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# VARIABLE ROLE CONCEPTIONS IN DOCTOR-PATIENT INTERACTION *

by

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Lead Summary

Patients are classified as either functional or non-functional depending on the nature of their chief complaint. Their role expectations with respect to the doctor-patient relationship are shown to be different: functional patients are more likely to seek a relationship of involvement with the doctor, while non-functional patients seek an affectively-neutral technical relationship. Physicians are classified in a parallel manner "Comprehensive" physicians are ready to grant psychological support and counseling in problems where it seems appropriate. "Organic" physicians are ready to give technical help only. The comprehensive physicians interact less stressfully with the functional patients than do the organic physicians. The greater stress with organic physicians is explained by the discrepancy of role conceptions.

A. Introduction

A major source of a patient's role expectations is the larger society. According to Parsons, the medical situation has been defined in our society as one of affective-neutrality, the goals of which are specific and technical in nature. Moreover, the services performed are considered as at least partially humanitarian and available to all who seek them.[1] These general notions constitute guidelines for proper conduct in the medical situation and have become a part of the cultural over-lay of American society. As such, doctors and their patients, as well as all mature members of society, are at least vaguely aware of the role expectations in the medical situation.

But the role conceptions of individual actors have their sources in more than the general culture of an inclusive society. Individual factors also have their effect. Thus, for example, the developmental history, as well as the social, psychological, and general environmental context of an actor's life will also have a real effect on the quality of an individual's role conceptions.[2]

The type of medical problem from which the patient suffers is a very important situational factor affecting the formation of the patient's role conceptions. Hence, patients suffering from non-functional problems would be expected to share some basic commonalities in their role conceptions when compared to patients with functional problems.[3] This similarity of role conceptions is grounded in the similarity of situations shared by non-functional patients. Whereas functional patients usually experience uncertainty about either symptoms or course of treatment, non-functional patients usually do not. The latter tend to show clear-cut symptoms and, consequently, a greater certainty about prognosis and treatment.

A second situational determinant of role conceptions is the ideology of medical care that each doctor has adopted.[4] Briefly, the "organic"

approach to patient care is the approach in which the doctor's responsibility is seen as primarily technical. His job is seen as treatment of the physical ills of the patient, and nothing more. The "comprehensive" approach views the doctor's responsibility as extending beyond treatment of physical complaints, and including interest in the socio-psychological factors that might contribute to the patient's physical condition.[5] These are factors that affect the role conceptions of the physician, even as the type of medical problem affects the expectations of the patient. The very general prescriptions of the society are, therefore, altered by the effect of unique situational factors.

If situational factors bring about varying types of role conceptions, the question arises as the their effect on doctor-patient interaction. Role theory would lead us to believe that strain will emerge when two or more persons interact with incompatible role expectations, be they opposed in content, or degree of specificity.[6]

The following study will entail, firstly, an examination of role conceptions held by doctors and patients. We will try to show that functional and non-functional patients have distinct sets of expectations about the doctor-patient relationship. Likewise, we will attempt to distinguish two separate orientations to patient care held by physicians. Secondly, the effect of these varying role conceptions on doctor-patient interaction will be studied.

B. Hypotheses

Our general expectations have already been stated: (1) patients and doctors will possess role conceptions that are affected by variable situational factors, such as type of illness, and type of orientation toward patient care; these will yield variable role conceptions; and (2) stress will emerge from the interaction between doctors and patients with incompatible

role conceptions. We now turn to the statement of specific, testable hypotheses.

We have limited the study of role conceptions to expectations about the interpersonal relationship between doctors and patients. Hence, three dimensions of doctor-patient relations were chosen for study: (1) the expectation of affectivity in the relationship, (2) the expectation of psychological support, (3) the expectation of a relationship of dependence between patient and doctor.

