Differential Attitudes of Nursing Personnel:

II. Attitudes Toward Psychiatric Problems[1]

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The care and treatment of patients entering a hospital may depend to a significant extent upon the attitudes of nursing personnel in the continuing nurse-patient relationship. With the increasing understanding of this relationship and of its importance in encouraging socialization, self-depend-

ence, and participation in decision-making on the part of the patient, the attitudes of nursing personnel, as part of the total medical and psychiatric team, may be of greatest importance in either achieving or failing to fulfill these goals. One important dimension to be considered is the variable focus of orientation of nursing specialties, as this relates both to the problems and to the care of the patients being served.

In a previous study (2), an attempt was made to determine if differential attitudes toward patient care exist among psychiatric and non-psychiatric nursing personnel. A total sample of 18 subjects was drawn from nursing personnel in a general teaching hospital. This sample was dichotomized into two major groups, psychiatric and non-psychiatric nursing personnel. Within these groups, a distinction between professional and non-professional nursing personnel was made. The resulting number of subjects per group was three professional and three non-professional psychiatric nursing personnel, and six professional and six non-professional non-psychiatric nursing personnel. Of the non-psychiatric group, half were drawn from the medical service and half from the surgical service. As indicated by several measures in this study, non-psychiatric personnel tended to be more authoritarian, more custodial, and more autocratic in their attitudes toward patient care than were psychiatric personnel, but all nursing personnel in the general hospital studied tended to be less authoritarian and custodial than were nursing personnel at several psychiatric hospitals.

The Problem: This second part of the overall investigation was designed to seek an answer to this question: Are there differences between psychiatric and non-psychiatric professional nursing personnel (registered nurses), and between psychiatric and non-psychiatric non-professional nursing personnel (technicians and orderlies), in their attitudes toward the nature and relative severity of psychiatric problems manifested by their patients? While it is known that there are differences of opinion as to the characteristics and importance of various problems, symptoms, signs, and com-

plaints presented by patients, it remains to be determined whether there are stimulus dimensions among the multitude of possible patient problems which lead to differential judgment of the severity of such problems on the part of different groups of nursing personnel.

To overcome the difficulty of adequately sampling widely diverse professional and non-professional groups, use was made of small-sample techniques and of obverse factor analysis. The significance of such data, the assumptions and limitations involved, the specific definitions of psychiatric, non-psychiatric, professional, and non-professional nursing personnel, the characteristics of the institution at which the study took place, the procedure for selection of nursing personnel groups, the characteristics of the subjects, and the general method of data collection have all been discussed in the earlier study noted above.

Method: In the course of prior investigations, Weiss, Schaie, and their co-workers developed an original but formal system for the classification of patients' psychiatric problems (6). In contrast to studies by earlier investigators, this research was not concerned with classification into a nosological system of psychiatric diagnosis, but rather with the meaningful assignment of verbalized patients' complaints to a system on whose terms agreement could be reached by raters with different professional backgrounds. Using this classification system, a set of representative complaints was obtained which could be used as a common data language for the description of patient complaint behavior. It should be emphasized that this was not an artificially constructed set of terms, but one derived from the actual complaint behavior of psychiatric patients.

The complaint classification has been described more extensively elsewhere (4, 5); it will be summarized here only briefly. Two dimensions were found to be required to place each complaint. These dimensions were called the "determinants" and the "referents" of each given complaint. The determinant identifies the dominant or major characteristic of the complaint (that is, its specific nature or type). The

referent identifies any situational factor which the complainer relates in any way to the determinant (as the attributed cause or result of the determinant, or as co-existing with it). The seven determinants and five referents found relevant for classification are given below:

DETERMINANTS

1. *Affective* (AFF): expressing mood disturbance (as elation, depression, discouragement, irritability, etc.).
2. *Anxietal* (ANX): expressing anxiety consciously perceived and directly felt (as "nervousness," "uneasiness," "fearfulness," "worry," etc.) or indirectly expressed in terms of *thoughts* which are obsessive or phobic.
3. *Behavioral* (B): expressing disturbance manifested by overt action, or by changes in overt action patterns.
4. *Mentational* (M): expressing disturbance pertaining to intellectual functions, memory, orientation, or judgement.
5. *Reality Distortional* (RD): expressing gross failure in evaluating external reality, as evidenced by hallucinations, delusions, or autistic or paranoid thinking.
6. *Social Welfare* (SW): expressing only a desire for aid in changing a specific situation which is not primarily medical or psychiatric.
7. *Somatic* (SOM): expressing a disturbance which the patient considers to be physical in origin, and for which he would be likely to seek medical rather than psychological or psychotherapeutic help.

