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THE BEHAVIORAL PERSPECTIVE IN CONTEMPORARY EDUCATION

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Abstract

This article first contrasts the philosophical premises of behaviorism with those of humanism and cognitivism. Behavioral contributions are then examined in three areas of practical importance to educators: description of student performance, explanation of student performance, and evaluation of educational interventions. Student behavior is presumed to be the only dimension that teachers can use as evidence of learning. Alteration of environmental events in the classroom is represented as the principal strategy for promoting student learning. The article asserts that learning research must involve reliable assessment, replicable interventions, and generalizable results. The author concludes that (a) all models make use of behavior in assessing student performance and (b) intervening cognitive and affective constructs contribute little to the explanation and promotion of student performance.

In the 1950s and 1960s, a variety of educational strategies emerged from the behavioral tradition. Among the most widely discussed were programmed instruction (Skinner, 1954), behavioral objectives (Mager, 1962), direct instruction (Bereiter & Engelmann, 1966), and contingent reinforcement (Becker, Madsen, Arnold, & Thomas, 1967). These tools proved highly successful in promoting on-task behavior and academic performance (Becker, 1978; Bijou, 1970; Bijou, Birnbrauer, Kidder, & Tague, 1966).

Despite the successes of applied behavior analysis, educational practitioners and researchers did not universally welcome this approach. Criticism accumulated regarding its assumptions, methods, and empirical effects. Condemnation of behaviorism has most often been directed toward the work of B. F. Skinner, generally regarded by both disciples and critics as this century's leading behaviorist. Criticisms of Skinner can be linked to ideas advanced in a variety of his writings such as *Science and Human Behavior* (1953) and *Beyond Freedom and Dignity* (1971).

Critics see Skinner's behaviorism as reducing psychology to an animal level, sometimes characterized as "rat psychology." (Behavioral psychology is envisioned as rats pressing levers and pigeons pecking...
Exacerbating the critics’ concern about the inclusion of animal behavior in the field of psychology is behaviorism’s preoccupation with the role of the environment in modifying behavior, which critics see as an affront to human volition. Critics further claim that dealing only with observable and measurable phenomena leaves untapped the richer dimensions of human experience, namely our thoughts and feelings (Kamii, 1980). Even the changes achieved through behavioral strategies are discredited as fragmented and antithetical to understanding the student as a whole person (Berryman, 1991). The critics contend that applied behavior analysis provides superficial solutions to complex human problems (Barron, 1996).

Added to the plethora of specific criticisms is the recent pronouncement of behaviorism’s demise in education (Cooper, 1993; Ertmer & Newby, 1993; Gardner, 1985; Jonassen, 1991; Wilson, 1993). Presumably, educators have recognized the limitations of the behavioral approach and have moved on to more promising models. Left behind are such notions as behavioral objectives, task analysis, scope and sequence, precision teaching, direct instruction, mastery learning, and extrinsic rewards. Behaviorism, critics say, is to be replaced with models that allow students the freedom to learn naturally, without teachers dictating what they learn, how they learn, and when they learn.

**Alternative Theoretical Models**

The two most widely discussed alternatives to behaviorism are humanism and cognitivism. Although the latter models have some differences in focus, they both emphasize the role of internal psychological phenomena in accounting for student learning. Both models hold that learning cannot be understood, assessed, or promoted without dealing with these internal phenomena.

A third viewpoint, constructivism, overlaps elements of both humanism and cognitivism. The tie between constructivism and humanism appears stronger, however, than the tie between constructivism and cognitivism. Constructivism is clearly grounded in the humanistic tradition of personal meaning but does not embrace all cognitive perspectives. For example, objectivistic approaches to cognitivism are generally more closely aligned with behavioral methodology than with constructivism (Jonassen, 1991). For the purposes of this discussion, constructivism is treated primarily within the humanistic tradition.
**Humanism**

This tradition makes emotion the focus of psychological study. Feelings are viewed as significant in their own right and as primary contributors to behavior (Byrnes, 1986). Such affective variables as empathy, warmth, and affection are fundamental to describing the quality of life. Thus, affective goals are seen as more important in educational planning than are behavioral objectives (Combs, 1973).

Closely aligned with the emphasis on affect is the commitment to personal meaning (Frankl, 1984). Among the most important personal-meaning constructs is self-esteem, a notion predicated on self-awareness. Being aware of our existence compels us to try to make sense of that existence. Part of that quest involves developing a sense of our own worth and adequacy, which fundamentally affects our quality of life and responses to life events.

