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A Study of the Relationship Between the Adjustment of Student Nurses to the School of Nursing and their Scores on the Minnesota Multiphasic Personality Inventory, the Johnson Temperament Analysis, and the Problem Check List Form for School of Nursing

Charlotte Rees Schultz

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A STUDY OF THE RELATIONSHIP BETWEEN THE ADJUSTMENT OF
STUDENT NURSES TO THE SCHOOL OF NURSING AND THEIR
SCORES ON THE MINNESOTA MULTIPHASIC PERSONALITY
INVENTORY, THE JOHNSON TEMPERAMENT ANALYSIS,
AND THE PROBLEM CHECK LIST FORM FOR
SCHOOL OF NURSING

A Thesis
Presented to
The College of Education, Graduate Division
University of Omaha

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Charlotte Rees Schultz
March 1958

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ACKNOWLEDGMENTS

The author wishes to express grateful appreciation for the valuable assistance rendered by the many persons cooperating in this study. She is particularly indebted to Frank H. German, whose constant guidance and generous help carried the entire work to its completion. To Edna A. Fagan the author is deeply indebted for helpful assistance and to Frederick R. Schultz for reading the manuscript.

C. R. S.

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CHAPTER I

THE PROBLEM AND ITS SCOPE

Need for the Study

Although all prospective student nurses applying to the Nebraska Methodist Hospital School of Nursing are required to take the Johnson Temperament Analysis, the Minnesota Multiphasic Personality Inventory, and to check the Problem Check List Form for School of Nursing, no actual value of the scores had been established. It appeared as though deviations above and below the fiftieth percentile on the Minnesota Multiphasic Personality Inventory might be predictive of adjustment problems in nursing students. On the Johnson Temperament Analysis it seemed as though a high score on the Nervous-Composed and Aggressive-Submissive traits was important in predicting the student's ability to adjust to nursing situations. It was assumed that the poorly adjusted student had more problems than the well adjusted student, although there was no way of considering how, or if the individual was able to express her problems.

Students from one other Omaha hospital school of nursing took the same battery of tests administered by the Vocational Testing Department of the University of Omaha. Mr. Herbert Larson, St. Joseph's Hospital, administered a

similar battery of tests to that hospital's incoming students. He made a study of one group of fifty student nurses, concerning the Minnesota Multiphasic Personality Inventory and their adjustment, and concluded that a high psychopathic deviate score indicated personality difficulties.

It would be helpful to the Admissions and Promotions Committee of any nursing school using these tests if there were valid statistical information indicating that the scores of these tests might point to the student's ability to adjust.

Most nursing school faculty members are unable to interpret these test scores. If more printed material were available on the validation and reliability of these tests on student nurses, faculties could use this research for in-service education so that they could better understand the student nurse with whom they are working.

In 1953 the withdrawals from the Nebraska Methodist Hospital School of Nursing indicated that more information about test results would be helpful to the Admissions Committee. The class admitted that year totaled fifty-seven admissions and sixteen withdrawals; six students did not like nursing and resigned, five failed, two resigned for health reasons, and two left to be married. In 1952 twenty-five students were admitted, two failed, and one resigned to be married. In 1954 thirty-nine students were admitted, two failed, one resigned to be married, two

resigned because they disliked nursing, and two resigned for health reasons. The following year forty-nine students were admitted, one failed, four resigned to be married, one resigned because she did not like nursing, and the resignation of one was requested because she appeared maladjusted personality-wise. In 1956 forty-three were admitted, four failed, and two resigned because they disliked nursing.

Emma Spaney¹ reported:

It is during the preclinical period that the greatest number of students leave the school, largely because of failure in theory and practice, or both, or because of inability to adjust to the complex school and residence situation.

It has been observed that the second largest percentage of withdrawals occurs during the second half of the first year, largely because of emotional and other difficulties in coping with patients, co-workers, and supervisors, which is again an adjustment problem.

The growing importance of understanding the students' problems in relation to their total life situation created a need for tests as the Problem Check List Form for School

¹Emma Spaney, "Personality Tests and the Selection of Nurses," Nursing Research (February, 1953), Vol. I, No. 3, p. 8.

of Nursing,¹ by Mary Alice Price, Luella J. Morison, and Ross L. Mooney.

It was assumed that the more information about such a check list was made available to faculties in nursing schools, the more helpful it would be in identifying the problems of student nurses. A trained observer has often realized the existence of a problem which the students did not realize existed. Supervisors have often been aided when they were able to determine that a certain problem of an individual signified a point in progression toward growth or a point toward excessive frustration. If this check list gives a clue to the student's problem world, it would assist the counselors in selecting cases for individual counseling.

The completion of an application form for admission to the school of nursing had produced information concerning the student's participation in a high school co-curricular program. This often quite brief information regarding needs and interests of the students had been substantially supplemented by information from the check lists and aided in planning the curricular and co-curricular programs for the development of the student toward desired goals.

¹Mary Alice Price, Luella J. Morison, Ross L. Mooney, Manual for Problem Check List Form for School of Nursing (Columbus, Ohio: The Bureau of Educational Research, Ohio State University, 1948).

The Problem

The purpose of this study was to determine the relationship between the scores made by student nurses on three specific tests and their adjustment in a school of nursing. The tests included were Minnesota Multiphasic Personality Inventory, Johnson Temperament Analysis, and Problem Check List Form for Schools of Nursing (adapted from Problem Check List: College Form by Ross L. Mooney), given to determine abilities in order to be accepted to the Nebraska Methodist Hospital School of Nursing. The study involved five minor problems:

1. To record the test scores of the student nurses admitted to the Nebraska Methodist Hospital School of Nursing for the five-year period, 1952 through 1956
2. To administer and record the results of the Problem Check List Form for School of Nursing on these same students
3. To define adjustment
4. To set up a questionnaire for evaluating the adjustment of these students
5. To determine the statistical correlations between the test scores.

Delimitations

The number of students included 213 student nurses admitted to the Nebraska Methodist Hospital School of nursing. The period that the test scores were studied was limited to the five years, 1952 through 1956.

The test scores studied were limited to the Johnson Temperament Analysis, Minnesota Multiphasic Personality Inventory, and the Problem Check List Form for School of Nursing.

Definitions

The student nurse as used in the study is a student in a three-year diploma program.

The word adjustment has been defined as the establishment of a satisfactory relationship between personal needs and desires and the requirements of the environment.¹ Adjustment for a student nurse is obtained when she participates in programs designed to help meet the health needs of society and the total needs of her patient, as well as experiencing personal satisfaction and maintaining good citizenship and professional growth.² In addition, she has

¹Webster's New Collegiate Dictionary (Springfield, Massachusetts: G. & C. Merriam Company, 1956), p. 12.

²Nebraska Methodist Hospital School of Nursing Bulletin, Omaha, Nebraska, 1956-57, p. 15.

acquired information to develop understanding of the relationship of facts to each other and to life situations, and has developed intellectual and manipulative skills used in relation to facts. She has established socially desirable attitudes and assumed responsibility for her own learning. She must be able to identify, analyze, solve problems, and be self-directing.¹

The schools of basic professional programs are the three-year diploma nursing schools.

Standard deviation is the square root of the variance.²

Variable is a quantity which may assume a succession of values or simply that which varies.³

Phi coefficient is the correlation for measuring the relationship between two variables that are truly dichotomous.⁴

Dichotomy means separation into two parts; division.⁵

¹National League for Nursing Criteria for Accrediting Schools of Nursing, New York, New York, 1957.

²Allen L. Edwards, Statistical Analysis for Students in Psychology and Education (New York: Rinehart & Company, Inc., 1946), p. 37.

³Ibid., p. 23.

⁴Ibid., p. 127.

⁵Joseph Devlin (ed.), Webster's Giant Illustrated Approved Dictionary (New York: World Publishing Company, 1943), p. 150.

Historical Review

From 1939 until 1948 the Nebraska Methodist Hospital School of Nursing used the National League for Nursing Pre-Nursing and Guidance Test Service. The areas tested were intellectual capacity, educational and cultural background, and personality and interest appraisal.

Since 1949 the Nursing School has required every student applying for admission to take a battery of tests administered by the Industrial Testing Bureau of the University of Omaha. The tests given were the Personnel Test by Wonderlic, Ohio College Association Scholastic Aptitude Test, Michigan Vocabulary Profile Test, Occupational Interest Inventory, Gordon's Fraction Test, Johnson Temperament Analysis, and Minnesota Multiphasic Personality Inventory. The last two mentioned were the tests considered in the study.

