Labeling

It is assumed that emotions can be validly measured by asking patients to reflect on their inner state. However, Schachter and Singer (1962) have hypothesized that an emotion is the result of a bodily state change that is "labeled" by means of appropriate environmental cues. The same change in bodily state can result in an angry or euphoric emotion, depending on the context in which the change occurs.

When a patient is asked to rate "how he or she feels," he or she may be uncertain about the nature and extent of his or her feelings. A most potent environmental cue is the fact that a therapy has recently been adminstered. The therapeutic milieu may lead the patient to "label" an ambiguous bodily state with "positive" words that reflect a therapeutic outcome.

The particular labels an individual chooses are apt to be dependent on the type of therapy rendered. Shapiro et al., (1974) administered drug-placebo and control-placebo therapies to psychiatric outpatients. The control placebo was conveyed by asking patients to sit in a quiet room for an hour and rate how their symptoms spontaneously varied. The number of side effects reported by patients did not differ between the two groups. However, patients who received the drug placebos tended to describe their side effects as somatic, such as "headache" and "stomach pain," whereas the control-placebo patients tended to use cognitive-affective labels such as "upset" or "feeling sorry for self."

In addition to environmental factors, previous experience with the particular therapy or similar therapies may supply appropriate labels in ambiguous situations (Linn, 1959). Becker (1953), has theorized that the experience of a marijuana induced "high" is dependent on an individual learning to label the bodily reactions that consitute this reaction.

An interesting phenomenon related to the labeling process is that any change in bodily arousal stimulates the need to explain the cause of the arousal. Individuals search the environmental for appropriate explanations (Barefoot & Straub, 1971; Girodo, 1973; Goldstein, Fink, & Mettee, 1972; Valins, 1966). If an adequate explanation does not exist, perceptions may be distorted to account for the arousal (Wilkins, 1971). The arousal associated with the uncertainty of the initial aspects of therapy may be "labeled" with terms that denote therapeutic success.

Misattribution

The basic premise of attribution theory is that people seek to know the causes of behavior, even their own behavior. However, sometimes mistakes are made and people misattribute the causes of behavior. (Jones, Kanouse, Kelley, Nisbett, Valins, & Weiner, 1972). Positive placebo effects may occur when the cause of a change in bodily state or behavioral response is erroneously attributed to the therapy rather than the actual cause such as some other environmental factor (Morris & O'Neal, 1974; Valins & Nisbett, 1971). The explanatory potential for misattribution as a mechanism for placebo effects is highlighted by a study by Schorer, Lowinger, Sullivan, and Hartlaub (1968). Sixty-four percent of a group of patients awaiting psychotherapy stated that their status had improved, even though they had not received treatment. Had these patients received psychotherapy it is likely that they would have attributed the improvement to their treatment.

According to attribution theory, individuals seek not only to assign reasons for observed changes, but also seek to fully explain why these changes occurred (Kruganski, 1975). If expected bodily state or behavioral changes do not occur, patients may experience a negative placebo effect. The negative placebo effect can occur when patient expectations about therapeutic results are overly optmistic (Hoenh-Saric, Liberman, Imber, Stone, Frank, & Ribich, 1974; Valins et al., 1971) or when patients assume that the cause of a therapy's failure is the severity of their illness (Storms & Nisbett, 1970).

Medication placebos have been used to manipulate the perceived cause for a reaction. By inducing people to falsely ascribe autonomic changes to the action of a placebo, fear of impending shocks can be diminished (Nisbett & Schachter, 1966), snake phobia can be reduced (Valins & Ray, 1967) discomfort from cigarette withdrawal can be reduced (Barefoot & Girodo, 1972), insomniacs may fall