Although humanists contend that we are predisposed toward goodness and health, they do not assume that personal meaning automatically evolves with maturation. Neither do life events affect our actions in an objective fashion. Instead, the metaphorical meaning we attach to those events is what influences our choices (Barron, 1996; Frick, 1987). Constructivists contend that we create our own meaning. Thus, learning is defined as the construction of meaning. Both knowledge and moral values are constructed by children as they interact with their physical and social environment (Kamii, 1980).

Humanists believe that personal meaning is closely linked to the possibility of personal choice. While not denying environmental and genetic influences on behavior, humanists believe that personal volition allows a person to transcend these influences. They believe that people choose their reactions to external events and become what they choose to be.

Another pivotal humanistic construct is intrinsic motivation. Many humanists—Alfie Kohn (1993) in particular—believe that extrinsic rewards both cheapen academic performance and undermine intrinsic motivation. The use of extrinsic rewards conveys that the rewarded tasks are not inherently worthwhile. This premise may undermine any chance of finding intrinsic value in those tasks. Humanists contend that students’ intrinsic interests should be the most important considerations in deciding what learning experiences to provide at school (Alam, 1983).
Cognitivism

Cognitivism focuses on the study of the human mind (Berman, 1978). Cognitivists are mainly interested in the analysis and promotion of certain thinking processes (e.g., critical thinking, problem solving, decision making, and creative thinking). They believe that these variables are more important in describing student learning than are discrete behavioral outcomes. Learning is fundamentally cognitive in nature and, thus, cannot be adequately explained without appealing to cognitive phenomena. A cognitivist might define learning as the "acquisition of knowledge and cognitive structures due to information processing" (Schunk, 1991, p. 337).

Although cognitive processes are important in their own right, they are also seen as basic contributors to behavior. Perceptions of events, rather than the events themselves, are thought to ultimately determine behavior. Hence, one cannot understand a child's reaction to a situation without knowing his interpretation of that situation.

Some cognitive theorists have blended elements of behaviorism with cognitivism (Bandura, 1977; Ellis, 1984; Mahoney, 1974; Meichenbaum, 1977; Weiner, 1979). They attempt to describe and quantify thoughts much as behaviorists do behaviors (Wolpe, 1978). Thoughts related to causation and personal adequacy are regarded as especially important (Pearl, 1985). When people assume that others are to blame for their problems or when they see themselves as helpless in changing problem conditions, the problems usually continue. Thus, bad behaviors are unlikely to improve unless cognitive antecedents change.

Although some cognitivists have maintained an affinity with behaviorism, the cognitive emphasis on thinking more readily blends with the humanistic emphasis on affect. Cognition and affect converge in the construct of personal meaning. Certainly, personal meaning involves such powerful emotions as happiness, tranquility, and sorrow; but those emotions are intimately linked to the way a person thinks. Affect and cognition do not exist in isolation from each other. Although their relationship is likely to be reciprocal, cognition may be the more powerful causal agent in this relationship.

Practical Contributions of Behaviorism

Although humanism and cognitivism see internal phenomena as indispensable to the study of learning, behaviorism may provide the methodology for examining student affect and cognition. This section examines the role of behavioral technology in three areas of practical importance to educators: (a) description of student
performance, (b) explanation of student performance, and (c) the evaluation of educational interventions.

**Description of Student Performance**

Behaviorists see learning as the expansion of one's behavioral repertoire by virtue of environmental factors, such as setting events and reinforcement contingencies. Learning is assessed in terms of skills that are both observable and measurable. Although learning undoubtedly involves covert changes in affect and cognition, behavior may be our only window to what is occurring covertly. Apart from behavior, how would the teacher know how a student feels, what a student is thinking, or what meaning has been constructed? All inferences about a student's affect or cognition are based on behavior, much of which is verbal in nature.

*Knowing vs. doing.* Jonassen (1991) claimed that cognitivists are concerned with what students know rather than what they do. Behaviorists argue that teachers cannot infer what students know apart from what they do. If student knowing remains a private process, the teacher has no means of assessing it. Fortunately, both cognition and affect usually have behavioral manifestations. The challenge to educators is to identify behavioral dimensions of such important constructs as critical thinking, creativity, and self-esteem. Within this context, the distinction between a student's knowing and doing becomes unnecessary.