The generation of working hypotheses was accomplished by applying our notion of the "situation" of each patient category to the above three dimensions of the doctor-patient relationship. It will be recalled that the category of non-functional patients was described as having relatively clear-cut physical difficulties. This suggests that these patients would be primarily interested in aspects of the medical situation that focus on the alleviation of these physical problems. On the other hand, functional patients were described as having medical problems of a relatively unclear status. We inferred from this that the functional patients would be interested in gaining alleviation of their psychic, as well as physical, distress.

Applying this general notion of the situation of the patients to the three dimensions of the doctor-patient relationship, we would enumerate the working hypotheses:

(1) Functional patients will seek a relationship with the doctor that has stronger affective overtones than will non-functional patients.

(2) Functional patients will expect to receive more psychological support and counseling in the doctor-patient relationship than will non-functional patients.

(3) Functional patients will feel that a dependence of the patient on

the doctor is more appropriate in the medical relationship than will non-functional patients.

If the physicians are classified as adherents to the organic or comprehensive approach to medical care, some clear-cut similarities between our doctor and patient types can be noted. Just as the functional patient might expect the physician to go beyond mere technical interest in him, so too the comprehensive physician could be expected to accept this wider, more diffuse responsibility. The non-functional patients and the organic physicians may be likened to one another since both expect nothing more than technical involvement on the part of the doctor.

Role theory indicates that stress will emerge in interaction when an incompatibility of role conceptions obtains. In the research at hand, this general expectation can be expressed in the last two working hypotheses:

(4) Comprehensive and organic doctors will interact with comparable levels of stress with the non-functional patients.
Both categories of doctors are seen as having the expectations that non-functional patients have, i.e., the expectation of technical assistance for the patient. The fact that the comprehensive doctors are prepared to go beyond simple technical aid would not lead one to expect stressful interaction, because this group of doctors is ready to fulfill all of the expectations of the non-functional patients.

(5) Comprehensive physicians will interact less stressfully with functional patients than will the organic physicians. The rationale is that both comprehensive doctors and functional patients share an expectation of medical interaction that is more affective and diffuse than the expectation held by organic doctors.

C. Research Setting and Sample

Observations were made in the Medical Out-Patient Clinic of Duke University Hospital. Subjects were selected from female patients entering the clinic, who were seeing pre-selected doctors for the first time. Of the 127 initial visit patients, 42 complete records were used in this study. The remainder were either not scheduled to return, failed to return as scheduled, or were dropped for operational reasons. Forty percent of the original sample were functional patients, and 60% were non-functional. Forty-five percent of the final sample were functional patients, and 55% were non-functional. Hence, functional patients were only slightly over-represented in the final sample. The patient sample had ages ranging from 16 to 73, and averaging 44 years.

The sample of physicians numbered 11, and consisted of fellowship holders in the Department of Medicine at Duke University Hospital. Each physician had at least one year of medical internship prior to the fellowship year. Their ages ranged from 25 to 32 years.

The intention had been to collect a minimum of five returning patients per doctor, but this proved unfeasible. Available data represent five returns on two doctors, four returns for six doctors, two doctors with three returns, and one doctor with two returns.

On arrival at the clinic, patients were assigned to attending physicians in the usual manner. Study doctors then took their patients to the examination-observation room. The room was equipped with a one-way mirror and was wired for sound recording. In all other respects the room was indistinguishable from other clinic examining rooms; audio tapes and Interaction Chronograph tapes (described below) were used.

At the next scheduled visit, the study patient was approached by one

of the observers before the appointment with the doctor. The observer interviewed the patients with an extensive questionnaire on attitudes toward health problems, treatment, and the doctor-patient relationship in general. After the ensuing appointment, the physicians filled out a questionnaire concerning some general opinions and attitudes relating to medical care and practice. The patients' opinion questionnaires, and the physicians' opinion questionnaires were used in the study of role conceptions. The Interaction Chronograph was used to examine the formal characteristics of doctor-patient interaction, and emergent strain therein.

D. Methods and Findings

Variable role conceptions of the patients. The sample of 42 patients was divided into two diagnostic groups, functional and non-functional categories. The classification was made on the basis of the doctors' diagnoses as reported on the medical chart histories. The investigator was aided in the process of classification by a consultant physician. Each subject was designated as either functional or non-functional depending on the nature of her chief complaint. There were 19 functional, and 23 non-functional patients.

