

DOCUMENT RESUME

ED 099 725

CG 009 318

AUTHOR Webb, Lynn E.; Lamb, Douglas H.
TITLE Expectancy-Reality Descrpancy and Patient Improvement.
PUB DATE Feb 74
NOTE 12p.; Paper presented at the Midwest Psychological Association Meeting (Chicago, Illinois, May 1974)

EDRS PRICE MF-\$0.75 HC-\$1.50 PLUS POSTAGE
DESCRIPTORS *Expectation; Improvement; *Mental Illness; *Patients (Persons); *Predictive Measurement; Psychiatric Hospitals; Psychiatric Services; Research Projects; *Self Evaluation; Speeches

ABSTRACT

Fifty-four admissions to the psychiatric unit of a general hospital were asked to predict their length of hospitalization. The difference between their predicted and actual length of hospitalization was calculated (expectancy-reality discrepancy-ERD). Patient ERD scores were compared with self-report, ward, and therapist measures of patient improvement. Those patients who had the largest discrepancy between their expected and actual length of hospitalization (the largest ERDs) tended to improve the least while hospitalized. Improvement did not appear to be related to whether a patient was discharged sooner or remained longer than he expected. (Author)

ED 099725

EXPECTANCY-REALITY DISCREPANCY AND PATIENT IMPROVEMENT

Lynn E. Webb and Douglas H. Lamb

Illinois State University

February 13, 1974

**U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION**

**THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.**

EXPECTANCY-REALITY DISCREPANCY AND PATIENT IMPROVEMENT

February 13, 1974

There is considerable evidence to support the relationship between patient expectancy and improvement (Clemes & D'Andrea, 1965; Frank, 1968; Goldstein, 1962; Goldstein, Heller, & Sechrest, 1966; Jacobs, Muller, Anderson, & Skinner, 1972; Wilkins, 1973). Levitt (1966) proposes, however, that the expectancies of the patients may not be as important in relation to improvement as is the discrepancy between these expectations and the ensuing reality. He hypothesizes that

there is a negative correlation between the effectiveness of any psychotherapeutic intervention and the discrepancy between the patient's expectation of the nature of the therapy process and the reality of the encounter. The more the patient finds that the therapeutic situation fails to conform to his preconception of it, the less it is likely to affect him favorably (Levitt, 1966, 163-166).

Studies relating directly to the relationship between therapy outcome and what Levitt calls the "expectation-reality discrepancy" (ERD) appear to be scarce. In one such study, Overall & Aronson (1963) hypothesized that patients with more discrepant expectations of their therapists' behavior would be less likely to return for treatment. As predicted, patients who failed to return for the next scheduled interview showed greater discrepancies between their expected and their actual perception of their therapists' behavior during the interview.

The ERD under investigation in the present study was the patient's expectation of his length of stay in the psychiatric unit of a general hospital compared to his actual length of hospitalization. Patient ERD was related to improvement as determined by self-report, ward, and therapist measures. The specific hypotheses were: (1) the less the discrepancy between expected and actual length of stay, the greater will be the degree of patient improvement as reported by the patient, the therapist, and the ward staff; (2) those patients who overestimated their length of stay (left sooner than they expected) will improve more than patients who underestimated their length of stay (stayed longer than they expected).

METHOD

Subjects. Ss were 54 (30 females, 24 males, age range 16-65) admissions to the psychiatric unit of a general medical hospital.

Experimental Measures. Three measures of improvement were used: (1) the present self questionnaire (patient), (2) the behavior rating scale (staff), and (3) the behavior rating scale (therapist). All scales were derived from a scale developed by Bunney & Hamburg (1963) for the systematic observation of emotional behavior. The present self questionnaire and the staff behavior rating scale were comprised of 20 questions. Responses ranged from "does not apply to patient at all" to "applies to patient very much so", and covered such dimensions as depression, anxiety, hostility, and bizarre behavior. The therapist behavior rating scale contained six questions taken from the staff rating scale. Measures were obtained upon admission and again at the time of discharge. The difference between the admission and discharge scores was the amount of measured improvement.

Patient ERD scores were determined by the differences between their expected length of hospitalization (in days) and their actual length of hospitalization. Such demographic variables as sex, age, diagnosis, and number of previous admissions were also related to ERD scores.