Knowing is usually represented in verbal behavior (i.e., we reveal what we know by the way we talk and write). Critics of behaviorism sometimes mistakenly assume that language falls outside the realm of behaviorism. Behaviorists have actually contributed a wealth of research on language in such journals as *The Analysis of Verbal Behavior.* One of Skinner's (1957) most formidable books, *Verbal Behavior,* attempted to account for language skills in much the same way as behaviorists account for other behaviors. Thus, if the teacher becomes aware of a student's knowing through that student's overt verbal behavior, which is a form of doing, then the knowing-doing distinction is again superfluous.

Several assessment terms punctuate the current educational literature: performance assessment, authentic assessment, portfolio assessment, direct assessment, and alternative assessment. Although these terms may have some important distinctions, they have one thing in common: all use behavior in assessing student knowing. The type of behavior required, the circumstances under which it is
expected to occur, and the criteria for acceptability may be different; but each type of assessment requires some kind of observable process or product from the student. In other words, each uses doing to assess knowing.

**Describing vs. interpreting.** Although behavior change is the only thing that teachers have available for judging student learning, assessing behavior is not an entirely objective process. What we observe can be greatly affected by our own affective and mental state. To minimize discrepancies in accounts of what is seen and heard, behaviorists recommend that we start by describing rather than interpreting behaviors. We can more readily determine what Johnny said than we can the intent of his comment. Behaviorists do not deny the importance of determining why a behavior occurred, but initially they focus on describing what behavior occurred and the circumstances in which it occurred.

A primary way that researchers seek to minimize distortions in behavioral observation is by using multiple observers and then checking for agreement among their observations. Although we cannot say that one person's observational account represents objective reality, having agreement among observers adds credence to the observational record. Certainly, agreement among multiple observers is better than disagreement. A 90% interrater agreement that Johnny spoke 10 times in the last hour may not be absolutely accurate, but it is far better than 50% agreement. If a teacher's description of student performance cannot be corroborated by others, we have no basis for reliable assessment of student learning. Interrater agreement at the 80% level is generally considered minimal for reliable assessment.

**Explanation of Student Performance**

Teachers want more than just a description of behaviors; they want to know what accounts for those behaviors. Why does one student work hard and another seem totally indifferent to learning? If a student provides little evidence of learning, can the teacher do something to motivate that student? Is the ultimate explanation for a student's performance inside the student or in the actions of the teacher?

**Role of choice.** The issue of personal choice is critical to answering these questions. If we ultimately choose how to respond to life events, the primary causes for student performance lie within the student. Teachers can provide opportunities for learning, but students
ultimately decide how to respond to those opportunities. On the other hand, if we assume that a person's actions are largely influenced by environmental events, much of the responsibility for student learning rests with teachers. When students are not learning, teachers need to reexamine their own actions.

The debate about the role of personal choice in learning may not be fully resolvable. Personal volition and determinism are assumptions that cannot be empirically proven or disproved. We can point to environmental-behavior relationships that seem to be consistent with a deterministic interpretation, but we cannot say for sure that volition is not operating within those relationships. On the other hand, we often speak as if we make choices, but our environment has probably reinforced us for speaking that way. Even those who champion the notion of personal choice would likely acknowledge that environmental events could expand, limit, or redirect people's choices.

A person does not have to take an absolute stand on the issue of personal choice to recognize that certain environmental experiences are more facilitative of student growth than are others. All psychological models attribute some role to the environment in supporting productive behavior. Perhaps a better question than whether the environment influences behavior is how can the environment best influence behavior.

The teacher's role in constructivism, for example, is to create a climate in which students can make their own decisions about learning experiences. Teacher structuring of objectives and instructional strategies could impede student construction of meaning. An open-ended environment in which students choose their own possibilities and assign their own interpretations to classroom experiences is thought to be more conducive to authentic learning (Ertmer & Newby, 1993).

Internal vs. external causes. Despite the differences in their approaches, constructivists and behaviorists would likely agree that classroom environments could facilitate or impede academic learning. Even the eminent humanist Carl Rogers acknowledged that client-centered therapy involves the prediction and control of behavior (Rogers & Skinner, 1956). For example, the counselor's nondirective responding is a powerful influence on how the client responds. Behaviorism might suggest more structuring of the learning environment than is encouraged by the humanistic tradition, but both models—implicitly or explicitly—recognize that the environment affects learning.
Even though humanists and cognitivists acknowledge the effect of environment on learning, they see that effect as moderated by dynamics within the child. It is these internal phenomena that provide the real explanation for a student’s learning. Internal phenomena are often represented in terms of psychological states or traits that promote or undermine learning. Among the most popular internal characteristics that inhibit learning are intellectual deficits, low motivation, perceptual dysfunctions, and personality disorders.

