

DECREASING PREMATURE TERMINATION FROM PSYCHOTHERAPY

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The present study tested a procedure for reducing dropout rates from psychotherapy. The procedure is based on research demonstrating that under certain conditions, explaining or imagining a hypothetical future behavior leads to increases in the subjective and actual likelihood of that behavior. In the present study, incoming clients imagined and explained why they (hypothetically) remained in therapy for four sessions. Sixty-five adult patients seeking therapy at a community mental health center participated in the project immediately before their intake appointment. Two experimental groups imagined and explained staying in therapy for four sessions; one of them also stated expectations for attending therapy. The control group imagined and explained an irrelevant event but received straightforward information regarding the importance of attendance. Dropout rates of 57 previous clients were obtained from their charts and comprised a historical-base-rate group. The hypothesis that clients who imagined and explained staying in therapy for four sessions would have lower dropout rates was supported. Theoretical and practical implications concerning the imagination-explanation procedures are discussed.

A high dropout rate in outpatient psychotherapy has been consistently reported over the past 20 years (Eiduson, 1968; Stockton, Barr, & Klein, 1981). In fact, many argue that premature or early termination from psychotherapy is one of the most persistent and troubling problems facing clinics and therapists today. Even more problematic is the lack of research on approaches to decreasing dropout rates.

In their review of premature termination, Baekeland and Lundwall (1975) reported that 20% to 57% of patients fail to return after their first visit to a psychiatric clinic. Similarly, 33% to 50% of patients

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in group psychotherapy drop out early. The consequences of such dramatically high dropout rates are numerous. The most obvious one is that patients who are seeking help for a problem are probably not getting the help they want or need because they drop out of therapy before their problem is solved. Luborsky, Auerback, Chandler, and Cohen (1971) reviewed treatment factors as they relate to therapeutic outcome and found that length of treatment is frequently positively correlated with outcome. Although this finding is probably confounded with dropout rates, treatment is obviously hampered when patients fail to persevere in that treatment. Likewise, Lorr, McNair, Michaux, and Riskin (1962) have reported a positive relation between length of therapy and outcome.

Another negative consequence of premature termination is that it can reinforce a client's view that his or her problems cannot be solved. That is, when clients drop out of treatment after one or two sessions with no symptom relief, it reinforces a belief that their problems are not amenable to the therapy process. Such a belief probably exacerbates the current problem and decreases the likelihood of seeking assistance for future problems. If therapy is sought in the future, the negative belief may lead the client to approach therapy with a negative set, thereby decreasing the chances of therapy success.

What is needed is a fresh approach to the dropout problem. Rather than trying to identify terminators and remainers, it may be more productive to find a general mechanism that will influence all clients to remain in therapy for some minimal amount of time. Several approaches to reducing dropout rates have received somewhat limited attention.

One approach consists of reminding clients of missed or upcoming appointments (Panepinto & Higgins, 1969; Turner & Vernon, 1976). Panepinto and Higgins (1969), for example, reduced first-month dropout rates in an alcohol clinic from 51% to 28% simply by sending appointment letters to the patients whenever they missed a scheduled visit.

A second approach involves pretherapy client preparation. Hoehn-Saric *et al.* (1964) found that an initial "anticipatory socialization" interview significantly reduced dropping out of therapy. Their interview was intended (1) to provide a rational basis for patients to accept psychotherapy as a way of helping them; (2) to clarify the roles of patient and therapist; and (3) to provide a general outline of the course of treatment. Other researchers have had some success with similar procedures (e.g., Garrison, 1978; Heitler, 1976; Holmes & Urie, 1975; Piper, Debbane, Garant, & Bienvenu, 1979).

These techniques, though useful, are time-consuming and expen-

sive. Sending new appointment letters after missed sessions may successfully get return visits, but the missed sessions still have wasted considerable (and scarce) resources of the clinic and the client. Extensive "anticipatory socialization" interviews are also expensive techniques. We feel that these approaches are worthwhile, but we also feel that less resource-intensive procedures may also be found to reduce premature termination. (See Pekarik, 1985, for a similar discussion of the dropout problem.)

IMAGINATION AND EXPLANATION

Social psychologists have long been interested in the explanations people generate for observed or experienced events. Indeed, research surrounding such attributions of causality has dominated the field for the past 15 years or so (Bem, 1972; Heider, 1958; Jones & Davis, 1965; Kelley, 1967; Weiner, 1979).

