

Behavioral sciences: a closer look

Many of our readers are concerned that too much is written about behavior management. In their opinion, management of the child dental patient is inherent in the personality of individual dentists; they feel that pharmacologic and nonpharmacologic measures provide little or no consistent help. This opinion seems to be shared by many clinicians who feel that the science of behavioral management is still in its infancy and that dentists must simply guess at which behavioral management technics are best.

If the behavioral science studies involving dentistry are judged solely by the consistency and efficacy of clinical technics, then this opinion may have some validity. No panacea to manage every child in every setting has ever been discovered. Unfortunately, the dental literature too often contains claims of such a panacea, or a continuing education clinician purports to have a sure-fire management tool based solidly in science and research. Most reputable behavioral researchers would claim that any misconceptions about the value of behavioral science studies stem from a clinician's extending results obtained in carefully controlled clinical or laboratory studies to an individual patient in the dental practice. They also would suggest that disenchantment with behavioral science stems from misunderstanding of clinicians whose expectations of applicability go far beyond the intentions of a particular study.

Continuing education courses are a main source of misinformation about behavioral science, especially in the area of pharmacologic management. However, the dental literature has to take responsibility for causing most of the confusion and disappointment in those who look skeptically at what behavioral science has to offer. The system of dental publication suggests that the blame often is spread equally among author, publisher, and reader.

Behavioral researchers contribute to misinterpretation of data in several ways. One way is including far-reaching statements about the clinical significance of their work in a list of conclusions. Another more subtle way is applying sophisticated

statistical analyses to a primitive research design to attain statistical significance which many authors erroneously perceive as necessary for publication. Unfortunately, readers too often accept statistical analyses and significance at face value, despite limitations in the research design.

The publisher of behavioral research should act as a final cordon against poor research, but often is simply a conduit between author and reader. Editors should insure that limitations in design are discussed adequately and that conclusions are stated accurately, but this often is not done enough. Editors who publish half-truths and clinically useless information do a disservice to their readers.

The dentist too often assumes that every child will follow a statistical behavioral pattern which has been derived from studying a group of children. The dentist who reads a journal containing a management article based on the latest study may be disappointed if he assumes he can apply those concepts in his practice the following day. The majority of published behavioral studies indicate trends or introduce new research designs; they usually do not introduce technics which can be applied in daily practice. Misconceptions and misinformation lead to unwarranted criticism. Any criticism should be directed at specific articles and at journals that publish those articles.

The behavioral sciences have been very successful. They have debunked many longstanding concepts of behavior which were based solely on the opinion of early experts. The behavioral sciences also have helped clarify the role of environment as it affects behavior, providing specific management technics for many children including the abused child, the handicapped child, and the poverty-stricken child. Meaningful instruments have been developed for future research that have clinical relevance—a far cry from early measures that were essentially useless to anyone but the researcher. Behavioral science also has opened our minds to new ideas. A recent concept is that behavioral problems may lie with the dentist and not the child—a totally new and potentially useful idea.