The Problem Check List Form for School of Nursing has been given to every freshman class, mid-term in the Mental Hygiene course, since 1951.

Description of Tests

The Johnson Temperament Analysis was devised by Roswell H. Johnson, University of Pittsburgh, and is a measure of certain fundamental characteristic behavior tendencies. It is an inventory for measuring temperament,

organized around nine behavior tendencies which include the following traits:

1. Nervous-Composed; the first word refers to high percentile, and the second word refers to low percentile. Nervous is a trait described as restlessness, fidgeting, tenseness, sleeplessness, tendency to worry, and faulty muscular control. A high nervous score lowers one's social acceptability and increases fatigue from a given amount of effort.
2. Depressive-Gay hearted; a high depressive score may indicate health problems, and percentiles higher than 60 need investigation.
3. Active-Quiet scores indicate introvertive or extrovertive nature.
4. Cordial-Cold measures expressive warm-heartedness.
5. Sympathetic-Hard boiled indicates the empathy of the individual, and a high score is regarded as an asset in the service professions.
6. Subjective-Objective; high scores tend to produce bad human reactions, and low scores show too low emotionality for good human relations.
7. Aggressive-Submissive; a high score is indicative of supervisory abilities.
8. Critical-Appreciative; high scores indicate trouble makers and high turnover cases.

9. Self mastery-Impulsive; high scores are frequently found in perfectionists who have poor human relations; low scores may indicate high absenteeism and dishonesty. It was stated in a review that the disadvantage of this test was that it did not represent a distinct theory but resembled more normal types of behavior.¹

Froehlich and Darley² reported that more research has been done on the Minnesota Multiphasic Personality Inventory than any other test of its type and that it has great potential value in guidance situations as well as in psychological clinics. They reported the reliability test retest reliability coefficients range from .71 to .83. The separate scales appear to yield scores which bear a significant relationship to psychiatric diagnosis.

The scores on the Minnesota Multiphasic Personality Inventory were reported in standard scores rather than percentiles; however, 50 is the point of average. The lie, question, and validity scores indicate whether or not one has obtained an accurate picture of the individual. Nine types of behavior were evaluated in this test:³

¹Oscar Krisen Buros (ed.), The Third Measurement Yearbook (New Brunswick, Connecticut: Rutgers University Press, 1949), p. 1275.

²Clifford P. Froehlich and John G. Darley, Studying Students (DeKalb, Illinois: The Geographical Publishing Company, 1952), pp. 322-323.

³Starke R. Hathaway and Paul E. Meeke, An Atlas for the Clinical Use of the M.M.P.I (Minneapolis: The University of Minnesota Press, 1951), pp. 1-2.

1. The hypochondriasis scale is a measure of amount of abnormal concern about bodily functions.
2. The depression scale indicates poor morale with a feeling of uselessness and inability to assume a normal optimism with regard to the future.
3. A high score on the hysteria scale may indicate that under stress the individual may solve problems confronting him by development of symptoms.
4. The psychopathic deviate scale measures the similarity of the subject to a group of persons whose main difficulty lies in their absence of deep emotional response, their inability to profit from experience, and the disregard of social mores.
5. The interest scale measures the tendency toward masculinity or femininity of interest patterns. A high score indicates a deviation of the basic interest pattern in the direction of the opposite sex.
6. A high score on the paranoia scale indicates paranoid tendencies characterized by suspiciousness, oversensitiveness, and delusions of persecution.
7. The psychasthenia scale measures the similarity of the subject to psychiatric patients who are troubled by phobias and compulsive behavior.
8. The schizophrenia scale measures the similarity of the subject's responses to those patients who are

characterized by bizarre and unusual thoughts or behavior.

9. The hypomania scale measures the personality factors characteristic of persons with marked over-productivity in thought and action.

A team of medical doctors reported administering the Minnesota Multiphasic Personality Inventory to 479 patients admitted to the Out-patient Department at the University of Minnesota in 1954 in Scope.¹ There seemed to be little doubt that the test scores could aid the physician in diagnosing primary neurotic diseases. It appears the same would be true if the test scores were heeded in relation to admission tests--the student could be referred to treatment and avoid failure in the nursing school.

According to the Manual accompanying the Problem Check List Form for School of Nursing,² the test can be given for the following functions:

To increase instructor understanding in regular classroom teaching.

To provide an opening by which an instructor can establish an individual and personal relation with each of her students.

To enable special analysis of students who are hard to "reach" or understand.

¹Scope (Kalamazoo, Michigan: Physician News Service, Inc., January, 1957).

²Mary Alice Price, Luella J. Morison, Ross L. Mooney, Problem Check List Form for School of Nursing (Columbus, Ohio: Bureau of Educational Research, Ohio State University, 1948).

To facilitate guidance interviews.

To prepare students for an interview by giving them an opportunity to review and summarize their own problems and see the full range of personal matters they might discuss with their counselor.

As a basis for group guidance and orientation programs.

To stimulate each student to the quicker recognition and analysis of her needs.

To indicate discussion topics and group activities which are related to the personal interests and needs of the students in any given group.

To make group surveys.

To find out what students are thinking about in their personal lives.

To help locate students who want and need counseling or other personal aid (on health, school, home, social, psychological, or other personal problems).

To help locate the most prevalent problems expressed within a student body as a basis for new developments and revisions in the curricula and guidance programs of a school.

To conduct research on the problems of the students in schools of nursing.

To show changes and differences in problems in relation to age, social background, school ability, interest patterns, and the like.

To discover clusters of problems which tend to be associated with particular problems.

The Form for Schools of Nursing is an adaptation of the Problem Check List, College Form, developed by Ross L. Mooney at the Bureau of Educational Research, Ohio State University. The adaptation was made by Mary Alice Price and Luella J. Morison.

The check list is designed primarily as an aid to counseling: to acquaint the counselor with topics that may be discussed, to help the student review his own problems, and to give counselors some preliminary notion as to matters of concern. The list is not designed to produce scores; it cannot be assessed with regard to the usual concepts of reliability and validity. It is useful in referral of cases to special programs, but not as having diagnostic significance. If the list were to be used for research purposes, it would be desirable to supply item frequencies for various samples.¹

The inventory is not scored; however, the authors do suggest counting the number of items which are marked in each area. Concerning reliability, Froehlich and Darley said:

For a sample of 116 college students, the frequency with which each item was marked on the first administration was correlated with the frequency with which the same items were marked on a second administration. A coefficient of .93 was obtained.

Validity: Studies reviewed in the manual indicate the check-list elicits a reasonably accurate report of what the student feels his problems are.

Students who indicated that they had a great many problems also had a marked desire for counseling.

¹Oscar Kriese Buros, The Fourth Mental Measurement Yearbook (Highland Park, New Jersey: The Gryphon Press, 1953), p. 73.

Norms: No norms are presented in the manual. Users are urged to study the distribution of problems among their own students.¹

Method

Sources of information from students tested were the pre-entrance psychological tests given prospective nursing students in 1952, 1953, 1954, 1955, and 1956; namely, the Johnson Temperament Analysis, the Minnesota Multiphasic Personality Inventory, and the Problem Check Form for School of Nursing. Test results were recorded by classes.

The Johnson Temperament Analysis and the Minnesota Multiphasic Personality Inventory were a portion of a battery of tests administered by the Industrial Testing Bureau of the University of Omaha before the student was accepted to the nursing program. The Problem Check List Form for School of Nursing was given to the freshmen in the Mental Hygiene course taught at the hospital in the middle of the first semester. The lists were used in the portion of the course concerned with problem solving.

The normative-survey approach is appropriate wherever the objects of any class vary among themselves.² This method

¹Freehlich and Darley, op. cit., pp. 323-324.

²Carter V. Good, A. S. Barr, and Douglas E. Scates, The Methodology of Educational Research (New York: Appleton-Century-Crofts, Inc., 1953), p. 287.

was used in the form of a questionnaire to ascertain the prevailing conditions. In order to establish a criterion for the "panel of experts" marking the questionnaire, it was necessary to define "adjustment" as the term applied to the evaluation of student nurses considered in the study. The philosophy of the Nebraska Methodist Hospital School of Nursing and the standards established by the National League for Nursing for Accrediting Schools of Nursing were used as criteria for the definition.

The questionnaire for the "panel of experts" consisted of a list of names of the 213 students admitted to the Nebraska Methodist Hospital School of Nursing in 1952, 1953, 1954, 1955, and 1956; a definition of "adjustment"; and five columns for checking degree of adjustment. It was given to a "panel of experts" which consisted of eight selected faculty members who knew and had observed the students concerned in the study.