More recently, researchers have begun examining the effects of creating causal explanations and imagining causal scenarios on estimates of subjective likelihood for the explained or imagined events (e.g., Anderson, 1983a, 1983b; Anderson, New, & Speer, 1985; Anderson & Sechler, 1986; Ross, Lepper, Strack, & Steinmetz, 1977; Sherman, Skov, Hervitz, & Stock, 1981; Sherman, Zehner, Johnson, & Hirt, 1983). Of particular relevance to the current problem are studies that have looked at the effects of imagining or explaining particular *hypothetical* behavioral scenarios or events. Several such studies have examined these effects on people's self-expectations and subsequent behaviors.

Sherman *et al.* (1981) found that when subjects explained outcomes for themselves (even when these outcomes were hypothetical), their beliefs that these outcomes might occur increased. Relevant behaviors also changed in a congruent fashion. In their study, subjects explained either success, failure, or nothing at all for an upcoming anagram task. Those who explained success actually performed better than the control group, who explained nothing at all.

Sherman *et al.* (1981) also examined the effects of explicitly stating expectations on subsequent behavior and found somewhat complex results. Explaining a hypothetical success led to improved performance, whether or not expectations are explicitly stated. The performance of those who explained failure varied, however, depending on whether or not expectations were explicitly stated. Those who explained failure but did not state their expectations performed better than those who failed and did state their expectations.

Other researchers have found similar self-expectancy and behavioral effects by using an imagination procedure. Anderson (1983b) had some subjects imagine themselves performing or deciding not to perform a variety of behaviors (e.g., donating blood). Other subjects imagined the same scenarios, except that they imagined a disliked acquaintance or a close friend as the main characters in the scenarios. Subsequent measures of intentions revealed that self-intentions changed in the direction of the imagined scenarios, but only when subjects imagined themselves as the main character. Furthermore, the amount of congruent intention change was larger when the scenarios were imagined more frequently.

Gregory, Cialdini, and Carpenter (1982) used a similar imagination procedure in their field work on compliance. They found that their scenario procedure influenced both self-expectancy judgments and related behaviors. Their subjects were homeowners contacted about subscribing to a cable television service. A control group consisted of homeowners who simply received straightforward information regarding the cable service. Subjects in the experimental group read a scenario emphasizing that they were to imagine themselves experiencing the benefits and features of the service. Several weeks later, all subjects were contacted by company salespeople (blind to the experimental manipulation) during the course of standard door-to-door marketing of cable television. Those homeowners who had imagined using cable television were more likely to subscribe to such a service when requested to do so.

The explanation researchers and the imagery researchers have drawn on the same interpretation for their findings—the availability heuristic. Tversky and Kahneman (1973) describe the availability heuristic as a principle of judgment based on the ease with which one can "bring things to mind." "Availability," then, refers to the ease with which relevant instances come to mind when an individual estimates the probability of a particular event. For example, if it is easy to imagine oneself donating blood, one will estimate the likelihood of doing so to be relatively high. Few studies of explanation and imagination effects have directly examined this availability proposition (cf. Anderson *et al.*, 1985). However, indirect support is quite strong. For instance, manipulations that should theoretically affect the availability of certain structures or events in memory have yielded the predicted effects on probability or likelihood estimates (e.g., Anderson, 1983a, 1983b; Carroll, 1978; Fleming & Arrowood, 1979).

In summary, the explanation and imagination literature suggests that once a person either explains or imagines a hypothetical future behavior, the subjective likelihood of that behavior is increased, due

to reliance on the availability heuristic. Subsequent behaviors may be influenced by these changes in expectations. From this model, it follows that a client who imagines and explains staying in therapy will remain in therapy longer than a client who does not engage in such an imagination and explanation task. Presumably, the imagination-explanation procedure makes more available relevant behavioral scenarios or causal reasons, either of which may be used to guide subsequent behavioral choices. If effectively demonstrated, this procedure could have an enormous impact on clinics trying to find a way of keeping clients in therapy long enough for it to be of some help.

