

Human Control

Judith Rodin's article, "Aging and health: Effects of the sense of control" (19 Sept. 1980, 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, 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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**SELF-CONTROL, SENSE OF CONTROL, CONTROL-ENHANCING INTERVENTIONS:
Critical Theoretical, Empirical, and Clinical Questions Remain**

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Judith Rodin's article (Sept 19) reviewed empirical studies indicating that the psychological construct "sense of control" can have strong effects on biological variables ranging from physiological changes to mortality (1). 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 important to address two substantive areas in Rodin's article which require further clarification.

1. LIMITS TO THE EFFICACY OF CONTROL-ENHANCING INTERVENTIONS AND SELF-CONTROL STRATEGIES

Although the data Rodin cites are promising, they emanate primarily from laboratory and institutional settings (e.g., nursing home). It is unclear how effectively these techniques would generalize to less structured and more complex environments. Based on research with clinical populations suffering from impairments of control (e.g., eating disorders; substance abuse; stress related disorders; Type A behavior) (2), there are limits to the effectiveness of self-control strategies (e.g., biofeedback, behavioral self-control, meditation, progressive relaxation) (3), and relapse and lack of compliance are frequent.(4) Future research needs to assess differences, if any, between control enhancing interventions offered by the environment, and "self-control" strategies generated by the individual; and the limits of their effectiveness (as well as adverse effects) with both clinical and normative populations.

2. CLARIFICATION AND ISSUES IN TERMINOLOGY AND CONSTRUCTS

Rodin's review 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: a) the relationship between "sense of control" and actual control; b) 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 (5); c) the negative effects of an "illusory" sense of control caused by unhealthy defenses and denial.

Further, since many major events (e.g., death) (6) and minor events (e.g., daily hassles) (7) cannot be controlled, Rodin's article fails to make the critical distinction between altering what we can directly control (a mastery model) and dealing with that which we cannot control and to which we can only hope to respond well (a coping model) (8). 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 (9). More of a "sense of control" may be gained from letting go of active control (e.g., acceptance) than continuing efforts to try to change that over which we do not have control.

In summary, without an effort at more clinically rigorous investigation (item one) and clarification of terms and

constructs (item two), we may be significantly limiting our understanding of and approaches to human control.

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