variation in youthful problem behavior.

Although these findings tend already to be replicated across the two sexes, we have a rather unique opportunity to examine their replication in an entirely different sample with a much larger N and a much wider degree of variation in demographic characteristics. The data from the Nationwide Sample Study are presented in Table 10.2.

Table 10.2 provides even more compelling empirical support for our environmental expectations. In regard to all three of the behavioral criterion measures, the patterning of the findings is clear and consistent for both sexes. The demographic environment accounts for almost none of the variation in problem behavior (although the correlations often do reach significance, it should be kept in mind that, with the sample sizes involved, a correlation of .04 can be significant for each sex and yet account for much less that even 1% of the variance). The distal structure of the perceived environment does better, but it still accounts for less than 10% of the variance even when its variables are combined; and the proximal structure does best, accounting for between about a quarter and a half of the variance across the three different behavior measures. This consistency of the overall pattern is not attenuated by departures of the sort encountered in the High School Study, and it is even clearer here that no increment is gained from independent variance when the demographic measures are added to the perceived environment measures—see the last line in Table 10.2.

Conclusion

Taken together, the results of the two independent studies are quite persuasive in their coherence and their import. With respect to delineating proneness or conduciveness to deviance in the perceived environment, the variables derived from Problem Behavior Theory have been shown to be effective. Generalized support and controls from parents and friends, and the relations perceived between these two most salient reference groups for youth, tend to be linked to problem behavior in a modest but significant way. As distal aspects of the perceived environment, they are variables that suggest something about the operation of the social system in which a young person is embedded and, more particularly, about whether that system is still parent oriented or whether it reflects the developmental move

	Times drunk in past year		Marijuana involvement		Deviant be past year		
Measures	Males ^a	Females ^a	Males ^b	Females ^b	Males ^b	Females	
A. Demographic							
Environment							
Socioeconomic status							
Father's education	05*	.01	.02	.06***	06***	01	
Mother's education	06***	.02	00	.05***	08***	.01	
Father's occupation	02	.02	.05***	.05***	03+	00	
Multiple R	.06**	.02	.05***	.07***	.08***	.01	
Religious group							
Father's relig. Grp.	.01	04*	04**	05***	03*	06***	
Mother's relig. Grp.	01	03+	06***	05***	03*	05***	
Multiple R	.04+	.04+	.06***	.06***	.03+	.06***	
Combined demographic							
Multiple R	.08**	.04	.08***	.08***	.09***	.06***	
B. Perceived							
Environment							
Distal structure							
Parent-friends comp.	16***	17***	19***	20***	26***	29***	
Parents-friends infl.	.17***	.21***	.24***	.24***	.26***	.33***	
Multiple R	.22***	.24***	.28***	.28***	.34***	.39***	
Proximal structure							
Parent approval	.10***	.10***	-	-	-	-	
Friends approval	.31***	.29***	.59***	.60***	.38***	.48***	
Friends models	.48***	.49***	.72***	.71***	.43***	.52***	
Multiple R	.49***	.50***	.74***	.73***	.45***	.55***	
Combined perceived							
Multiple R	.51***	.52***	.75***	.73***	.50***	.60***	
C. Demographic plus							
Perceived environment							
Multiple R	.52***	.52***	.75***	.74***	.51***	.61***	

Table 10.2 Pearson correlations and multiple correlations of demographic and perceived environment measures with three problem-behavior criterion measures (Nationwide Sample Study, [1974] Data)

Note: Level of significance of correlations, two-tailed test: $+p \le .10$, $*p \le .05$, $**p \le .01$, $***p \le .001$ "Data are based on drinkers only; male *Ns* range from 3100 to 3700, female *Ns* range from 3000 to 3700 for the different correlations

^bResults are based on all respondents with valid data; degrees of freedom for the correlation range from 4300 to 4900 for the males and from 4700 to 5620 for the females

toward a peer orientation. In regard to the proximal aspects, the strongest to emerge are the models and reinforcements for problem behavior perceived among one's friends, variables that have consistently substantial associations with behavior. As a whole, the variables in the perceived environment seem capable of accounting for between 25 and 50% of the variance depending on the behavior at issue. In light of this outcome, and especially its stability for both sexes in two such diverse studies, it is not unreasonable to claim some support for the particular conceptualization of environmental conduciveness to problem behavior that has been advanced.

As a problematic concept, the environment is amenable to a variety of levels of analysis and alternative conceptual foci. We have argued that distal environments such as demography are too remote to be useful as explanations in social-psychological research. Social structural environments do have explanatory interest insofar as they involve concepts that shape and map the conditions and interactions that persons can experience. But it is the perceived environment, as our data have shown, that is most likely to yield "...the thing that psychology has always been really after throughout its history" (Brunswik, 1943, p. 266)—invariant relations between environment and action.

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