OVERVIEW

The main hypothesis was that clients who imagined and explained staying in therapy for at least four sessions would have a lower dropout rate than clients who did not engage in this task. In addition, Sherman *et al.*'s (1981) finding of different explanation effects, depending upon whether or not subjects were explicitly asked to state expectations, suggested the inclusion of a similar manipulation here. No clear predictions regarding the effects of such a manipulation could be made, though, because the contexts were so different. For instance, Sherman *et al.* found an effect of explicitly stating expectations only for subjects induced to explain a failure. Our clients, however, were not induced to explain a failure, but rather a type of success (i.e., staying in therapy for four sessions).

Subjects in the present study—clients attending an outpatient mental health center—were randomly assigned to one of three experimental groups. One group imagined themselves attending at least four therapy sessions, and explained why they (hypothetically) did so. A second group also imagined and explained attending at least four therapy sessions, and explicitly stated their expectations for doing so. The third group was given information about the importance of attending at least four therapy sessions, but did not imagine or explain attending four sessions. This group did, however, imagine and explain an irrelevant event, so that any subsequent differences in dropout rate could not be attributed to a positive effect of imagining and explaining any event.

In addition, the case histories of past clients at the clinic were examined to obtain a (nonexperimental) historical-base-rate estimate of the dropout rate at that clinic. Because this group was not randomly assigned, and may have differed from the others on unknown dimensions, any inferences regarding this group must be made with caution.

METHOD

SUBJECTS

Subjects were adult clients seeking outpatient therapy at a community mental health center in Scottsdale, Arizona. Most clients at this clinic were white, were working-class or middle-class, and had at least a high school education. A total of 65 patients participated in the experiment. In addition, data from 57 clients who had attended the clinic earlier in the year were collected.

PROCEDURE

When clients arrived at the clinic for their intake appointment, they were asked to participate in a research project involving filling out a three-page form. Their participation was voluntary, though encouraged. Those who agreed to fill out the form were randomly assigned to one of the three conditions. Subjects in each condition received a slightly different form. All subjects filled out their questionnaires in the clinic waiting room prior to meeting their therapist.

All questionnaires began with a self-descriptive rating list. Subjects in all three experimental conditions were asked to rate themselves on 10 traits using a scale from 1 to 5 ("not at all" to "extremely"). The next part of the questionnaire varied according to experimental condition. The conditions and their corresponding questionnaires were as follows.

Relevant Task Only

After filling out the self-descriptive ratings, these subjects were instructed to imagine and explain attending at least four sessions of therapy in the following manner:

Another part of our research interest is to look at people's ability to imagine events and explain them. For the purpose of this exercise, please take at least 2 or 3 minutes and just *imagine* seeing yourself come into this clinic for at least four sessions of therapy. That is, picture yourself walking into your appointment, talking with your therapist, leaving and returning next week, and so on until you have visualized yourself being in four different therapy sessions. (You may find it easier to close your eyes—but either way, spend a couple of minutes imagining this series of events.) After you have finished this step, please continue with the questionnaire.

Now place a check next to any of the following reasons that might explain why YOU would continue with therapy for at least four sessions.

1. I like to finish what I begin.
2. It is important to me that I get over my problem.
3. Now is a good time for me to spend time solving my problem.
4. I am the type of person who keeps commitments I make.
5. I realize that it will take some time to solve my problems.
6. Being happy is very important to me.
7. I want to solve my problems now while they are still manageable.

Although some people drop out after one or two sessions, continue to assume that YOU have attended four therapy sessions. Please write a paragraph describing what qualities YOU have that explain why you attended at least four therapy sessions. You may use any of the above-listed reasons as well as adding others. (Remember, you are just explaining a hypothetical outcome.) In writing your paragraph, try to list as many traits and qualities about yourself as you can that would explain your attendance at four therapy sessions.

I am the type of person who would stick with therapy for at least four sessions because . . . (Continue paragraph here.)

The list of reasons for continuing with therapy was provided as a way of helping the subjects write their explanations. A pretest indicated that clients had difficulty writing the paragraph without the prompting provided by the seven statements listed.

Relevant Task Plus Expectations

After completing the self-descriptive ratings and the above exercise on imagining and explaining attendance at four sessions of therapy, this group completed two items designed to assess expectations to stay in therapy. The two items were "How confident are you that you will attend at least four sessions of therapy?" and "How confident are you that you will stick with therapy for at least four sessions even if it becomes inconvenient for you to schedule your sessions?". These items were rated using a 5-point scale ranging from "not at all confident" (1) to "very confident" (5).