The "panel of experts" held the following positions:

1. A director of nursing who had a Master of Arts degree and eighteen years' experience in nursing service and nursing education.
2. An assistant director of nursing education who had a Bachelor of Science degree, course work completed for a Master of Science degree, and ten years' experience in nursing service and nursing education.

3. An assistant director of student health with college credits and twenty years' experience in nursing service and nursing education.
4. An assistant director of nursing service who had a Bachelor of Science degree and ten years' experience in nursing service.
5. A dynamics of nursing instructor who had a Bachelor of Science degree and ten years' experience in nursing service and nursing education.
6. A clinical instructor working toward a Bachelor of Science degree and five years' experience in nursing service and nursing education.
7. A headnurse who had twenty years' experience in nursing service.
8. A headnurse who had five years' experience in nursing service.

The twenty-nine students who were marked on the questionnaire as adjusting "better than average or very good," and the thirteen marked consistently "poorly or below average" were designated as two dichotomous variables. The next task was to determine the degree of association between the two variables relating to the test scores made on the

Johnson Temperament Analysis and the Minnesota Multiphasic Personality Inventory. The "phi coefficient" seemed suited to this task because it was applicable to truly dichotomous distributions;¹ that is, well adjusted-poorly adjusted.

¹Allen L. Edwards, Statistical Analysis for Students in Psychology and Education (New York: Rinehart and Company, Inc., 1946), p. 125.

CHAPTER II

PREVIOUS RESEARCH

Professional publications in the field of nursing and education have contained only a few articles that appear to approach the scope of the testing conducted in the study.

The first recorded action in this field appeared in 1932 in the form of a report of a round table discussion at the American Nurses Association Biennial Convention held that year. On the subject, "Quality versus Quantity in Student Body," Dr. Joseph W. Yarborough, Professor of Psychology, Southern Methodist University, stated that:

The method of psychological testing lends itself to the selection of students for nursing education as it does to the selection of students for industrial, legal, or medical training.¹

At this time the aptitude test for student nurses was still in its experimental state. There was not sufficient data for conclusions. The participants in the round table discussion agreed that revisions and standardizations were necessary before the tests could become a useful criterion for predicting success in nursing education.

¹Joseph W. Yarborough, "Quality versus Quantity in Student Body," The American Journal of Nursing (July, 1932), p. 601.

Potts,¹ in 1936, reported a survey of dropouts in nursing schools in New York State (1929-32) and found that 37% of students admitted did not complete the course. In 1932 New York required high school graduation as a state requirement for admission to a school of nursing. In 1934 and 1935 many of the more progressive schools in New York gave psychometric tests to aid in the selection of students. The specific names of these tests were not given but described as reading ability test, verbal intelligence tests, achievement tests, and personality measures.

Several articles have been written about the Potts Guidance Pre-Test for Student Nurses and the Nursing Aptitude Testing Bulletin Service by C. H. Smeltzer. These tests were constructed for pre-nursing students; however, not as much research has been done on these tests as the ones used in general education. The sampling was smaller and, consequently, the validity questionable. Reading ability, interest patterns, and personality areas are tested in both test batteries.

In 1940 the American Journal of Nursing² reported 258 nurses, representing 113 different agencies and

¹Edith Margaret Potts, R. N., "Eliminating the Unfit," The American Journal of Nursing (September, 1936), p. 1096.

²The American Journal of Nursing (November, 1940), p. 943.

organizations in 21 states, registered for a three-day institute of administrators, teachers, and supervisors. The general theme of the institute, sponsored by the Department of Nursing Education at the University of Chicago, was "Tests and Measurements in the Improvement of Education." No mention was made of specific tests.

Morison¹ described the device for ascertaining problems of student nurses in the article, "A Problem Check List--Its Use in Student Guidance," printed in 1947. Students from six schools, totaling 321, were asked to mark this check list. The average was 35 problems per student, and most problems were in the area of social and recreational activities.

Cardew² reported a study of 1300 students admitted to a nursing school from 1932-42. Five hundred students withdrew from the school; 166 were failures in theory. She concluded that there was a high degree of relationship between the lack of ability to carry classroom courses satisfactorily and the lack of ability to give satisfactory

¹Luella J. Morison, R. N., "A Problem Check List--Its Use in Student Guidance," The American Journal of Nursing (April, 1947), Vol. 47, No. 4, p. 248.

²Emily C. Cardew, R. N., "Evaluating Admission Requirements," The American Journal of Nursing (March, 1949), Vol. 49, No. 3, p. 179.

nursing care. Adherence to both the highest quarter in the high school class and ranking above the fourth decile on the psychological tests would have eliminated all but twenty of the failing students. There were thirteen students who fell below these levels, on both the high school rank and psychological test, who were successful; they gave evidence of other factors, such as motivation, maturity, et cetera, which may have been responsible for success.

In 1951 The American Journal of Nursing¹ reported a validation study of the pre-nursing and guidance tests given by the National League for Nursing. The test battery consisted of the following five tests:

1. American College on Education Psychological Examination for College Freshmen.
 - a) Quantitative
 - b) Linguistic
 - c) Total
2. Cooperative Reading Comprehension Test, higher Level--Part II Reading.
 - a) Speed of comprehension
 - b) Level of comprehension

¹The American Journal of Nursing (March, 1951), Vol. 51, No. 3, pp. 201-202.

3. Mathematics (adapted from Cooperative Mathematics Test for Grades 7, 8, and 9).
4. Cooperative General Academic Test 11: A test of general proficiency in the field of natural sciences.
5. Cooperative General Culture Test--Part 11 History of Social Studies.

The concluding statement indicated perseverance and strong motivation might do much to offset relatively poor scores.

Mildred Katzell,¹ Director of National League for Nursing's Evaluation Tests for Selection and Guidance Service, reported in 1956 that for applicants applying for admission to schools of basic professional programs, five separate tests were given two or three times a year. The tests were general scholastic aptitude, reading, mathematics, science, and history and social studies. The purpose of these examinations was to help faculties of basic professional programs work with applicants to determine whether the program was suited to their capacities.

¹Mildred Katzell, "The N. L. N.'s Test Services," The American Journal of Nursing (January, 1956), Vol. 56, No. 1, p. 59.

In an experimental Human Relations Seminar for Nursing Students, conducted at Newton-Wellesley by Rosenberg and Fuller¹ in Newton Lower Falls, Massachusetts, the Problem Check List for Schools of Nursing was administered to both the control and the pilot class in an effort to measure objectively the effect that the seminar might have on the understanding of the pilot class. In the control class 37.5% of the members thought the director of the school lacked understanding of the students' problems, and 60% of them thought supervisors did not appreciate students. In the pilot class 13.2% of the students thought the director lacked understanding, and only 28.9% believed supervisors were unappreciative.

In a workbook written by Carter and McGinnis,² an assignment is made on problem solving using the Mooney Problem Check List for Student Nurses--the purpose being to define the problem and work out solutions carrying out the principles of good mental health.

¹Pearl P. Rosenberg and Myrtice L. Fuller, "Human Relations Seminar for Nursing Students," Nursing Outlook (December, 1957), Vol. 5, No. 12, p. 724.

²Homer L. J. Carter and Dorothy J. McGinnis, Building a Successful College Career (Dubuque, Iowa: W. C. Brown Co., 1950), p. 54.

In The Third Mental Measurements Yearbook¹ the Johnson Temperament Test is described as an inventory for measuring temperament organization around nine behavioral tendencies considered important in the light of Dr. Johnson's family relation experiences. To avoid error by forcing the client to answer yes or no, he is advised to rate the subject in the highest 40%, middle 20%, or lowest 40%. No single question is used to measure two traits. According to this review, the disadvantage is that it does not represent a distinct theory but resembles more normal type of behavior. At that time the validity was questioned because of the sampling. Ellis, the reviewer, stated that the test warranted further use and research as to its validity for use in marital counseling.

According to the Manual of the Johnson Temperament Analysis,² this temperament test may be used as:

1. A tool to be used along with others in vocational guidance and occupational selection.
2. The diagnosis of some of the principal factors in: a) unhappy marriages, b) problem youth, c) faulty parent-child relationships, d) exaggerated depressions, feelings of inferiority, or faulty social manners.

¹Oscar Krisen Buros, The Third Mental Measurements Yearbook (New Brunswick, Connecticut: Rutgers University Press, 1949), pp. 62-63.

²Roswell H. Johnson, Manual of the Johnson Temperament Analysis (Los Angeles, California: California Test Bureau, 1944), p. 3.