REFERENTS

a. *Physical Health* (PH): referring to bodily health or illness.

b. *Mental Health* (MH): referring to psychological health or disturbance.

c. *Economic-Occupational* (E-O): referring to financial or occupational situations.

d. *Interpersonal* (I): referring to situations primarily in terms of relationships with other persons.

e. *Non-situational* (N): No related situation specified.

An example of an item which fits category 1a is: "I am discouraged because I have headaches." The determinant in this item is of an affective nature (i.e., "I am discouraged"), and "because I have headaches" refers to "physical health."

The combinations of the determinants and the referents provide 35 possible classification categories. All complaints were sorted into these categories and a balanced Q-sort sample was composed by selecting two representative complaints from each category. This gave a total of 70 complaints which could now be used as a common data language for the systematic assessment of individual complaint behavior. This representative complaint sample was named "The Psychiatric Evaluation Index" (PEI).

The rationale and procedure for administration of the PEI have also been discussed elsewhere (7, 8). In this study, raters (nursing personnel) were simply instructed to distribute the complaint items in order of severity. That is, raters were asked to place the two items which they considered to be the most disabling complaints into the category identified by a score of ten and those two items which they considered to be the least disabling into the category which would yield a score of zero. This procedure continued until all items had been assigned according to the required distribution. The use of such a methodology permits tests of certain types of hypotheses even though only a limited number of raters is used. The basic assumption made is that one is dealing with a population of complaints rather than raters. While there may be considerable sampling differences among raters with respect to any given complant, one may still propose with some confidence that these differences will be in terms of dimensions which may be found in nursing personnel raters in general or which are confined to raters belonging to specific nursing specialties.

Results: The mean scores for the four experimental nursing groups on the various determinants and referents may be seen in Tables I and II. Pattern profiles based on these mean scores of professional and non-professional personnel are described in Figures 1 and 2, respectively. Visual examination of these profiles indicates that the patterns of the two groups within each category appear to be very similar. Closer examination, however, demonstrates more subtle but nevertheless significant differences.

Table I

PROFESSIONAL PERSONNEL MEAN SCORES ON THE PEI

	REFERENTS					DETERMINANTS						
	PH	MH	E-O	I	N	AFF	ANX	B	M	RD	SW	SOM
Psychiatric	62.33	77.33	60.67	80.67	69.00	46.67	44.67	46.67	52.33	81.33	31.67	46.67
Non-Psychiatric	63.16	80.50	59.50	81.16	65.67	44.67	46.67	49.50	41.50	77.00	43.83	46.83

Table II

NON-PROFESSIONAL PERSONNEL MEAN SCORES ON THE PEI

	REFERENTS					DETERMINANTS						
	PH	MH	E-O	I	N	AFF	ANX	B	M	RD	SW	SOM
Psychiatric	57.33	75.00	52.00	86.33	76.00	45.33	44.00	44.67	55.00	77.67	37.67	45.67
Non-Psychiatric	67.83	82.50	58.17	73.67	67.83	45.17	50.50	45.50	51.00	68.67	40.67	48.50