Irrelevant Task Plus Information

After completing the self-descriptive ratings, these subjects were instructed to imagine and then to explain a content-irrelevant event (spending some enjoyable time with a family member). The instructions read as follows:

Another part of our research interest is to look at people's ability to imagine events and explain them. For purposes of this exercise, please take at least 2 or 3 minutes and just *imagine* spending some pleasant and enjoyable time with a member of your family. Please try to imagine all aspects of this time spent together in as much detail as possible. After you have finished this step, please continue on.

Now continue to assume that you have spent some pleasant and enjoyable time with someone in your family. Please write a paragraph describing what qualities, attitudes, or beliefs YOU personally have that explain why YOU had an enjoyable time with that person. (Remember, you are just explaining a hypothetical outcome.) In writing your paragraph, try to list as many traits and qualities about yourself as you can that would explain your having an enjoyable time with someone in your family. (Write paragraph below.)

No list of plausible reasons was given to this group, because a pretest indicated that subjects had no difficulty completing the paragraph. This group was also informed that attending four sessions is important for deriving benefit from therapy. This information was presented in a question-answer format and was embedded among three other common questions and answers that clients have about the clinic. The item read as follows:

Question: How many therapy sessions will I have to attend?

Answer: Although this varies from person to person, research indicates that most people need to attend at least four therapy sessions to derive benefit from therapy.

This control group was designed to separate the effects of the imagination-explanation procedure from any information or perceived experimenter demands in the imagination-explanation instructions. The information statements also paralleled other attempts to decrease dropout rates through an orientation statement about what to expect in therapy. Thus, this group also provided a comparison of an orientation method for reducing dropouts with our imagination-explanation technique.

Historical Base Rate

Data were also collected on clients who had come to the clinic before the study began. This group did not fill out any questionnaire at all; data regarding their treatment were simply retrieved from their clinic charts. In addition to the information already described in the questionnaires, demographic data were collected on all clients. This was

taken from the "face sheet" that all clients completed for the clinic before their intake appointment.

Several weeks after a client had appeared for an intake appointment, therapists were asked to rate the disposition of each of their clients who had come in the previous month. Therapists were blind to the condition of each of their clients. For purposes of this research, early termination was defined as occurring when a client unilaterally dropped out of treatment before four sessions. Of course, a therapist might have agreed that fewer sessions were needed, in which case the client was *not* categorized as a dropout. Therefore, an early termination or dropout was operationally defined as occurring when a client attended fewer than four sessions *and* was also rated by the therapist as having dropped out of therapy.

RESULTS

DROPOUT RATES

The major hypothesis was that clients who had been induced to imagine and explain why they (hypothetically) attended at least four therapy sessions would be less likely to drop out of therapy than those who had not engaged in the imagination-explanation task. The dropout rates for the three experimental groups and the historical-base-rate group were compared using an arcsin transformation and performing the relevant *z* test on the transformed data (see Langer & Abelson, 1972). The results clearly supported the hypothesis. As can be seen in Figure 1, clients who had imagined and explained attending at least four sessions were less likely to drop out than clients who had not done so; 18.2% of the relevant-task group and 22.7% of the relevant-task-plus-expectation group dropped out, versus 42.9% of the irrelevant-task group and 33.3% of the historical-base-rate group. The appropriate contrast test was significant, $z = 1.98, p < .05$.

To perform more sensitive tests of differences between groups than the simple proportions reported above, we assigned a rating-scale score to each client indicative of therapy attendance. Clients who attended at least four therapy sessions, or who completed therapy (as judged by the therapist), or who attended therapy until transferred or referred to another agency, were assigned an attendance score of 4. Clients who dropped out earlier were assigned scores based on the number of sessions they had attended. Thus, the range of scores was from 4 (good attendance) to 1 (insufficient attendance). An un-