In order to test the general hypothesis that functional patients possess role conceptions different from non-functional patients, expectations about the three dimensions of the doctor-patient relationship were examined: affectivity, psychological support and counseling, and interpersonal dependence in the medical situation. These three variables indicate the tenor of the interpersonal relationship expected by the patient.

Information on these three variable dimensions was gleaned from the patients' opinion questionnaire. From this instrument were taken a number of questions that struck at the three dimensions of role expectations listed

above. The questions asked the patients to state preferences about the doctors' mode of behavior. Each response could be rated as a choice for or against affectivity, psychological support, or dependence. For example, the patient was asked to make a choice in each of the following pairs about what kind of doctor she prefers:

| | |
|---|---|
| __ a warm-hearted doctor* | or __ a doctor who uses his brain |
| __ a doctor who is an expert | or __ a doctor who is gentle* |
| __ a doctor who is sympathetic* | or __ a doctor who is scientific |
| __ a doctor who is friendly* | or __ a doctor who knows a lot of medical facts |

(*denotes the affective alternative.)

Every question was scored as either zero or one depending on the preference given by the patient. The hypotheses about each of the three dimensions were tested by combining the responses of the subjects. An index was obtained for each patient on each variable. When patients were classed according to their diagnostic groups, and the mean responses for each group tabulated, a difference of means test could be employed to detect differences in role conceptions.

Analyses of variance were computed on each variable between the two diagnostic categories. Table 1 shows the results of these computations. The three working hypotheses were supported. The functional group proved to be significantly more concerned with an affective relationship than the other diagnostic group. The functional group proved to be substantially more interested in the psychological products of the doctor-patient encounter than did the other patient category. Finally, the functional group expected significantly more dependence in the doctor-patient dyad than did the non-functional patients.

INSERT TABLE 1 ABOUT HERE

Strain in doctor-patient interaction. We believed that physicians could be classified on the basis of their adherence to either the comprehensive or organic ideology of patient care, and that these two classifications would parallel, with respect to role expectations, the patients' functional and non-functional dichotomy. This parallel classification of physicians permits the testing of the second general hypothesis: stress will emerge from the interaction of actors with incompatible role conceptions.

Classification of the 11 doctors was accomplished by analysing their responses to the physicians' opinion questionnaire. It yielded information concerning patient care, procedures for handling patients, in general, and physicians' attitudes relating to their clinical training.

To make the judgement as to whether a physician belonged in the comprehensive or organic category, a set of criteria of placement had to be established. The criteria were abstracted from the definitional meaning of the terms "comprehensive" and "organic".[7] The organic approach is recognizable by the following characteristics: (1) the physician tends to rely exclusively upon the patient's physiological responses, to the point of ritualistic adherence to organic considerations in making a diagnosis; (2) the physician places greater responsibility on the patient, thus considering referral to other doctors as an appropriate form of disposition; (3) the physician indicates less emotional involvement with the patient. The comprehensive approach is characterized by the following: (1) the physician includes social and psychological as well as physiological responses of the patient in assessing the patient's problem and his own clinical success; moreover, he does not categorically assign priority to either organic or psychological factors in making a diagnosis; (2) the physician places greater responsibility on

himself, and will tend to identify his own difiences when the patient makes no progress; (3) the physician tends to become involved with the patient where such involvement is appropriate.

Of the 11 physicians considered, only five doctors could be placed confidently into one category or the other. Two of these doctors were the most extremely comprehensive; three were the most extremely organic in their orientation. The remaining six doctors lay somewhere between these two poles and possessed rather indeterminate role conceptions about their approaches to patient care. To be sure that the pure type of each ideology was not diluted, the indeterminate physicians were kept separate when types of doctor-patient interaction were subsequently compared.