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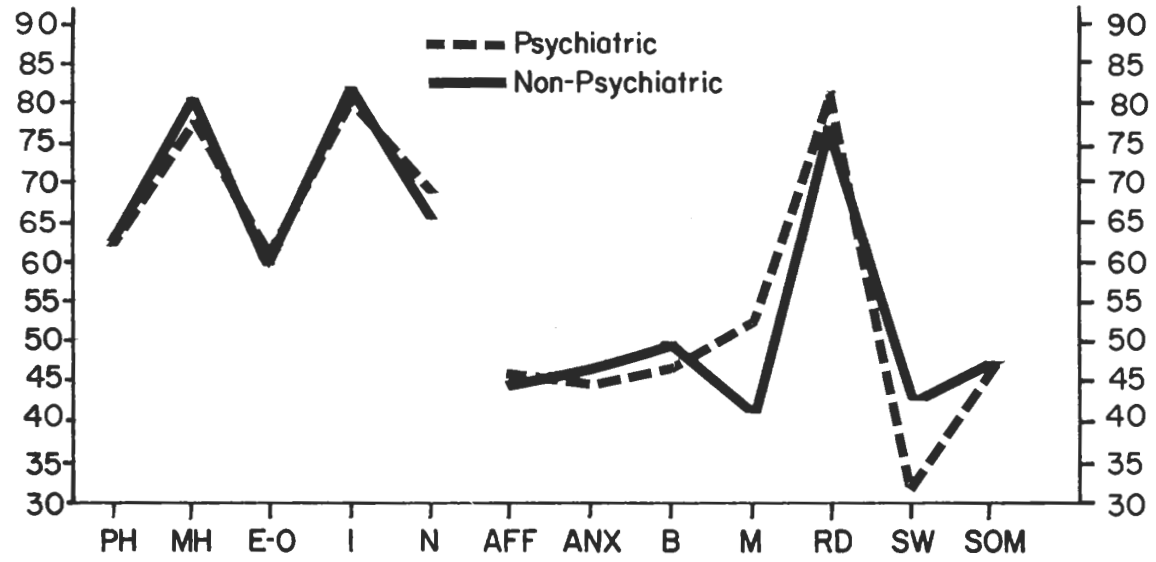
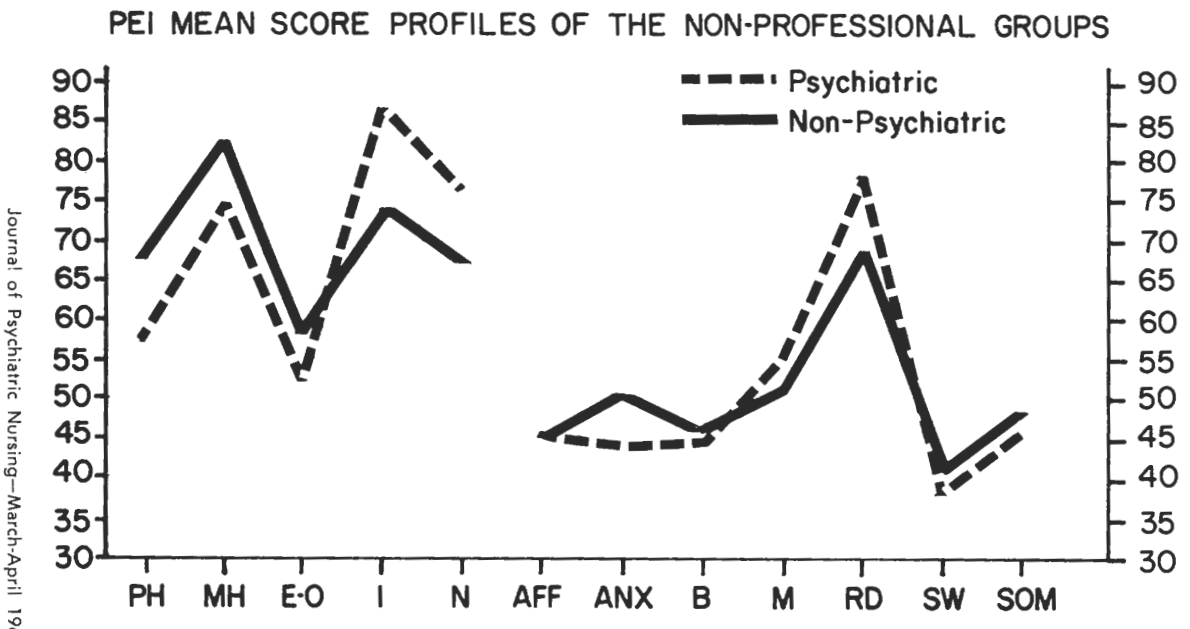
PEI MEAN SCORE PROFILES OF THE PROFESSIONAL GROUPS