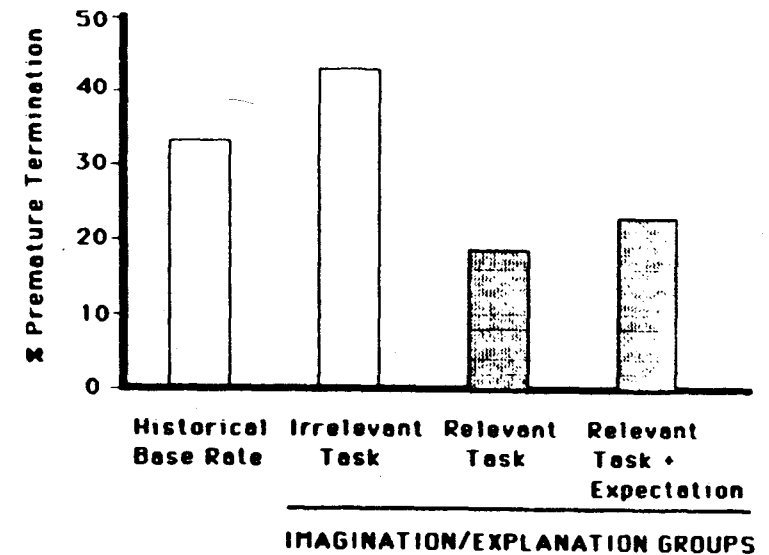


FIGURE 1
Premature termination (dropout) rates.

weighted-means analysis of variance was then performed on these data, and several *a priori* contrasts were tested.

First, we tested the difference between the two imagination and explanation groups. There was no significant difference between those who had explicitly stated their expectations and those who had not ($M_s = 3.55$ and 3.64 , respectively), $F < 1$. Second, the irrelevant-task and the historical-base-rate groups did not differ reliably from each other ($M_s = 2.95$ and 3.16 , respectively), $F < 1$. Third, we contrasted the mean attendance scores of the two groups that had imagined and explained attending at least four sessions with the two groups that had not done so. This contrast was highly significant, $F(1, 118) = 5.67, p < .01$. As expected from our prediction and from the similar contrast on the proportion data reported above, clients who had imagined and explained attending four therapy sessions had reliably better attendance ratings.

Because clients in the historical-base-rate group were not randomly assigned to the condition, but had attended the center before the experiment was begun, inferences about that group should be made with caution. Indeed, the most appropriate test of the major hypothesis compares the mean attendance rating of the irrelevant-task group to the mean ratings of the two groups that imagined and explained

attending at least four sessions. This contrast was also significant, $F(1, 118) = 5.37, p < .01$. In sum, it appears that the imagination-explanation task was quite effective in cutting the dropout rate and increasing therapy attendance.

SUPPLEMENTARY ANALYSES

Therapist Effects

Ten different therapists saw varying numbers of clients in this study. A number of different analyses of possible therapist effects on dropout rates were conducted. All yielded nonsignificant results (p 's $> .12$).

Demographic Variables

We looked at the effects of sex, work status, marital status, education, age, family size, referral source, and previous counseling treatment on dropout rates. None were significant.

Self-Descriptive Ratings

It should be recalled that the clients in the three experimental conditions rated themselves on each of 10 self-descriptive items (e.g., "I am one who finishes what I begin," "I am one who keeps commitments that I make"). Ratings on the 10 items by those who became dropouts were compared to ratings of those who did not drop out. Only one item, "I am one who is aware of my own needs," was related to dropping out. Dropouts claimed to be less aware of their own needs than did nondropouts ($M_s = 3.06$ and 3.77 , respectively), $t(63) = 2.28, p < .05$. Perhaps those who became dropouts were the least confident in their initial decision to attend the mental health center. However, because only 1 of the 10 items yielded a significant effect, we caution against overinterpretation of this finding.

Expectation Items

One proposed mechanism for imagination-explanation effects on subsequent behavior relies on changes in self-expectancies. Thus, we expected that those who dropped out would have had lower expecta-

tions about the likelihood of staying in therapy for four sessions. Clients in the relevant-task-plus-expectation group stated their expectations concerning staying in therapy on two items. On both items, those clients who later dropped out expressed less confidence that they would remain in therapy for four sessions. On only one item ("How confident are you that you will attend at least four sessions of therapy?") was this difference significant, $t(20) = 2.26, p < .05$. This supports the notion that self-expectations influence subsequent behavior, perhaps through the availability of relevant self-referent behavioral scenarios or of relevant causal arguments.