Internal explanations of academic performance are often plagued by circular reasoning. For example, a teacher may assume that Mary is exhibiting a number of behaviors having motivational roots. She may come to class late, engage in side conversation during class discussion, doodle instead of doing her writing assignment, and occasionally nod off as the teacher gives instructions. The teacher may interpret those behaviors as reflecting inadequate motivation. The circular reasoning emerges when the teacher infers that these behaviors are caused by low motivation.

Attributing a set of behaviors to a construct like motivation or intelligence is an example of what Skinner called an explanatory fiction (Sparzo, 1992). How would a teacher know that a student has a motivational problem without the behaviors identified above? To explain these behaviors by inferring low motivation is to use the label for the behaviors as the explanation for them.

A way around this dilemma is to provide an independent measure of the inferred cause, such as low motivation or limited intelligence. Independent assessments of internal characteristics usually involve tests that sample certain types of student behaviors. These tests may require the student to perform particular tasks or report personal response tendencies. Self-report, either oral or written, is the most common behavior sampled in psychological testing. The tested behaviors are then used to predict other forms of behavior, namely those occurring in the classroom.

Although connecting different sets of behaviors may be illuminating, why assume that a score on a motivational inventory is more useful than in-class measures of motivation? Even if the student’s test score suggests little interest in school, does that reveal anything not already known by simply observing the student’s classroom behaviors? Perhaps even more important, does the student’s test score tell us what to do about the identified classroom behaviors? If the test score provides no clue as to what the teacher can do differently, what value does it have?
Cognitive antecedents and consequences. The cognitive behaviorists have attempted to explain behaviors by invoking specific covert processes rather than general states or traits. For example, they see certain kinds of thinking or cognitive assumptions as important contributors to behavior (Dickinson, 1978). Thoughts can function much as overt events do in accounting for behavior—they can set the stage for certain behaviors and provide reinforcing or punishing consequences for behavioral tendencies. According to this perspective, understanding a particular behavior requires one to look beyond the situational context to the student’s perception of that context.

Although the cause-effect relationship between cognition and behavior can be reciprocal, some cognitive behaviorists believe that cognition has a greater effect on behavior than behavior does on cognition (Beck, 1976). Skinner (1989), on the other hand, proposed that covert responses and behavior are collateral affected by environmental events. Because certain thoughts and feelings occur concurrently with certain behaviors, we mistakenly assume that these behaviors were prompted by the collateral covert events.

Cognitive events often take the form of self-talk (Harris, 1986; Swanson & Kozleski, 1985). Rational-emotive theorists, particularly Albert Ellis (1958; 1984), underscore the importance of identifying and correcting maladaptive self-talk. Regardless of the external social situation, such covert comments as “My ideas are foolish,” “I’ll look like a fool if I try to participate,” “Everyone thinks I’m stupid,” “I am stupid,” and “No one likes me” are not likely to produce much socialization. Without identifying and changing this negative self-talk, how can the teacher expect to promote positive social reactions from the student?

Behavioral representation of cognitive events. Although behaviorists have traditionally attempted to account for learning in terms of the overt environment, they realize that the environmental context does not tell the whole story. For example, they acknowledge that hereditary factors and neurological conditions affect student learning; but teachers cannot alter these influences on learning. Feelings and thoughts may also contribute to learning, but those covert events must be translated into behaviors—typically verbal in nature—before teachers can work with them. As long as the student’s self-talk remains private, it provides no explanatory potential to the teacher.

Once the student’s self-talk is revealed at a behavioral level, environmental events (e.g., models, prompts, and feedback) can be
used in changing it. The ultimate intent, of course, is to improve classroom performance by changing the student's negative self-talk. The exploration of self-talk is most helpful when the manipulation of environmental events fails to produce the desired classroom behavior. When changes in setting events and reinforcement contingencies do not alter a problematic tendency, interviewing the student may reveal the assumptions and self-talk that are blocking improvement.

**ABC analysis.** In accounting for student performance, behaviorists typically use an approach called an ABC analysis (Kazdin, 1994). The \( B \) represents the behavior in question, and the \( A \) and \( C \) are the context for that behavior. More specifically, \( A \) represents antecedent events that set the stage for the behavior and \( C \) represents the consequences that follow the behavior, making it more or less likely to recur.