3. An aid to the psychiatrist, psycho-neurologist, or clinical psychologist, in certain diagnoses, which gives more quantitative answers on more important traits than the Rorschach or other projective methods. Also in measuring changes after treatments.
4. In schools, to detect individuals in need of personal counseling.
5. Mate selection and courtship quandaries.
6. Treatment of temperamental faults by helping the individual to face realities and relieve inferiority feelings.
7. In criminology, to aid in predicting the probability of future criminal conduct.

The revised edition of the Minnesota Multiphasic Personality Inventory was reviewed in the Journal of Clinical Psychology¹ in 1951.

The Minnesota Multiphasic Personality Inventory was found helpful as part of a battery for the vocational diagnosis of disabled veterans applying for rehabilitation.²

Schmidt,³ in his article, "Notes on the Minnesota Multiphasic Personality Inventory," discussed the K-factor in the test. Published at the same time was an article by

¹Journal of Clinical Psychology, 7:387 0'51.

²Lindsey R. Harmon and Daniel N. Wiener, "Use of the Minnesota Multiphasic Personality Inventory," Journal of Applied Psychology, 29:132-141, 1945.

³Hermann O. Schmidt, "Notes on the Minnesota Multiphasic Personality Inventory," Journal of Clinical Psychology, 12:337-42, S-0'48.

Jerome M. Schneek,¹ entitled "Clinical Evaluation of the F Scale on the Minnesota Multiphasic Personality Inventory."

Hathaway and Meeke² in their book, An Atlas for the Clinical Use of the M.M.P.I., have presented a summary of psychiatric cases arranged by their coded profiles on the Minnesota Multiphasic Personality Inventory. Reading the cases suggested that the profiles grouped them according to their main behavioral trends.

In conclusion it was observed that most articles printed in professional publications concerned with testing nurses branched into evaluation techniques of the nurse as a student, test construction, and the preparation of state board examinations.

¹Jerome M. Schneek, "Clinical Evaluation of the F Scale on the Minnesota Multiphasic Personality Inventory," Journal of Clinical Psychology, 104:440-2 Ja'48.

²Stark R. Hathaway and Paul E. Meeke, An Atlas for the Clinical Use of the M.M.P.I. (Minneapolis: The University of Minnesota Press, 1951), p. 3.

CHAPTER III

ANALYSIS OF DATA

The Johnson Temperament Analysis, the Minnesota Multiphasic Personality Inventory, and The Problem Check List Form for School of Nursing considered in the study are given to student nurses early in their program. This provides teachers and supervisors an insight and improved understanding of the student as an individual in order that they might help the student gain understanding of her own behavior and adjust more readily and easily to her new environment. An analysis of the scores of the three tests was made on the twenty-nine well adjusted and the thirteen poorly adjusted as they were rated on the questionnaire by the panel of eight experts to investigate the following questions:

- a) What problem areas are of most concern?
- b) What are the components of the ratings?
- c) What is the relationship between the scores of the two groups?

According to the Problem Check List Form for School of Nursing, problems appeared more prevalent in the areas of Health and Physical Development, Social and Recreational Activities, Social-Psychological Relations, Personal-Psychological Relations, and Adjustment to School of Nursing as illustrated on Graph 1 and Graph 2.

Problems circled		Total problems checked	
Health and Physical Development			
1952	4%		15%
1953	3%		11%
1954	2%		13%
1955	3%	9%	
1956	2%		13%
Finances and Living Conditions			
1952	7%	4%	
1953	8%		7%
1954	1%		8%
1955	3%	3%	
1956	1%		7%
Social and Recreational Activities			
1952	2%		12%
1953	2%		12%
1954	3%		17%
1955	2%		10%
1956	1%	6%	
Social-Psychological Relations			
1952	3%		11%
1953	2%		8%
1954	3%		13%
1955	2%		9%
1956	2%		11%
Personal-Psychological Relations			
1952		6%	11%
1953	3%		8%
1954		4%	15%
1955		4%	9%
1956	1%		10%

GRAPH 1. MEAN SCORES MADE BY FIVE CLASSES OF STUDENT NURSES ON THE PROBLEM CHECK LIST FORM FOR SCHOOL OF NURSING. THE PROBLEMS THAT WERE TROUBLE-SOME TO THE STUDENT WERE UNDERLINED, THOSE THAT WERE OF MOST CONCERN WERE CIRCLED.

Problems circled		Total problems checked	
Courtship, Sex, and Marriage			
1952	.1%		6%
1953	.8%		5%
1954	.1%		7%
1955	1%		4%
1956	.7%		4%
Home and Family			
1952	.7%	2%	
1953	.8%	3%	
1954	.7%		5%
1955	.5%	1%	
1956	1%		6%
Morals and Religion			
1952	.1%	2%	
1953	.9%		4%
1954	1%		5%
1955	.2%	2%	
1956	.02%		4%
Adjustment to School of Nursing			
1952		7%	
1953		5%	
1954		6%	
1955		5%	
1956	1%		
	1952		15%
	1953		15%
	1954		20%
	1955	12%	
	1956	6%	

GRAPH 2. MEAN SCORES MADE BY FIVE CLASSES OF STUDENT NURSES ON THE PROBLEM CHECK LIST FORM FOR SCHOOL OF NURSING.

Problems circled		Total problems checked	
The Future: Professional and Educational			
1952	.7%	4%	
1953	.8%		7%
1954	1%		8%
1955	.5%	3%	
1956	.9%		7%
Curriculum and School Program			
1952	.1%	2%	
1953	.5%	4%	
1954	.6%	3%	
1955	.1%	3%	
1956	1%		6%
Adjustments to Human Relationships in Nursing			
1952	.1%	1%	
1953	.8%	3%	
1954	.3%	1%	
1955	.1%	1%	
1956	1%		6%
Adjustments to Administration of Nursing Care			
1952	1%	3%	
1953	.9%		5%
1954	.6%	4%	
1955	.7%	2%	
1956	.06%	4%	

GRAPH 3. MEAN SCORES MADE BY FIVE CLASSES OF STUDENT NURSES ON THE PROBLEM CHECK LIST FORM FOR SCHOOL OF NURSING.

Because of the percentage of students indicating problems in the areas of Adjustment to School of Nursing, every effort was made to improve the orientation program for freshmen in 1955 and 1956. The graph indicated a decrease to twelve per cent and six per cent for these years.

The scores on the Problem Check List Form for School of Nursing were not adaptable to statistical treatment. The students rated as "poorly adjusted" marked twice as many problems as those rated "well adjusted," as indicated on Table I.

The mean scores made on the Johnson Temperament Analysis and the Minnesota Multiphasic Personality Inventory of the total group of 213 students were compared with the twenty-nine marked "well adjusted" and the thirteen marked "poorly adjusted." On the Johnson Temperament Analysis the poorly adjusted group scored more nervous, more depressed, more quiet, less friendly, more subjective, and more aggressive. On the Minnesota Multiphasic Personality Inventory the three groups were quite comparable. This is illustrated in Table II. Three of the forty-two scored in the "improvement urgent" category of the Johnson Temperament Analysis; the remainder of the total group scored in the test publisher's norms for similar groups on both tests.

TABLE I

MEANS OF WELL ADJUSTED AND POORLY ADJUSTED ON THE
PROBLEM CHECK LIST FORM FOR SCHOOL OF NURSING

Problem Areas	Well Adjusted Mean	Poorly Adjusted Mean
Health and Physical Development	2.7	4.8
Finances and Living Conditions	.9	3.4
Social and Recreational Activities	1.7	3.8
Social-Psychological Relations	2.0	4.0
Personal-Psychological Relations	1.7	4.8
Courtship, Sex, and Marriage	.9	1.0
Home and Family	.5	2.5
Morals and Religion	.6	1.9
Adjustment to Nursing School	2.3	6.1
Professional and Educational Future	1.6	2.9
Curriculum and School Program	.8	1.5
Adjustment to Human Relations in Nursing	.3	1.2
Adjustment to Administration of Nursing School	1.0	1.7

TABLE II

A COMPARISON OF THE MEANS MADE BY THE TOTAL GROUP ON JOHNSON TEMPERAMENT ANALYSIS AND THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY

	JOHNSON TEMPERAMENT ANALYSIS			MINNESOTA MULTIPHASIC PERSONALITY INVENTORY			
	Total Group	Means Well Adj.	Poorly Adj.	Total Group	Means Well Adj.	Poorly Adj.	
Nervous-composed	21.3	29	13	Question	21.3	29	13
Depressed-gay	22.8	20.3	39.3	Life	50	50	50
Active-quiet	32.2	31.8	46.0	Validity	54.5	57.6	53.6
Cordial-cold	70.7	71.0	60.5	K	50.2	48.2	49.8
Sympathetic-Hard boiled	72.7	80.0	59.0	Hypochondriasis	59.8	64.4	61.1
Subjective-Objective	86.5	91.1	82.8	Depression	46.4	48.8	49.5
Aggressive-Submissive	33.0	27.3	41.5	Hysteria	44.5	45.5	48.2
Critical-Appreciative	66.2	69.8	74.0	Psychotic Deviate	50.7	53.6	51.5
Self mastery- Impulsive	31.9	27.2	30.6	Int. Masc. Fem.	53.9	54.5	56.9
	82.2	86.6	79.7	Paranoia	51.1	52.3	52.6
				Psychasthenia	52.1	53.9	52.9
				Schizophrenia	50.0	50.4	52.6
				Hypomania	51.7	53.2	53.1
					52.0	52.3	52.3

Comparing the Johnson Temperament Analysis by classes for the five-year period, the scores were consistently high in the areas of Active-Quiet, Cordial-Cold, Sympathetic-Hard boiled, Aggressive-Submissive, and Self mastery-Impulsive. This was illustrated in Graph 4 and Graph 5.

This was understandable in most areas. One of the reasons given for choosing nursing by prospective students in their initial interviews was that they preferred to be moving about in their work rather than being confined to a desk.

The word "hospital" originated from a connotation of hospitality, and it has been found necessary for a nurse to make the patient and his family feel welcome and as comfortable as possible. Through conferring with this group, most nurses were found to be aware of the importance of this and wanted to be cordial.

According to the Johnson Temperament Analysis Manual¹ for interpreting this test, "sympathetic-hard boiled" indicates the empathy of the individual. A high score is regarded as an asset in the service professions.

¹Johnson, loc. cit.

Nervous-Composed	
1952	26.6
1953	28.7
1954	23.9
1955	20.8
1956	20.8
Depressive-Gay	
1952	28.5
1953	37.3
1954	38
1955	29.6
1956	27.7
Active-Quiet	
1952	67.2
1953	60.
1954	69.1
1955	72.2
1956	85.3
Cordial-Cold	
1952	71
1953	63.7
1954	72.2
1955	76.9
1956	80.1
Sympathetic-Hardboiled	
1952	90.9
1953	85.6
1954	84.6
1955	84.2
1956	89.3
Subjective-Objective	
1952	37.2
1953	35
1954	34
1955	24.3
1956	34.6

GRAPH 4. MEAN SCORES MADE BY FIVE CLASSES OF STUDENT NURSES ON THE
JOHNSON TEMPERAMENT ANALYSIS.

	Class	Mean																		
		Aggressive-Submissive																		
1952																				68.7
1953																				61.4
1954																				66.4
1955																				67.6
1956																				67.1
		Critical-Appreciative																		
1952																				34.4
1953																				30.7
1954																				30.3
1955																				25.5
1956																				34
		Self mastery-Impulsive																		
1952																				82.8
1953																				80.2
1954																				79.7
1955																				84.7
1956																				83.8

GRAPH 5. MEAN SCORES MADE BY FIVE CLASSES OF STUDENT NURSES ON THE
JOHNSON TEMPERAMENT ANALYSIS.

Several psychologists have called attention to the fact that the aggressive test scores were consistently high for nurses. No published material has been found to substantiate this impression. Frederick H. Allen¹ defined aggression as follows:

The capacity to aggress is the most fundamental characteristic of all living matter. It means "to reach out." Living matter by aggressing is brought into a functioning relation to other living matter upon which it is dependent and from which nourishment is drawn to sustain life. It is a truism to say that life cannot exist apart from life.

In reference to the high impulsive scores, most eighteen-year olds are impulsive. It is considered a part of the personality maturation process.

The class mean on the Minnesota Multiphasic Personality Inventory did not vary more than eight points on any score except validity where there was a variance of thirteen points. It was evident on Table II that the largest deviation in means was four and six-tenths made on the K score. The deviations on the means of the "well adjusted" and the "poorly adjusted" were negligible.

The questionnaire was marked by eight faculty members who had known and worked with the 213 students considered in the study. Twenty-nine of the 213 students listed in

¹Frederick H. Allen, "Problems of the Teenager," Understanding Your Patient, ed. Samuel Liebman (Philadelphia: J. B. Lippincott Company, 1957).

the questionnaire were marked consistently "better than average" or "very good," and thirteen of the same number were marked consistently "poorly" or "below average."

Of the thirty-two students who resigned from the nursing school, fourteen were marked "average" by at least two of the faculty marking the questionnaire; seventeen were marked "poorly" by more than half. Thirty-one students of the 213 considered in the study maintained an A-B average in theory. Of these thirty-one students, twenty were marked as adjusting "better than average" or "very good," by seventy per cent of the faculty marking the questionnaire. The twenty-five students whose records indicated a D theoretical average, six were marked "poorly" in the adjustment area by seventy-five per cent of the faculty.

The statistical treatment adaptable to the scores made by the two dichotomous variables, the "well adjusted" and the "poorly adjusted" on the Johnson Temperament Analysis was the phi correlation. If for a sample of forty-two, the correlation is .298 to .385 it is significant at the five per cent level; at .385 and above it is significant at the one per cent level. This means the size of the correlation coefficient is not due to mere random sampling; it is significant. In only two categories were the correlations significant. In the Nervous-Composed the phi correlation was .355 which was significant at the five per cent

level, and in the Cordial-Cold the correlation was .394 which was significant at the one per cent level.

The results of the phi correlation on the temperament traits tested by Johnson Temperament Analysis are illustrated on Table III.

TABLE III
PHI CORRELATIONS OF JOHNSON TEMPERAMENT ANALYSIS TRAITS

Trait	Phi Correlation	Significance
Nervous-Composed	.355	at 5 per cent level
Depressed-Gay	.261	none
Active-Quiet	.175	none
Cordial-Cold	.394	at 1 per cent level
Sympathetic-Hard boiled	.238	none
Subjective-Objective	.277	none
Aggressive-Submissive	.098	none
Critical-Appreciative	.054	none
Self mastery-Impulsive	.176	none

It is possible that more valid results might have been obtained if a larger sampling had been used.

Although the phi correlation of the "well adjusted-poorly adjusted" scores made on the Johnson Temperament Analysis was not significant, the test is a valuable tool for counseling individuals. It helps to diagnose some of the principal factors in exaggerated depressions, feelings of inferiority, or faulty social manners. Also it is an aid in the treatment of temperamental faults by helping the individual to face reality and sometimes relieve inferior feelings.

The Johnson Temperament Analysis was the only test of the three considered in the study where the scores were significant of statistical treatment. To determine the degree of association between the two dichotomous variables, "well adjusted" and "poorly adjusted," the phi correlation seemed to be suited to the task.

Edwards¹ has stated, "The most valuable measure of variability is the 'standard deviation,' which is computed from the squares of the deviations from the mean and is represented by the symbol σ ."

The "standard deviation" ($\sigma = \sqrt{\frac{\sum d^2}{N}}$) was computed on the scores of the two groups on each category of the

¹Edwards, op. cit., p. 48.

Johnson Temperament Analysis: Nervous-Composed, Depressed-Gay, Active-Quiet, Cordial-Cold, Sympathetic-Hard boiled, Subjective-Objective, Aggressive-Submissive, Critical-Appreciative, and Self mastery-Impulsive. The phi coefficient formula

$$r_{Pbi} = \frac{(M \text{ of well adj.} - M \text{ of poorly adj.}) \times \sqrt{N \text{ of WA} \times N \text{ of PA}}}{\sigma \times N}$$

was then applied to determine the correlation of the scores to determine their criteria for predicting adjustment.