DISCUSSION

The present findings clearly demonstrate the efficacy of the imagination-explanation procedure as a tool for decreasing premature termination from psychotherapy. Within the three experimental groups, the pooled dropout rate of those clients who imagined and explained attending at least four sessions of therapy was less than half the rate of clients in the irrelevant imagination-explanation group (20.5% vs. 42.9%). This technique is particularly promising not only because it works, but also because it is considerably less expensive and time-consuming than other approaches to the dropout problem. In these days of budget cuts and program elimination, such mundane considerations are critical.

Our results also generally support the theoretical analyses of imagination and explanation effects offered in much previous work. Making salient self-referent behavioral scenarios of (cf. Anderson, 1983b; Gregory *et al.*, 1982) and causal arguments for (cf. Anderson *et al.*, 1985; Sherman *et al.*, 1981) a target behavior did lead to increases in that behavior. That is, inducing clients to imagine and explain attending at least four sessions of therapy did increase the proportion of clients who did so. Furthermore, the self-expectancy ratings were also congruent with subsequently observed behavior (i.e., dropout rates).

We hasten to point out, however, that much work remains to be done before these phenomena are fully understood. For example, empirical support of the proposed link between self-expectations and behavior is, in the present context, quite weak. Questions concerning what is mediating the change in expectations also remain unanswered. Are self-relevant behavioral scenarios (i.e., images) being accessed as the means of assessing one's own intentions? Alternatively, are causal arguments of a verbal, propositional form being accessed for this judgment? Are there individual differences in what is being ac-

cessed, such that some people tend to think in scenario or imaginal terms and others tend to be more verbal or propositional? What are the different judgmental contexts that emphasize the image versus the proposition as the structure that is accessed in judgments of intention, and as guides to behavior?

Sherman, Cialdini, Schwartzman, and Reynolds (1985) have found that the ease of imagining events is related to changes in judgments of subjective likelihood. Specifically, they found that imagining easily imaginable symptoms of a disease increased the judged probability of contracting the disease, but that imagining difficult-to-Imagine symptoms led to decreases in judged probability. Will similar ease-difficulty effects obtain when applied to self-intentions and behaviors? Answers to these and related questions will allow further refinements in application of the imagination-explanation procedures.

Finally, the success of the manipulation in the present experiment demonstrates that the effects are quite robust. Laboratory findings frequently break down when applied to necessarily more complex real-world situations. Despite all the uncontrollable factors that influence dropout rates at a community mental health center, the imagination-explanation procedure produced dramatic effects. This suggests that such procedures may be useful in a variety of applied settings. For instance, Anderson (1984) has suggested several possible applications to interpersonal and academic problems common to adolescents. Although considerably more research is needed on these issues, we feel that the basic phenomena are understood well enough to warrant testing in a variety of applied settings. Such testing will, we feel, lead to further theoretical advances as well.

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SELF-PERCEPTION THEORY, SALIENCE OF BEHAVIOR, AND A CONTROL-ENHANCING PROGRAM FOR THE ELDERLY

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Accessibility of attitudes was manipulated (frequent reminders through active experience based on the subjects' own behavior) for geriatric nursing home residents in an enhanced visitor control program. Thirty subjects (mean age 82.6 years) were randomly assigned to one of three groups: a high- or low-behavior-salience condition or a no-treatment condition. Subjects completed Forms A and B of the Life Satisfaction Index 1 week prior to, and 1 week after, the program. A nurse administrator additionally rated each subject on Health Status and Zest for Life scales at these times and at 1-month and 12-month follow-up times. Results showed that in comparison to the no-treatment group, both visitor control programs helped the residents, and that the high-salience condition was most helpful. Furthermore, this condition was associated with a slower rate of long-term decline. Results are interpreted as being consistent with Bem's (1972) self-perception theory.

Social psychologists have often been interested in relating attributional processes to clinically relevant problems (Harvey & Weary, 1981; Weary & Mirels, 1982). Generally, these efforts focus upon misattribution of arousal (Valins & Nisbett, 1972) or on attributional retraining techniques (Metalsky & Abramson, 1981). In both approaches an attempt is made to have an individual attribute a dispositional trait to an external cause. Less frequently studied is another possibility, suggested by Bem (1967, 1972), of having a client misattribute an external cause to a dispositional trait. According to Bem's theory of self-perception, in the absence of strong external or physiological cues, one's

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