In Skinner's behavioral model, consequences are thought to have a more powerful impact on behavior than do antecedents. In fact, antecedents acquire their influence from the consequences that follow actions. Antecedents that signal which behaviors will be reinforced play an indispensable role in behavior modification. However, that signaling capacity is developed only through behavioral consequences that occur in the presence of certain antecedent conditions. For example, if a student's comment is acknowledged only when he has been called upon by the teacher, the student will eventually learn to comment only when called upon by the teacher.

Some consequences are natural outcomes of one's actions; for example, the natural consequences of reading may be the information gained. Other consequences, such as praise, privileges, and tangible payoffs, are not naturally linked to student learning. However, consequences have been used to promote a variety of academic skills including creative responses (Glover & Gary, 1976; Goetz, 1982; Maloney & Hopkins, 1973). Behaviorism suggests that such extrinsic consequences be used selectively, because under certain conditions they can promote the intrinsic valuing of academic activities and under other conditions undermine that intrinsic valuing (Lepper, Keavney, & Drake, 1996). In general, unnatural extrinsic rewards are most useful when intrinsic valuing of an activity is low and most damaging when intrinsic valuing is high.

Although it is possible to infer cause-effect relationships within an ABC analysis, only the sequence of events is directly verifiable. All that can be said for sure is that certain environmental events precede or follow the behavior in question. The teacher can then determine
whether altering these antecedents and consequences leads to changes in the behavior. Despite the apparent linkage of environmental events to behavior changes, one cannot prove that these events caused the behavior changes.

If environmental events in the classroom help to explain student performance, surely environmental factors outside the classroom also affect academic performance. Family and community variables undoubtedly influence how students perform in the classroom. Unfortunately, teachers have little control over most nonschool variables that adversely affect students.

One of the mixed blessings of environmental-behavioral relationships is that behavior is somewhat situation specific. That is encouraging when trying to help a child from a problematic background learn to behave constructively in the classroom. But when attempting to produce behavior changes in the classroom that will transfer to other environments, the results may be disappointing. What the child learns to do in the classroom may be largely negated by conditions in the community or home.

The best that most teachers can do when the home or community threatens academic learning is to identify and teach skills for coping with those external threats. For example, the Drug Abuse Resistance Education program (DARE) teaches social skills needed to counter pro-drug influences in the community (DeJong, 1987). Some educators are also arranging for schooling to occur in work and community settings, thus providing supervised experience in coping with work and community demands (Berryman, 1991, Gardner, 1991; Stone, 1994). Learning academic and social skills in an actual work environment provides multiple benefits for students; they learn both academic skills and the work habits necessary for success in the world of work.

Whether change is attempted in the traditional classroom or in a community setting, the behavioral approach identifies and alters environmental events thought to influence targeted behaviors. Although environmental factors may not be the ultimate contributors to student behavior, these factors are the most manageable from the teacher's perspective. The teacher may not be able to fix a biological condition or personality disorder contributing to a student's behavior, but the teacher can usually do something about classroom variables that influence the student's performance.
Evaluation of Educational Interventions

Applied behavior analysis uses scientific methods to evaluate the effect of environmental interventions on learning. All interventions and outcome variables are operationally defined and reliably assessed. Some outcome variables (e.g., the steps in a particular task or the accuracy of a response) are assessed qualitatively, but most are quantitatively assessed (e.g., the rate or amount of responding). The bottom-line issue is not whether the data are qualitative or quantitative, but rather whether the results of each study are replicable. Without reliable assessment procedures and replicable results, a generalizable body of information about classroom behavior management cannot be created.

Qualitative research methods appear to be used more extensively in the humanistic and cognitive groups than among behaviorists. The emphasis in qualitative research (e.g., ethnographic studies) is on describing a particular experience or set of experiences from the participant's perspective. Interrater reliability and replicable interventions are not considered as important within this research tradition as in behavioral research (Steckler, McLeroy, Goodman, Bird, & McCormick, 1992). The intent of many qualitative studies is to better understand a particular experience or phenomenon in the context in which it occurred. That understanding may or may not be generalizable to other individuals, times, and settings. However, the absence of interrater reliability, replicable methodology, and generalizable results greatly limit both the practical and scientific value of a research endeavor.

Specifying outcome variables. The first step in evaluating behavioral interventions is to precisely identify the outcome variable for change. If improving students' reading comprehension is of interest, assessing word-attack skills or student opinions about reading would not be adequate. If reading comprehension is the interest, then the outcome variable must be performance on a reading comprehension task. In other words, it is necessary to directly assess the dimension that is the bottom-line interest rather than a dimension that may be obliquely related to the primary interest.