Raw Data

Phi correlation formula:

$$\frac{(M \text{ of well adj.} - M \text{ of poorly adj.}) \times \sqrt{N \text{ of W.A.} \times N \text{ of P.A.}}}{\sigma \times N}$$

$$N \text{ of well adjusted} = 29$$

$$N \text{ of poorly adjusted} = 13$$

$$\text{Sq. root of } 29 \times 13 = 19.416$$

$$\text{Standard deviation} = \frac{\text{sum of deviations squared}}{\text{total number, } N}$$

$$N = 42$$

Calculation for Critical-Appreciative trait on

Johnson Temperament Analysis:

$$30.6 - 27.2 \times 19.416 = 66.014$$

$$\sigma = 29.138 \times 42 = 1223.796$$

$$66.014 \div 1223.796 = .054$$

$$r_{Pbi} = .054$$

Calculation for Aggressive-Submissive trait on the
Johnson Temperament Analysis:

$$74.0 - 69.8 \times 19.416 = 81.5472$$

$$\sigma = 19.875 \times 42 = 834.750$$

$$81.5472 + 834.750 = .098$$

$$rPbi = .098$$

Calculation for Self-mastery - Impulsive trait on
the Johnson Temperament Analysis:

$$86.6 - 79.7 \times 19.416 = 133.9704$$

$$\sigma = 18.111 \times 42 = 760.662$$

$$133.9704 + 760.662 = .176$$

$$rPbi = .176$$

Calculation for Cordial-Gold trait on the Johnson
Temperament Analysis:

$$80.0 - 59.0 \times 19.416 = 407.736$$

$$\sigma = 24.658 \times 42 = 1035.59$$

$$407.736 + 1035.59 = .394$$

$$rPbi = .394$$

Calculation for Subjective-Objective trait on the
Johnson Temperament Analysis:

$$41.5 - 27.3 \times 19.416 = 275.7072$$

$$\sigma = 23.728 \times 42 = 996.576$$

$$275.7072 + 996.576 = .277$$

$$rPbi = .277$$

Calculation for Sympathetic-Hard boiled trait on
the Johnson Temperament Analysis:

$$91.1 - 82.8 \times 19.416 = 161.1528$$

$$\sigma = 16.093 \times 42 = 675.906$$

$$161.1528 + 675.906 = .238$$

$$rPbi = .238$$

Calculation for Active-Quiet trait on the Johnson
Temperament Analysis:

$$71.0 - 60.5 \times 19.416 = 203.8680$$

$$\sigma = 27.695 \times 42 = 1163.190$$

$$203.8680 + 1163.190 = .175$$

$$rPbi = .175$$

Calculation for Depressive-Gay trait on the Johnson
Temperament Analysis:

$$46.0 - 31.8 \times 19.416 = 275.7072$$

$$\sigma = 25.179 \times 42 = 1057.518$$

$$275.7072 + 1057.518 = .216$$

$$rPbi = .216$$

Calculation for Nervous-Composed trait on the Johnson
Temperament Analysis:

$$39.3 - 20.3 \times 19.416 = 368.894$$

$$\sigma = 24.739 \times 42 = 1039.038$$

$$368.894 + 1039.038 = .355$$

$$rPbi = .355$$

CHAPTER IV

SUMMARY AND CONCLUSIONS

This investigation has been concerned with an analysis of the scores made by student nurses on the Johnson Temperament Analysis, the Minnesota Multiphasic Personality Inventory, and the Problem Check List Form for School of Nursing to determine the value of these tests in predicting adjustment ability.

Summary

1. The two hundred thirteen students marked the Problem Check List Form for School of Nursing to indicate more problems in the areas of Health and Physical Development, Social and Recreational Activities, Social-Psychological Relations, Personal-Psychological Relations, and Adjustment to School of Nursing.
2. When attention was given to improving the orientation program for pre-clinical students in 1955 and 1956, the students expressed fewer problems in the area of Adjustment to School of Nursing in the Problem Check List Form for School of Nursing.
3. The students rated as "poorly adjusted" marked fifty per cent more problems on the Problem Check List Form for School of Nursing than those rated "well adjusted,"

except in the areas of Courtship, Sex, and Marriage where there was one-tenth per cent increase in the number of problems marked and Adjustment to School of Nursing where the increase was seven-tenths per cent.

4. The total group of two hundred thirteen students made comparable scores on the Minnesota Multiphasic Personality Inventory, four and six-tenths being the greatest deviation on the mean scores and occurring on the K score.

5. The deviation of the means of the "well adjusted" and the "poorly adjusted" on the Minnesota Multiphasic Personality Inventory did not vary more than four points.

6. The scores made on the Minnesota Multiphasic Personality Inventory did not predict the students' ability to adjust.

7. On the Johnson Temperament Analysis the scores of the total group of two hundred thirteen students were consistently high in the areas of Active-Quiet, Cordial-Cold, Sympathetic-Hard boiled, Aggressive-Submissive, and Self mastery-Impulsive.

8. The thirteen students marked "poorly adjusted" scored more nervous, more depressed, more quiet, less friendly, less objective, and more aggressive on the Johnson Temperament Analysis than the group that was marked "well adjusted."

9. Three of the thirteen students of the "poorly adjusted" group scored in the "Improvement Urgent," each in a different trait on the Johnson Temperament Analysis.

10. All of the two hundred thirteen students scored within the norms established by the test publishers for similar groups on the Johnson Temperament Analysis.

11. On the Johnson Temperament Analysis scores made on the Nervous-Composed trait showed a phi coefficient correlation of .355 between the two groups and was significant at the five per cent level. The Cordial-Cold trait showed a phi coefficient correlation of .394 between the two groups indicating significance at the one per cent level.

12. The "well adjusted" students scored more composed and more cordial than the "poorly adjusted" students on the Johnson Temperament Analysis.

13. On the questionnaire two-thirds of the students who were marked "well adjusted" maintained an A-B theoretical average.

14. Considering the total group of two hundred thirteen, seventy-five per cent of the panel of experts marked one-half of the students who had D grades as "poorly adjusted."

15. Fifty per cent of the panel of experts who marked the questionnaire rated one-half of the total number of

students who did not complete the program as "poorly adjusted."

Conclusions

The Minnesota Multiphasic Personality Inventory is not selective in predicting student nurse adjustment ability. The two traits of the Johnson Temperament Analysis indicative of predicting adjustment ability were Nervous-Composed and Cordial-Cold. Scores made on the remaining seven traits tested in the Johnson Temperament Analysis were not significant.

Student nurses who have difficulty adjusting seem to have problems in all areas.

Recommendations

The following recommendations were made:

1. Future research to determine the value of the Minnesota Multiphasic Personality Inventory in the psychological test battery given to prospective student nurses.
2. Further studies to determine the value of the Johnson Temperament Analysis as a tool for counseling in schools of nursing.
3. An investigation of the relationship of theoretical and adjustment abilities among student nurses.
4. Additional study with nurses used in the study so that analyses of their adjustment ability as graduate

nurses may be compared with their initial adjustment ability.

5. Investigation to determine what constitutes measurable adjustment differences in a specific situation.

In spite of the statistically meager results, it may develop that no more can be expected from our tools and our techniques for using them than we have already experienced. We can accept these tools and techniques and use them to the best advantage in the light of collective experiences, or we can change our tools, or techniques, or both. We may conclude that tests and ratings are not useless, but their results must always be interpreted in the light of their origins.

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A P P E N D I X A

QUESTIONNAIRE

Considering the following definition, please evaluate the student nurses listed as to their adjustment, by checking the column which you believe identifies the student nurse.

Adjustment has been defined as:

1. The establishment of a satisfactory relationship between personal needs and desires and the requirements of the environment.
2. She participates in programs designed to help the health needs of society and the total needs of her patients.
3. She experiences personal satisfaction and maintains good citizenship and professional growth.
4. She acquires information to develop understanding of the relationship of facts to each other and life situations and develops intellectual and manipulative skills used in relation to facts.
5. She has established socially desirable attitudes and assumed responsibility for her own learning.
6. She is able to identify, analyze, solve problems, and be self directing.