PEI MEAN SCORE PROFILES OF THE NON-PROFESSIONAL GROUPS
Psychiatric
Non-Psychiatric
90
85
80
75
70
65
60
55
50
45
40
35
30
PH
MH
E-O
I
N
AFF
ANX
B
M
RD
SW
SOM

There is general agreement in the literature that one should conduct an analysis of variance before engaging in comparisons of means in a situation of non-independent means, i.e., where all comparisons are based on the same subjects. Since a test of significance using an analysis of variance is based on *all* observations available, the error term generally will be smaller, and one is less likely to reject true differences in a small-sample study.

The results of the analysis of variance indicate that there were significant overall differences between the referents, determinants, and the referent-determinant interaction at the one percent level of confidence, suggesting that the PEI is valid for the purposes used.* Of interest are the statistically significant interactions between referents and specialty (at the five percent level), between determinants and specialty (at the one percent level), and between determinants and training level (at the one percent level). The interaction between referents and training level was not statistically significant. This indicates that there was a significant difference between psychiatric and non-psychiatric nursing personnel on both referents and determinants, and there was a significant difference between professional and non-professional nursing personnel on determinants but *not* on referents.

The means on the dimensions showing significant differences were then tested using Duncan's Multiple Range Test. Results indicated that psychiatric nursing personnel, in comparison to the non-psychiatric, gave significantly greater endorsement to the non-specific referent, the mentational determinant, and the reality distortional determinant, and significantly lower endorsement to the social welfare deter-

*Copies of statistical tables and details of computation are available from the Secretary, Department of Psychiatry, University of Missouri School of Medicine, Columbia, Missouri. Please remit in advance $1.25 to cover the cost of duplication.

minant ($P=.05$ or less in all of these relationships). Psychiatric nursing personnel also gave possibly significantly greater endorsement to the interpersonal referent and possibly significantly lower endorsement to the anxiety determinant ($P = .10$ in both of these relationships). The combined group of nurses, in comparison to the combined group of technicians and orderlies, gave significantly higher endorsement to the reality distortional determinant and significantly lower endorsement to the mentational determinant ($P = .01$ in both of these relationships). Analyses of variances for each individual Q-sort were then computed with results suggesting generally good reliability of the Q-sort.

The next step was the computation of the matrix of intercorrelations among raters, followed by an hypothesis-testing factor analysis. Four factors were specified: (1) psychiatric nurses, (2) psychiatric technicians (attendants), (3) non-psychiatric nurses, and (4) non-psychiatric technicians (attendants). Results indicated that considerable overlap was present, but that differences did exist between all nurses and all attendants, and more significant differences existed between all psychiatric nursing personnel and all non-psychiatric nursing personnel.

The last procedure in data analysis consisted of the centroid factor analysis of the correlation matrix, and appropriate subsequent computations. Results indicated that a large proportion of the reliable common variance was accounted for by a factor which probably represents common attitudes found among a variety of professional personnel, since on this factor items were ranked in order of severity in a similar manner noted in previous studies sampling psychiatrists, psychologists, and psychiatric social workers (3) with the order ranging from high endorsement of reality distortional items to low endorsement of social welfare items, and with high endorsement for mental health and interpersonal referents to low endorsement for economic-occupational referents. A factor emphasizing reality distortional complaints as more severe when related to interpersonal or nonspecific referents was endorsed by persons with psychi-

atric training, and a factor emphasizing social welfare complaints as *less* severe when related to economic-occupational referents was similarly endorsed by persons with psychiatric training.