A common way of assessing the effectiveness of instructional strategies is to solicit students' opinions about those strategies. Did the students like the strategies and did they feel like they learned more when the strategies were used? Student opinions have some relevance, but these opinions may not be the most valid indicators of what students have learned (Powell, 1977; Vesta & Sarmiento, 1979).
For example, students may not applaud a program with high standards, even when much learning has occurred. On the other hand, student self-report can sometimes provide clues as to why a promising strategy failed to produce good results.

**Timing the assessment.** After identifying the basic outcome variable, how will the influence of the teaching strategy on that dimension be determined? Assessment of the outcome variable must begin before implementation of the intervention. Otherwise, it will be difficult to determine whether or not the intervention was responsible for the post-treatment results. Pretreatment or baseline data constitute a necessary frame of reference for evaluating the post-treatment data.

Unfortunately, many educational programs are evaluated after the fact (i.e., assessment is begun after the intervention is completed). About the best that can be done without baseline data is to ask students whether they liked the new program better than the old. Such retrospective evaluations are notorious for yielding biased perceptions. In contrast, assessing the target behavior (e.g., reading comprehension, problem-solving skills) before the intervention is introduced will provide a legitimate point of comparison for subsequent performance. As a general rule, no educational interventions should be introduced before a baseline assessment of the targeted outcome variable(s).

Another common practice in behavioral evaluation is to track the target behavior throughout the application of the intervention. If the educational program is applied for one month, then student performance is assessed throughout that month. Continuous assessment is better than assessing the target behavior only on a pre- and post-program basis. Recurring assessment allows the research practitioner to determine how soon improvement occurs, whether a ceiling effect is reached during the intervention period, or whether behavior change runs in cycles. Maybe the intervention was initially effective but improvement later waned. On the other hand, maybe the outcome variable was still improving when the intervention ended. In the latter case, it might be advisable to extend the intervention to determine if additional improvement could be achieved.

**Ruling out extraneous variables.** A problem not unique to behavioral analysis is how to separate the impact of an intervention from the possible influence of extraneous variables. An extraneous variable is an event that occurs in the same context and time period
as the intervention but is not a part of the intervention. Extraneous variables can come in almost any form, such as proximity to school year breaks, weather conditions, presence of new students in the room, and change in the topic of study.

Two strategies are particularly useful in isolating the effects of an instructional program from those of possible extraneous variables: (a) introduce the program at different times for different groups of students; or (b) introduce, withdraw, and reintroduce the program for the same set of students. If student performance improves whenever the intervention is in effect, the teacher can be confident that its influence is overriding the effects of extraneous variables scattered across the assessment periods.

Why go to such trouble to pinpoint what has contributed to a behavior change? Without knowing what accounts for an observed change, teachers may continue to operate in a trial-and-error fashion. On the other hand, carefully isolating treatment-outcome relationships will help build a repertoire of reliable procedures for improving student performance.

Concluding Observations

To many educators, the behavioral emphasis on modifying behaviors through environmental events spells external control. To whatever degree external control operates in human relationships, behavior modification does not change that degree of control. The behavioral model deals with the nature and direction of control rather than with the amount of control. A behavioral program may change the control from negative to positive measures, but control is operating under both sets of circumstances. Both screaming at students and praising them influence student behavior—but likely in different directions. Even when students do the opposite of what the teacher would like, it is probable that the teacher's actions are contributing to the unwanted behavior. It is impossible to interact with others without both influencing and being influenced. The behavioral approach attempts to promote reciprocal support in classroom interactions.

Is human behavior ultimately controlled from within the person or by external factors? The behavioral model does not rule out the possibility that internal events affect overt behaviors. It simply acknowledges (a) that another's internal phenomena can only be dealt with when they are revealed at an observable level and (b) that many behaviors can be modified by simply making adjustments in the external environment. Does the behavioral model prove that
individuals do not have personal volition, feelings, and cognitive perspectives? No, but it does not use those covert constructs in explaining our behaviors.

Behaviorists do not object to the use of cognitive and affective events as intervening variables in accounting for student performance as long as these constructs increase our potential for predicting and modifying behavior under practical circumstances. On the other hand, if student performance can be promoted just as well by simply making adjustments in the physical and social environment, the introduction of intervening variables adds unnecessary complexity and clouds causal inferences.

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