Testing of the last two working hypotheses required the use of some measure of interpersonal strain or tension. Such a measure was found in the Interaction Chronograph. The latter is a mechanical device which operates during the entire interview. On a continuous tape can be recorded the number, type and duration of various occurrences in on-going interaction. Two observers were used to operate the chronograph. The first recorded the frequency and duration of the participant's speech, the second registered the content of the verbalizations in 16 categories. The resultant tapes thus represent a coded record of the sequence and content of the total interaction.

Of the sixteen content categories used on the chronograph, two were combined to serve as an indicator of stress. It included all signs of tension and rejection of doctor and patient, as well as all verbalizations that manifested rejection, active or passive, of a suggestion, idea or opinion. These utterances were interpreted as marks of interpersonal strain, and a lack of consensus. The interviews could, therefore, be examined for presence or absence of stress occurences.

Using this approach, the three groups of doctors were compared over both categories of patients. Contingency tables were constructed and the distribution examined for differences in the presence of stress in the diagnostic interviews. (No statistical testing was attempted due to the unfulfilled assumption of independence of observations.) Table 2 supports the fourth working hypothesis. Neither the organic, nor the comprehensive physicians encountered substantial stress with the non-functional patients.

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INSERT TABLE 2 ABOUT HERE

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Table 3 supports the second working hypothesis. We observe that the tension count for the organic doctors interacting with the functional patients was significantly higher than the tension recorded between comprehensive doctors and functional patients. Hence, it appears that the organic physicians interacted smoothly with the non-functional patients, but less harmoniously with the functional patients. The comprehensive physicians also dealt smoothly with the non-functional patients, but were more successful in effecting smooth interaction with functional patients.

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INSERT TABLE 3 ABOUT HERE

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In both Table 2 and Table 3 we noted that the physician group with indeterminate role conceptions about the doctor-patient relationship showed markedly more stress in their interviews than did either of the determinate physician groups. This outcome was not anticipated, and no hypotheses were made about determinate versus indeterminate physicians. This finding might mean that the lack of any clear role conception is more stress-producing than even the confrontation of two discrepant, but clear, role conceptions.

E. Summary and Conclusions

In the first step of the inquiry, it was shown that functional and non-functional patients possessee expectations about the doctor-patient relationship that were quite distinct from one another. As expected, the functional patients were significantly more interested in an affective kind of relationship with the doctor than were the non-functional patients. Similarly, the functional patients expected more psychological support and counseling; they had a greater expectation of a relationships of dependence of patient on doctor.

It can be concluded that these two categories of patients do possess distinct role conceptions with respect to the type of doctor-patient relationship that they see as appropriate. The differences arise, at least partly, out of the diverse situational factors that affect the functional and non-functional patients. The functional patients, due to their situations of greater uncertainty, either about the cause or cure of their illnesses, appear to seek a more diffuse kind of relationship than their non-functional counterparts. Not only do they seek the technical aid of the doctor, but also an affective relationship, featuring psychological counseling and substantial dependence on the doctor. The non-functional patients, with their situations of relative certainty, have much less expectation of a diffuse medical relationship. Their prime concern is to receive competent technical aid.

In the second phase of research, the doctors were divided into comprehensive and organic groups. In general, the comprehensive physicians possessed role expectations analogous to those of the functional patient category. They were prepared for a relationship of relative involvement with the patients. Furthermore, the comprehensive physicians believed that the responsibility of the doctor extended beyond mere technical aid of

the patient, social and psychological matters were viewed as valid areas of the doctor's concern. The organic physicians had expectations analogous to those of the non-functional patients. Both believed that the main concern of the physician ought to be technical aid, promoting physical cure of the patient. As such, psychological counseling, affective relations, and interpersonal dependence are viewed as falling outside the sphere of the doctor's responsibility.

In the third and final phase of inquiry, the interaction among the doctor and patient categories was examined. As expected, incompatibilities of role expectations were associated with the emergence of stress in interaction. Both the comprehensive and organic doctors interacted with equal smoothness in the interview with non-functional patients. Here, there was no incompatibility of role expectations. The non-functional patients expected nothing more than simple technical help. Both the comprehensive and organic doctors had this expectation also. The functional patients were seen to interact significantly more smoothly with the comprehensive doctors than with the organic doctors. This result was ascribed to the fact that the organic doctors did not have the extra expectations possessed mutually by the functional patients and comprehensive doctors.