	Below Poorly	Average	Average	Better than Average	Very Good
1952:					
M. J. Ankeny					
A. Bartels					
M. Driver					
L. Fiala					
C. Flynn					
B. Frink					
B. Hansen					
M. Hanson					
P. Harr					
R. Johnson					
C. Kepler					
D. Leonard					
F. Lear					
B. O'Neil					
E. Reed					

(2)

	Poorly	Below Average	Average	Better than Average	Very Good
1952 (cont'd)					
B. Hamilton					
R. Smith					
M. Voelte					
C. Wright					
C. Yon					
B. McKee					
A. Chamberlain					
A. Gillespie					
M. Houlden					
1953:					
D. Aerni					
R. Barron					
R. Berthelson					
K. Brown					
D. Campbell					
S. Clark					
G. Cummings					
F. Evans					
B. Eaton					
R. Russell					
L. Gordon					
M. Groons					
V. Roache					
D. Holyoke					
J. Hotz					
L. Johnson					
D. Jenkins					
S. Keithley					
M. Johnson					
R. Kousgaard					

	Poorly	Below Average	Average	Better than Average	Very Good
1953 (cont'd)					
M. Killo					
F. Meyer					
M. Kniep					
E. Knox					
R. Merrill					
S. DeWitt Ken					
B. O'Heman					
B. Silk					
B. Shada					
B. Spuhler					
R. Golder					
R. Tewell					
W. Tschirley					
S. Weeks					
L. Wagner					
E. Oden					
E. Olson					
C. Opecensky					
L. Schafersman					
D. Bachore					
M. Burman					
E. Fitch					
M. Gibson					
C. Gildersleeve					
L. Hauger					
D. Hershner					
N. Keast					
M. Nunn					
J. Peterson					

	Poorly	Below Average	Average	Better than Average	Very Good
1953 (cont'd)					
B. Rase					
D. Rasmussen					
J. Thiles					
J. Schwab					
N. Stockholm					
G. Vrbsky					
1954:					
S. Askey					
M. Bohanan					
C. Bach					
J. Bohl					
B. Donaho					
B. Brown					
M. Calvert					
N. Overton Calvert					
J. Commandello					
C. Dannelly					
B. DeWitt					
S. Harrison					
J. Kartwig					
G. Hanny					
J. Hilst					
C. Holdridge					
D. Johansen					
K. Kaes					
V. Larson					
A. Leamons					
M. Mayo					
L. McGaughey					
F. Mahrstett					

	Poorly	Below Average	Average	Better than Average	Very Good
1954 (cont'd)					
G. Nielsen					
S. Pannier					
F. Reeves					
E. Royce					
C. Runte					
G. Spidle					
C. Thompson					
E. Travis					
E. Bowman					
M. Flowers					
V. French					
J. Holmes					
C. Larson					
C. Lawson					
J. Siedschlag					
L. Shepherd					
Y. Spier					
1955:					
J. Ackerberg					
S. Agee					
M. Ahrens					
M. Baker					
W. Annable					
G. Boller					
J. Burkey					
J. Calta					
P. Childers					
C. Cramer					
J. DeWitt					
J. Elberg					

	Poorly	Below Average	Average	Better than Average	Very Good
1955 (cont'd)					
R. Hetlund					
M. Hicks					
E. Hofrichter					
C. Horner					
S. Hutchins					
C. Sacher					
R. Johansen					
S. Kinnison					
B. Kleckner					
E. Kratochvil					
D. Wicson					
A. Mincey					
B. Mendenhall					
G. Meyer					
C. Mitchell					
K. Mitchell					
M. Paine					
L. Park					
P. Patterson					
C. Peterson					
J. Pope					
D. Rasmussen					
J. Robertson					
J. Schmidt					
P. Schmitt					
M. Stangle					
L. Stroh					
S. Stukey					
E. Watanabe					

(7)

	Poorly	Below Average	Average	Better than Average	Very Good
1955 (cont'd)					
D. Wagner					
D. Westenburg					
V. Wickstrom					
F. Wuethrich					
D. Casement					
M. J. Lutes					
P. Sindelar					
I. M. Wilke					
L. Murray					
1956:					
C. Allely					
S. Bass					
M. Bishop					
L. Beck					
J. Botsford					
M. Cochran					
M. Donaldson					
D. Fisher					
C. Gilmore					
I. Griffith					
J. Harris					
S. Hill					
K. Holm					
C. Hughes					
M. Hucke					
F. Johansen					
M. King					
N. Maybee					
D. Muller					
S. Matthews					
V. Mead					

A P P E N D I X B

PROBLEM CHECK LIST

FORM FOR SCHOOLS OF NURSING

(Adapted from Problem Check List:
College Form, by Ross L. Mooney)

By LUELLA J. MORISON

Please fill out these blanks:

Date of birth.....

Name of the School of Nursing.....

Class in School of Nursing.....
(Preclinical, Senior, etc.)

Name of the person to whom
you are to turn in this paper.....

Your name or other identification,
if desired.....

Date.....

DIRECTIONS FOR FILLING OUT THE CHECK LIST

This is not a test. It is a list of troublesome problems which often face students in schools of nursing—problems of health, social life, relations with people, studying, and the like. You are to go through the list, pick out the particular problems which are of concern to you, indicate those which are of most concern, and make a summary interpretation in your own words. More specifically, you are to take these three steps:

- (1) Read the list slowly, pause at each item, and if it suggests something which is troubling you, *underline* it, thus, "1. Tiring very easily." Go through the whole list, underlining the items which suggest troubles (difficulties, worries) of concern to you.
- (2) After completing the first step, look back over the items you have underlined and *circle the numbers* in front of the items which are of *most concern* to you, thus, "1. Tiring very easily."
- (3) After completing the first and second steps, answer the summarizing questions on pages 5 and 6.

1. Tiring very easily
2. Being underweight
3. Being overweight
4. Not enough sleep
5. Not enough suitable clothes to wear
6. Too little money for clothes
7. Having less spending money than others
8. Managing my finances poorly
9. Not enough time for recreation
10. Lacking a place to entertain friends
11. Wanting to learn how to entertain
12. Being ill at ease at social affairs
13. Shyness
14. Being slow in making friends
15. No real friends in the school of nursing
16. Feelings too easily hurt
17. Too self-centered
18. Taking things too seriously
19. Nervousness
20. Getting too excited
21. Not mixing well with opposite sex
22. Not enough time for dates
23. "Going steady"
24. Being in love with someone I can't marry
25. Being criticized by my parents
26. Mother
27. Father
28. Parents sacrificing too much for me
29. Belonging to a minority religious group
30. Belonging to a minority racial group
31. Affected by racial or religious prejudice
32. Bothered by the vulgarity of hospital talk
33. Feeling lost in school of nursing
34. Purpose in going through nursing not clear
35. Dislike of nursing
36. Being a nurse on insistence of family
37. Family opposing my professional choice
38. Needing encouragement to continue in nursing
39. Needing to know my professional abilities
40. Not knowing what kind of person I want to be
41. School too indifferent to student's problems
42. Dull classes
43. Director of Nurses lacks understanding of students
44. Instructors lacking personality
45. Annoyed by supervision
46. Can't seem to please some supervisors
47. Supervisors poor managers
48. Supervisors not trusting us enough
49. Failing to organize my work well
50. Unable to perform procedures effectively
51. Lacking the aptitude for procedures
52. Can't carry out nursing practice as taught in theory
53. Not getting enough exercise
54. Not getting enough outdoor air and sunshine
55. Threatened with a serious ailment
56. Afraid I may need an operation
57. Going in debt for nursing expenses
58. Missing previous regular salary
59. Going through nursing on too little money
60. Doubting that nursing is worth the financial sacrifice
61. Boring days off
62. Too little social life
63. Awkward in meeting people
64. Unskilled in conversation
65. Unpopular
66. Being made fun of
67. Being talked about
68. Feeling inferior
69. Moodiness, having the "blues"
70. Not having any fun
71. Failing to get ahead
72. Sometimes wishing I'd never been born
73. Too few dates
74. Uninterested in opposite sex
75. Embarrassed in discussions of sex
76. Wondering if I'll find a suitable mate
77. Parents separated or divorced
78. Death in the family
79. Father not living
80. Mother not living
81. Learning undesirable habits
82. Disillusioned in religious ideals
83. Confused in my religious beliefs
84. Confused on some moral questions
85. Unable to concentrate well
86. Weak in logical reasoning
87. Poor memory
88. Worrying about examinations
89. Needing to plan ahead for the future
90. Doubting the wisdom of future plans
91. Wanting to get out of school and on my own
92. Wondering if I'll be successful in life
93. Inadequate high school training
94. Nursing textbooks hard to understand
95. Too few books in the library
96. Instructors lacking grasp of subject matter
97. Supervisors don't understand our educational need
98. Supervisors expecting too much of us
99. Supervisors too friendly
100. Dissatisfied in present department
101. Working too long hours
102. Off-duty time not scheduled so one can plan for it
103. Nursing care assignments unevenly distributed
104. Nursing care assignments not clear

