

Improving ourselves, or fooling ourselves?

Beware of self-enhancement claims

Robert A. Bjork, Ph.D., professor of psychology at the University of California, Los Angeles, chaired a National Research Council committee that studied performance-enhancement techniques. Daniel Druckman, Ph.D., of the research council was the committee's study director.

**By Robert A. Bjork
and Daniel Druckman**

MANY PEOPLE who would never dream of buying a car without checking a consumer magazine become amazingly incautious when it comes to methods that purport to improve human performance.

Americans spend more than \$50 million annually, for example, on "subliminal learning" tapes that claim to help listeners with problems ranging from losing weight to building self-esteem to becoming better bowlers. There are meditation classes to reduce stress and self-assessment tests to guide career decisions.

Having just directed a National Research Council study that evaluated a variety of techniques designed to enhance performance, we advise readers to be selective in their enthusiasm.

There is neither a theoretical basis nor empirical evidence, for instance, that subliminal self-help audio tapes can alter complex human behaviors. Many people believe they have been helped by such tapes, but the available research suggests that any changes for the better are due to processes such as "expectancy effects," when a person is so ready to change that it matters little what's on the tape.

There also is no convincing evidence that meditation has any special properties as a technique to reduce stress and control tension. Rest and relaxation training appear to be as effective. People who meditate regularly may pursue a more peaceful lifestyle, but one must distinguish between the practice of meditation and these lifestyle changes to deter-

mine why stress or tension was reduced.

The popularity of self-assessment tests as a tool in career counseling also seems unjustified. One such test, the Myers-Briggs Type Indicator, classifies people into certain personality types and is administered to nearly 2 million people in the United States each year. Yet our committee could find no convincing evidence of a relationship between Myers-Briggs types and performance in particular occupations.

SO CAUTION is needed. At the same time, however, there is good reason for optimism about some techniques. We concluded, for instance, that people can be taught psychological techniques to help manage pain. Proven stress-management techniques such as relaxation training, providing information about what to expect and enhancing a person's sense of control all can help people cope with pain.

There also is evidence that some mental rehearsal and preparation techniques are effective in helping performance. Mental practice can be useful when learning a motor skill, and mental rehearsal of a learned skill can facilitate getting ready to perform. Simple rituals such as bouncing a tennis ball a certain number of times before serving may slow a person's heartbeat and produce other physiological changes associated with better performance.

Conventional training techniques also need closer scrutiny. Many training programs offered by companies, for instance, compress instruction into a short period, fix the conditions of practice and provide continuous feedback to the students. These approaches may facilitate performance during training, but they are not effective in terms of long-term retention or applying skills to new situations.

What works better is to space practice sessions over time, vary the conditions of training and provide feedback only inter-

mittently. Such measures introduce difficulties during training, but they result in more durable and flexible skills after training is complete. Training that fosters understanding and involves students as active participants in the learning process also improves long-term performance.

WHY WOULD corporations that spend billions of dollars annually to teach workers to operate machines, use computers and carry out other tasks use inefficient methods? And why do experienced instructors use these methods? The answer, in part, is that instructors usually see students' performance only during training and even may be evaluated themselves by that performance. On-the-job performance needs to become the main criterion by which training programs are evaluated.

Our human drive to improve ourselves is laudable, but less admirable is our tendency to believe there are easy solutions to difficult problems. It's time to stop kidding ourselves. Dramatic claims and testimonials, even when accompanied by good intentions, are not enough. We have to be guided by hard evidence. Yes, it is possible to improve how we learn and perform. Those improvements can even be dramatic, but they are rarely effortless.

**National Academy
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First step toward self-improvement is to be wary of gimmicks

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Conventional training techniques also need closer scrutiny. Many training programs offered by companies, for instance, compress instruction into a short period, fix the conditions of practice and provide continuous feedback to the students. These approaches may facilitate performance during training, but they are not effective in terms of long-term retention or applying skills to new situations.

What works better is to space practice sessions over time, vary the conditions of training and provide feedback only intermittently. Such measures introduce difficulties during training, but they result in more durable and flexible skills after training is complete. Training that fosters understanding and involves students as active participants in the learning process also improves long-term performance.

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Do self-help techniques really work?

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Guest commentary

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