Procedure. Upon admission to the psychiatric unit and before the first interview with the psychiatrist, each patient was asked to predict the number of days he would be in the hospital, as well as to complete the present self questionnaire. On the second day of hospitalization a member of the nursing staff on the unit completed the ward staff behavior rating scale on the patient. The third measure was obtained from the patient's individual therapist who was also asked to complete a behavior rating scale after his initial contact with the patient. On the evening prior to or the day of discharge, the three individuals (patient, nurse, therapist) again completed the questionnaires.

RESULTS

An analysis of the patient population indicated that there were approximately an equal number of new and previous admissions. Thirty of the 54 patients were married and the most frequent diagnosis was depression (N=25). There were no significant relationships found between either sex, age, marital status or length of hospitalization with patient improvement.

On the average, patients underestimated their hospital stay by an average of 3.8 days. Although the ERD range was large (nine days overestimated--28 underestimated) half of the Ss had discrepancies (in either direction) of two days or less. Thirty-four of the 54 patients underestimated their hospital stay.

In order to analyze the relationship between improvement and ERDs the Ss were divided into the following four groups as a function of the magnitude and direction of their ERD scores (whether the patient overestimated or underestimated his length of hospitalization): (1) the high discrepancy group (N=13) were those underestimators who had a discrepancy of nine or more and those overestimators who had a discrepancy of eight or more; (2) the medium discrepancy group (N=13) including those underestimators who had an ERD from four to seven and those overestimators with an ERD of three; (3) the low discrepancy group (N=23) included the underestimators with an ERD between one and three and the overestimators between one and two; (4) the fourth group (N=5) was composed of the patients who had an expectancy-reality score of zero.

Table 1 lists the Pearson-Product Moment correlations between patient ERDs

INSERT TABLE 1 ABOUT HERE

and the mean improvement scores for all 54 Ss and for the Ss within each of the four discrepancy groups. Fourteen of the sixteen correlations are in the predicted direction and range from $-.45$ to $+.08$. As discrepancy increases, improvement decreases, regardless of the measuring source (patient, staff, therapist). The correlation between ERD scores and overall mean improvement scores for all 54 Ss was significant ($r = -.27$, $df = 53$, $p < .05$) and in the predicted direction.

Table 2 gives the mean improvement scores for the four discrepancy groups and

INSERT TABLE 2 ABOUT HERE

for the combined medium and low discrepancy groups. As predicted, the mean improvement scores for the high discrepancy group were lower than for all other discrepancy groups. When an analysis of variance is applied, however, none of the means were found to be statistically different from one another. To determine if an analysis of the two extreme discrepancy groups would be fruitful, the low and medium discrepancy groups were combined. The overall mean improvement for the high discrepancy group was 14.38 as compared to a mean of 19.01 for the combined medium-low discrepancy group. While the means were in the predicted direction, they were not found to be statistically different from one another.

In order to determine if those patients who overestimated their length of stay tended to improve more than those who underestimated their length of stay mean improvement scores for the underestimators ($N = 35$), overestimators ($N = 14$) and zero discrepancy group ($N = 5$) were compared. The mean improvement scores for these three groups were 17.83, 17.65, and 20.34 respectively. A statistical analysis of these means revealed no differences in the amount of improvement

suggesting that improvement was unrelated to whether the patient underestimated or overestimated his length of hospitalization.

DISCUSSION

The significant negative correlation between the overall mean improvement scores and Ss ERD scores suggests that expectation discrepancies regarding duration of hospitalization may be an important component of therapeutic outcome, thus supporting Levitt's (1966) contention regarding the importance of investigating discrepancy measures. These findings also suggest the possible value of directly manipulating patient expectations concerning the duration of treatment (Hoehn-Saric, Frank, Imber, Nash, Stone, & Battle, 1964). One possible avenue of future research would be comparing improvement scores for patients who are given differing explicit expectations regarding duration of hospitalization.