Discussion: In their total configuration, the above data may seem somewhat complicated and confusing. As one studies them, however, rather clear patterns emerge. In the first place, it is apparent that maximum concern with patients' gross failure to evaluate external reality comes as a function of increased training and experience either in general professional nursing or in specific psychiatric experience and training (whether this latter be at a professional or a non-professional levels). Ratings on this determinant of psychiatric and non-psychiatric nurses, as well as those of psychiatric technicians, were similar to those of psychiatrists, clinical psychologists, and psychiatric social workers as determined in an earlier report. However, untrained persons probably do not consider the reality distortional determinant so important: although even the non-psychiatric non-professional personnel rated this the highest of all determinants, their mean rating on reality distortional problems was significantly lower than the mean ratings of the other three groups.

Secondly, maximum endorsement of reality distortional complaints as more severe when these are either related to interpersonal referents or else are not related to *any* specific referents appears to be a function of psychiatric training, especially at the professional nursing level, and does not occur significantly in nursing personnel whose professional or non-professional experience and training is not specifically psychiatric. Similarly, psychiatric training and experience at either the professional or non-professional level appear to predispose the nursing person to consider their patients' social welfare problems to be of comparatively less clinical significance, especially when these problems are essentially economic or occupational in nature.

A secondary concern with mentational problems—those complaints expressing disturbance pertaining to intellectual

function, memory, orientation, or judgment, which frequently indicate organic brain disorder—seems to be a specific function of psychiatric training; concern with such problems is, in fact, apparently *de-emphasized in* non-psychiatric nursing training or experience. In the previous study already noted (3), it was found that psychiatric social workers, as compared to psychiatrists and psychologists, also appeared to de-emphasize the importance of mentational problems. However, all psychiatric personnel (social workers as well as psychiatrists, psychologists, nurses, and technicians) seem to be relatively less concerned with patients' problems centering about anxiety: this determinant was generally rated the least severe except for social welfare. Non-psychiatric personnel, on the other hand, endorsed the anxietal determinant with enough enthusiasm to place it in the middle range of their ratings.

What are the implications of these findings? Clearly, a patient's complaints expressing gross distortion of external reality indicate serious psychopathology; this important fact is apparently taught in specific psychiatric education and in general nursing training, but is not emphasized in the training of non-psychiatric technicians and aides. Specific psychiatric education and/or experience also brings with it an appreciation that such reality distortional complaints probably indicate somewhat *less* severe psychopathological processes when the complaints are related to specific situational factors (except when the complaints are related to interpersonal difficulties, in which case there can always be the danger of homicide or suicide). Specific psychiatric education and/or experience also seems to teach the nursing person that mentational symptoms and signs frequently indicate severe psychiatric disorders, while complaints relating to anxiety are likely to be more common and less serious in the hospital setting, and that social welfare and economic problems, too, are less likely to indicate severe psychiatric disturbance than other sorts of problems presented by patients.

These pilot studies, then, indicate that even a limited

amount of psychiatric education and/or experience confers upon the nursing personnel who are its recipients certain beneficial changes in attitudes. Not only do such psychiatrically-educated nurses and technicians tend to be less authoritarian, custodial, and autocratic in their attitudes toward on-going patient care, but they also tend to be more likely to recognize the clinical significance of various types of complaints made by their patients, whether or not those patients are being evaluated and treated on psychiatric services or on medical and surgical services. The implications for nursing education are obvious.

In the first study in this series (2), certain limitations were noted, especially those related to sampling techniques, specific tests of predictive validity, and possible difference between expressed attitudes and actual behavior. In spite of these limitations, the present studies do suggest strongly that differences in specialized nursing experience and training do affect attitudes toward care, treatment, and management of patients. Probably the use of such techniques as have been described in the studies will prove most applicable in determining the effectiveness of specific training and supervisory programs, and in screening and selection processes. Martin (1) has noted that most mental hospital attendants report attitudes related to helping, identification, or sympathy when they consider patients with psychiatric disorder. Unfortunately, as he notes, the attendants also express opinions containing contradictions as to the best methods of helping such patients. The present study suggests that competent psychiatric educational experience would be useful to both professional and non-professional personnel, in both general and psychiatric hospitals, as opening for them one road to improved care of all patients.

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