105. Afraid I may contract disease
 106. Poor posture
 107. Poor complexion
 108. Not very attractive physically
109. Needing money for education beyond nursing course
 110. Having to watch every penny I spend
 111. Family worried about finances
 112. Disliking financial dependence on family
113. Missing former social life
 114. Slow in getting acquainted with people
 115. Nothing interesting to do in spare time
 116. Not enjoying many things others enjoy
117. Hurting people's feelings
 118. Being watched by other people
 119. Being left out of things
 120. Being criticized by others
121. Not doing anything well
 122. Too easily discouraged
 123. Unhappy too much of the time
 124. Worrying about unimportant things
125. Disturbed by ideas of sexual acts
 126. Insufficient knowledge about sex matters
 127. Wondering if I'll ever get married
 128. Afraid of losing the one I love
129. Friends not welcomed at home
 130. Home life unhappy
 131. Family quarrels
 132. Feeling I don't really have a home
133. Missing spiritual elements in my present life
 134. Wanting more chances for religious worship
 135. Failing to go to church
 136. Science conflicting with religion
137. Not fundamentally interested in books
 138. Having too many subjects at one time
 139. Getting low grades
 140. Fear failure in school of nursing
141. Not physically fit to practice nursing
 142. Dread leaving school and starting on my own
 143. Wanting advice on steps after leaving school
 144. Doubt ability to take part in professional organizations
145. Classes too large
 146. Too few chances to express ideas or opinions
 147. Instructors lacking interest in students
 148. Having an unfair instructor
149. Having difficulty in following doctors' orders
 150. Unable to please the doctors
 151. Trouble in figuring out what the doctor wants
 152. Maintaining loyalty to the doctor
153. Unable to handle embarrassing situations
 154. Not observant enough in bedside care
 155. Needing to cultivate a well modulated voice
 156. Finding it hard to be dignified on duty
157. Being clumsy and awkward
 158. Being too short
 159. Being too tall
 160. Having weak eyes
161. No regular source of income
 162. Too little money for recreation
 163. Having financial dependents
 164. Too many financial problems
165. Unsure of social etiquette
 166. Wanting to learn how to dance
 167. Not knowing what to do on a date
 168. Feeling my personal appearance is unsatisfactory
169. Being snubbed
 170. Being called "high-hat"
 171. Losing friends
 172. Not getting along with other people
173. Daydreaming
 174. Forgetting things
 175. Afraid when left alone
 176. Not taking things seriously enough
177. Going with a person my family won't accept
 178. Being in love
 179. Deciding whether I'm in love
 180. Afraid of close contact with opposite sex
181. Heavy home responsibilities
 182. Sickness in the family
 183. Parents expecting too much of me
 184. Too dependent on my family
185. Being forced to go to church
 186. Failing to see relation of religion to life
 187. Rejecting earlier religious beliefs
 188. Doubting value of worship and prayer
189. Unable to express myself in words
 190. Afraid to speak up in class discussions
 191. Wanting to change to another school
 192. Unable to get scientific subjects
193. Afraid I'll never become an "R.N."
 194. Being told I'll fail in practice as an "R.N."
 195. Doubting happiness as an "R.N."
 196. Doubting economic value of "R.N." degree
197. Being without a counselor
 198. Instructors partial to some students
 199. Grades unfair as measures of ability
 200. Not getting adequate education for present nursing
201. Discouraged by pessimism of "R.N.'s"
 202. Afraid of some of the doctors
 203. Afraid the patients won't like me
 204. Can't deal with the patient's friends and visitors
205. Afraid of becoming a "hardboiled" nurse
 206. Afraid of causing pain when giving treatments
 207. Afraid to administer medicines
 208. Can't take unpleasant odors or sights
209. Having frequent sore throat
 210. Having frequent colds
 211. Nose or sinus trouble
 212. Speech handicap (stammering, etc.)
213. Living quarters unsatisfactory
 214. Lacking privacy in living quarters
 215. Living with unsatisfactory roommates
 216. Noise in home interfering with sleep
217. Not enough time for myself
 218. Too much social life
 219. Failing to have fun in school activities
 220. Desiring more cooperation among students
221. Disliking certain persons
 222. Being disliked by certain persons
 223. Getting into arguments
 224. Being jealous
225. Losing my temper
 226. Stubbornness
 227. Carelessness
 228. Laziness
229. Breaking up a love affair
 230. Choice of continuing training or marrying
 231. Thinking too much about sex matters
 232. Competition in a love affair
233. Not telling my parents everything
 234. Parents not trusting me
 235. Being treated like a child at home
 236. Being an only child
237. Having a guilty conscience
 238. Yielding to temptations
 239. Getting a bad reputation
 240. Can't forget some mistakes I've made
241. Too easily distracted during classes
 242. Absent from classes too often
 243. Tardy for classes too often
 244. Wanting to leave nursing
245. Not knowing what I really want
 246. Not able to decide what nursing field to enter
 247. Need information about future fields of nursing
 248. Need education beyond nursing course
249. Courses too unrelated to each other
 250. Too much repetition of some topics
 251. Tests often unfair
 252. Assigned study periods unsatisfactory
253. Dislike caring for demanding patients
 254. Dislike caring for patients with certain diseases
 255. Dislike caring for male patients
 256. Can't be firm with patients
257. Routines in some departments hard to learn
 258. Failure of departments to orient students
 259. Nursing care checked to unreasonable degree
 260. Too little credit given for good nursing care
261. Having poor teeth
 262. Having poor hearing
 263. Tired feet
 264. Frequent headaches
265. Infrequent all-night or late permits
 266. Not fitting into the group with which I live
 267. Living conditions don't provide "home" environment
 268. Not getting along with the House Mother
269. Too little time for sports
 270. Too little chance to enjoy art or music
 271. Too little chance to listen to the radio
 272. Too little chance to go to shows
273. Wanting a more pleasing personality
 274. Too easily led by other people
 275. Picking the wrong kind of friends
 276. Speaking or acting before I think
277. Afraid of making mistakes
 278. Can't make up my mind about things
 279. Lacking self-confidence
 280. Can't see the value of things I do
281. Putting off marriage
 282. Engagement
 283. Absence of boy friend
 284. Religious differences preventing marriage
285. Clash of opinions between me and parents
 286. Having been "spoiled" at home
 287. Not getting along with brother or sister
 288. Not getting along with a step-parent
289. Too little chance to develop my own religion
 290. Disliking church services
 291. Lessened fervor in religious practices
 292. Losing faith in religion
293. Not smart enough in scholastic ways
 294. Trouble in outlining or note-taking
 295. Weak in writing
 296. Slow in catching on to theory
297. Afraid I'll not be adequately prepared for nursing
 298. Afraid of unemployment after graduation
 299. Trying to combine marriage and a career
 300. Concerned about entering military service
301. Instructors lacking understanding of students
 302. Too much work required in some courses
 303. Hard to study in living quarters
 304. No suitable place to study in school
305. Prefer working alone to working with other students
 306. Depend too much on others for assistance
 307. Too willing to "cover-up" for co-workers
 308. Too many people "passing the buck"
309. Seniority rule carried too far
 310. Too difficult for students to get doctor's care
 311. Rule against accepting patient's gifts unfair
 312. Rule against accepting patient's invitations unfair

2. How would you summarize your chief problems in your own words? Write a brief summary.

Note to Counselors: Normally the summary of items checked is to be made by the counselor. In some situations, however, the counselor may want students to make their own summaries. In these cases, students should be given definite instructions and a demonstration of the method, preferably after they have filled out the check list.

Instructions for Making Summary of Items Checked

For convenience in summarizing results on an individual case or on groups of students, the 364 problems are classified in thirteen areas:

- (1) Health and Physical Development (HPD)
- (2) Finances and Living Conditions (FLC)
- (3) Social and Recreational Activities (SRA)
- (4) Social-Psychological Relations (SPR)
- (5) Personal-Psychological Relations (PPR)
- (6) Courtship, Sex, and Marriage (CSM)
- (7) Home and Family (HF)
- (8) Morals and Religion (MR)
- (9) Adjustment to School of Nursing (ASN)
- (10) The Future: Professional and Educational (FPE)
- (11) Curriculum and School Program (CSP)
- (12) Adjustment to Human Relationships in Nursing (AHR)
- (13) Adjustments to Administration of Nursing Care (AAN)

There are 28 problems in each area, these being arranged in groups of four items across the seven columns of problems. The first area is the top group, the second the second group, and so on down the pages. On page five there is at the end of each group a box in which to record the count of problems marked in each area. In the left half of the box put the number of items circled as important; in the right half, put the total number marked in the area (including the circled items as well as those underlined only). At the bottom of the column enter the totals for the list.

NOTES

The remainder of this page and the next may be used for counselor's notes.

3. Have you enjoyed filling out the list?Yes.No.

4. Whether you have or have not enjoyed filling out the list, do you think it has been worth while doing?Yes.No. Could you explain your reaction?

5. If the opportunity were offered, would you like to talk over any of these problems with someone on the nursing faculty?Yes.No. If so, do you know the particular person (s) with whom you would like to have these talks?Yes.No.

Names.....