The hypothesis that those patients who overestimated their length of stay would tend to improve more than those who underestimated their length of hospitalization was not substantiated. Goldstein & Shipman (1961) reported similar results in their study of symptom reduction, finding that perceived symptom reduction was not related to whether the patient over or underestimated number of expected symptoms, but to the difference between the number of expected and perceived symptoms. Wright (1960) has noted that individuals experiencing discrepant expectations will react emotionally to the size and direction of the discrepancy. That is, if the direction of the expectancy-reality discrepancy is in agreement with the patient's wishes, positive affect evolves with accompanying surprise and hopefulness. If, on the other hand, the direction of the discrepancy is not in accord with the individual's expectancy, Wright found that disappointment and frustration ensue. Attempts by hospital personnel to minimize discrepancies may help to alleviate patient disappointment and depression.

The finding that there were far more patients who underestimated than overestimated their length of stay may be related to some types of placebo responses to hospitalization admission itself. Predictions from patients at other times during their hospitalization may have produced more realistic ERDs and thus resulted in more positive patient affect 1. 2s.

REFERENCES

- Bunney, W. E., Jr. & Hamburg, D. A. Methods for reliable longitudinal observation of behavior: Development of a method for systematic observation of emotional behavior on psychiatric wards. Archives of General Psychiatry, 1963, 9, 280-294.
- Clemes, S., & D'Andrea, V. J. Patients' anxiety as a function of expectation and degree of initial interview ambiguity. Journal of Consulting Psychology, 1965, 29, 397-404.
- Frank, J. The influence of patient's and therapist's expectations on the outcome of psychotherapy. British Journal of Medical Psychology, 1968, 41, 349-356.
- Goldstein, A. P. Therapist-patient expectancies in psychotherapy. New York: Pergamon Press, Inc., 1962.
- Goldstein, A. P., Heller, K., & Sechrest, L. Psychotherapy and the psychology of behavior change. New York: Wiley, 1966.
- Goldstein, A. P., & Shipman, W. G. Patient expectancies, symptom reduction and aspects of the initial psychotherapeutic interview. Journal of Clinical Psychology, 1961, 17, 129-133.
- Hoehn-Saric, R., Frank, J., Imber, S., Nash, E., Stone, A., & Battle, C. Systematic preparation of patients for psychotherapy: I. Effects on therapy behavior and outcome. Journal of Psychiatric Research, 1964, 2, 267-281.
- Jacobs, M., Muller, J., Anderson, J., & Skinner, J. Therapeutic expectations, premorbid adjustment, and manifest distress level as predictors of improvement in hospitalized patients. Journal of Consulting and Clinical Psychology, 1972, 39, 435-461.
- Levitt, E. E. Psychotherapy research and the expectation-reality discrepancy. Psychotherapy, 1966, 3, 163-166.

Table 2

Mean Patient Improvement Scores For Discrepancy Groups

	Overall Mean Improvement	Patient Measure of Improvement	Staff Measure of Improvement	Therapist Measure* of Improvement
High Discrepancy Group (N=13)	14.38	12.69	13.08	18.45
Medium Discrepancy Group (N=13)	19.82	18.85	19.62	20.25
Low Discrepancy Group (N=23)	18.55	16.48	17.13	22.31
Zero Discrepancy Group (N=5)	20.34	17.00	15.40	28.64
Combined Medium-Low Discrepancy Group (N=36)	19.01	17.34	18.03	21.55

*Adjusted to 100 point scale

Table 1

Pearson-Product Moment Correlations For Discrepancy Groups

	Overall Mean Improvement	Patient Measure of Improvement	Staff Measure of Improvement	Therapist Measure of Improvement
Total <u>Ss</u> (N=54)	-.27*	-.20	-.15	-.19
High Discrepancy Group (N=13)	-.33	-.18	-.42	-.16
Medium Discrepancy Group (N=13)	-.18	-.45	+.02	+.08
Low Discrepancy Group (N=23)	-.25	-.10	-.15	-.20

*p<.05

- Overall, B., & Aronson, H. Expectations of psychotherapy in patients of lower socioeconomic class. American Journal of Orthopsychiatry, 1963, 33, 421-430.
- Wilkins, W. Expectancy of therapeutic gain: An empirical and conceptual critique. Journal of Consulting and Clinical Psychology, 1973, 40, 69-77.
- Wright, B. A. Physical disability - a psychological approach. New York: Harper, 1960.