In the analysis of interview stress, it was seen that physicians with no clear role conceptions about the doctor-patient relationship, interacted more stressfully with all types of patients than did either the organic or comprehensive physician groups. It was speculated that indeterminate role conceptions can be even more stress-producing than the interaction of clear, but discrepant, role conceptions.

Table 1

A comparison of means between diagnostic groups based on analysis of variance

| Variable | Max. Score | Non-functional | Functional | F/d.f. | Sig. |
|---|---|---|---|---|---|
| Affective relationship | 5 | 0.95 | 1.88 | 4.95/1-36 | .05 |
| Psychological support | 3 | 0.73 | 1.72 | 13.57/1-39 | .001 |
| Dependence | 4 | 2.61 | 3.35 | 8.10/1-39 | .01 |

Table 2

Frequency distribution of interviews with and without stress, of comprehensive, indeterminate, and organic physicians over the category of non-functional patients.

| | with stress | without stress | total |
|---|---|---|---|
| Organic physicians | 2 | 12 | 14 |
| Indeterminate physicians | 10 | 10 | 20 |
| Comprehensive physicians | 0 | 12 | 12 |
| Total | 12 | 34 | 46* |

*Each patient made 2 visits to the physician. Hence, the 23 non-functional patients had 46 interviews.

Table 3

Frequency distribution of interviews with and without stress, of comprehensive, indeterminate, and organic physicians over the category of functional patients.

| | with stress | without stress | total |
|---|---|---|---|
| Organic physicians | 5 | 5 | 10 |
| Indeterminate physicians | 14 | 8 | 22 |
| Comprehensive physicians | 0 | 6 | 6 |
| Total | 19 | 19 | 38* |

* Each patient made 2 visits to the physician. Hence, the 19 functional patients had 38 interviews.

Footnotes

1. Talcott Parsons, The Social System (Glencoe, 1951), 454-465.

2. Robert N. Wilson, "Patient-Practitioner Relationships," in Howard Freeman, Sol Levive, and Leo G. Reeder (eds.), Handbook of Medical Sociology (Englewood Cliffs, 1963), pp. 274.

3. By "functional" is meant disorders that show important psychological components. "Non-functional" disorders are those that are largely explainable in terms of organic and physiological factors.

4. The idea of practitioner orientation to patient care, though unexploited in the pure medical setting, has been used successfully in the psychiatric context. See, for example: A.B. Hollingshead and F.C. Redlich, Social Class and Mental Illness, (New York: 1958), pp. 155-161. For a summary of recent studies into varying interpersonal orientations of psychiatrists, see: Robert C. Carson, "A and B Therapist 'Types' : A Possible Critical Variable in Psychotherapy," presented at the Annual Convention of the Southeastern Psychological Association, New Orleans, March 31, 1966.

5. Kenneth R. Hammond, and Fred Kern, Teaching Comprehensive Medical Care (Cambridge, 1959), p. xv.

6. Talcott Parsons, op.cit., pp. 269-272, 327-328.
Robert N. Wilson, op.cit., p. 28 .
Jurgen Ruesch, Therapeutic Communication (New York, 1961), pp. 202-215.
H.L. Lennard and A. Bernstein, "Expectations and Behavior in Therapy," in B.J. Biddle and E. J. Thomas, (ed.), Role Theory: Concepts and Research, (New York, 1966).

7. Kenneth R. Hammond, and Fred Kern, op.cit., p.4.

8. E.D. Chapple, "Quantitative Analysis of the Interaction of Individuals," Proceedings of the National Academy of Science, 25(1939), pp. 58-67.

F. Goldman-Eisler, "Individual Differences between Interviewers and Their Effect on Interviewees' Conversational Behavior," Journal of Mental Sciences, 98(1952), pp. 666-671.