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The Candidates' Budgets

The time has come to reconsider the scientific method for selecting presidents. In response to the editorial by Daniel E. Koshland, Jr. (19 June, p. 1501), I wrote letters to each of the 14 most likely presidential candidates (seven Democrats and seven Republicans) requesting that they consider the preparation of a federal budget to provide voters with a discrete measure of candidates platforms. The experiment had the advantage of sampling the entire population as of July 1987. The letters suggested that the candidates consider the previous year's budget as a control and report only the significant differences between their budget and the control. Embellishments regarding the potential benefits to the presidential campaign process and the appropriateness of these measures were included, and Koshland's editorial was cited.

Today is the bicentennial of our Constitution, and nearly 2 months have passed since the letters were submitted to our presidential candidates. The raw data include responses from two of the 14 candidates, or 14%. These data deliver a crushing blow to the hopes that the majority of presidential candidates are concerned with "we the people." It is also noteworthy that Republican candidates unanimously chose not to take part in the experiment.

The two Democratic candidates who responded were Michael Dukakis and Paul Simon. The letter from Governor Dukakis' staff was concise (two paragraphs); it stated that my request could not be reasonably fulfilled and that such a specific proposal would not accurately reflect an actual Dukakis budget in 1989. In addition, it said that this request would not provide an accurate representation of "underlying program tradeoffs." Finally, it said that Dukakis would prefer to be judged on his past record and on his statements of purpose for the future. The letter from Senator Simon stated that the request would be considered very seriously. He went on to point out his

support for "education, productivity, peace, and justice."

These observations indicate that a number of candidates may proclaim love of mother because it costs nothing, but only a small minority might sell their Porsche to support her in the manner to which she has become accustomed.

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Human Control

Judith Rodin's article, "Aging and health: Effects of the sense of control" (19 Sept. 1986, p. 4770), reviews empirical studies indicating that the psychological construct "sense of control" can have strong effects on biological variables ranging from physiological changes to mortality. Because of the importance of this research for behavioral and natural scientists in the health and human sciences, and because theoretical and empirical work on control is at such a pivotal juncture, we believe it is important to address two substantive areas in Rodin's article that require further clarification.

Although the data Rodin cites are promising, they emanate primarily from laboratory and institutional settings. It is unclear how effectively these techniques can be generalized to less structured and more complex environments. On the basis of research with clinical populations suffering from impairments of control [for example, eating disorders; substance abuse; stress related disorders; Type A behavior (1)], we believe there are limits to the effectiveness of self-control strategies [for example, biofeedback, behavioral self-control, meditation, progressive relaxation (2)] and that relapse and lack of compliance are frequent (3). Future research needs to assess the differences, if any, between control-enhancing interventions offered by the environment and "self-control" strategies generated by the individual as well as the limits of their effectiveness (or adverse effects) in both clinical and normative populations.

Rodin's article highlights the lack of uniform, operational terminology in research on control. The use of different terms, with variable meanings, suggests the critical need to systematically address the construct of control theoretically and conceptually. We believe what is needed is a theory-driven research model, based on clarification of semantics and efforts toward developing a unifying theory of control. Examples of some important clarifications and issues not

addressed in Rodin's article include the following: (i) the relationship between "sense of control" and actual control; (ii) whether "sense of control" is most effectively generated by self-control behaviors, control enhancing interventions, or belief that a benevolent other has things in control (4); and (iii) the negative effects of an "illusory" sense of control caused by unhealthy defenses and denial.

Further, since many major events (such as death) (5) and minor events (for example, daily hassles) (6) cannot be controlled, it is necessary to make the critical distinction between altering what we can directly control (a mastery model) and dealing with what we cannot control and to which we can only hope to respond well (a coping model) (7). Finally, equating control with active efforts to alter or change, or to use restraint to refrain from altering or interfering, may reflect a limiting, culture-bound definition. Other cultures conceptualize control in terms of yielding, acceptance, and letting go (8). More of a "sense of control" may be gained from letting go of active control (acceptance) than continuing efforts to try to change that over which we do not have control.

Without an effort at more clinically rigorous investigation and clarification of terms and constructs, we may be significantly limiting our understanding of and approaches to human control.

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Response: Shapiro, Evans, and Shapiro point out complexity in the construct of control, correctly noting that there are different types of control, and they argue for conceptual and empirical rigor. While there is undoubtedly need for clarity, I am not confident that the several distinctions among types of control that Shapiro *et al.* propose have been shown to have significant heuristic value in generating research questions. One must be careful not to overemphasize the importance of differentiation of terms and concepts when indeed there may be fewer, rather than more, underlying constructs in this area. This remains an empirical question, however, and one that most urgently needs to be addressed.

Shapiro *et al.* comment on the distinction between control-enhancing interventions offered by the environment and self-control strategies. They discuss impairment of self-control as an essential feature of many clinical problems, for example, obesity, bulimia, and alcoholism, and cite weak results from the use of self-management strategies in these areas. These data are then used to imply that self-control interventions may not work. One must be careful, however, to separate studies of clinical populations from studies of normative samples, for example, the aged or children, who may suffer an impairment in control because of developmental stage and environmental change. In addition, many clinical disorders have been intractable after self-control interventions, not because of problems with self-management as an intervention strategy, but because they often have a large genetic contribution and involve a heavy burden of biological change once the disorder is initiated (1). Control-relevant intervention may not work where biological and genetic factors influence the disorder. Indeed, I have argued that teaching self-management strategies in these domains can convey an implicit message of personal blame for the cause of the disorder, leading to feelings of shame and reduced ability to exercise control (2).

The study of control in human populations is an exciting and timely one, especially with increasing demonstrations of potential health significance. Like Shapiro *et al.*, I believe strongly that the time has come to understand the underlying similarities and dissimilarities among the various constructs that have been used in the control literature. These are not context-free evaluations, however; setting accounts for a substantial portion of the variance when studying the construct of control. As Bandura (3) has suggested, individuals with a high degree of self-efficacy still can recognize when there are no response-outcome contingencies, that is when events in the environment are uncontrollable by anyone, despite the individual's own sense of personal mastery.

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Comparison of High Schools

Luther B. Otto's review (11 Sept., p. 1357) of *Public and Private High Schools: The Impact of Communities* by James S. Coleman and Thomas Hoffer does not stress a problem presented by overall comparisons of public with private and Roman Catholic high schools. It is easy to make a case for private and Roman Catholic schools if one does not take into consideration the superb records of selected public schools.

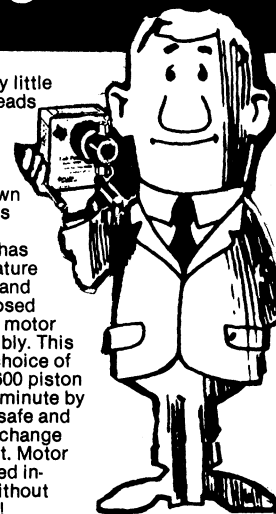
The public high schools welcome students of all sorts to the extent that the students can meet current standards of admission. Public schools are required to be as inclusive as possible. The students in public high schools in such choice areas as Short Hills or Madison, New Jersey, however, have records of accomplishment that go well beyond those of students in the local Roman Catholic schools.

To compare these school systems without reference to class and area is like treating statistics on elephants, dogs, and cats as comparable.

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