

SURVEY OF ATTITUDES, JOB SATISFACTION
AND TRAINING SUGGESTIONS OF
ATTENDANTS IN MENTAL RETARDATION
TRAINING SCHOOLS

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KAREN M. LOUNSBURY
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ABSTRACT

SURVEY OF ATTITUDES, JOB SATISFACTION AND TRAINING SUGGESTIONS OF ATTENDANTS IN MENTAL RETARDATION TRAINING SCHOOLS

By

Karen M. Lounsbury

A survey was made of attendants in two mental retardation training schools. Suggestions for attendant job training, attitude toward mental retardation, personal history variables and job satisfaction ratings were obtained from the Ss. Their immediate supervisors made ratings of perceived job satisfaction for the attendants.

Cluster analysis procedures revealed four relatively independent main factors: 1) attendants' training suggestions rated for number of responses, originality, practicality and completeness; 2) job satisfaction; 3) attitude about segregation of retarded individuals via institutionalization; and 4) tenure related variables.

The results were discussed in terms of the ability of attendants to specify job training programs, the lack of relationship between attendant job satisfaction and supervisor-perceived job satisfaction, and the lack of relationship between tenure and personal history or job satisfaction scores.

Approved:

John P. McKinney
Prof. John P. McKinney

Date:

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Karen M. Lounsbury

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TABLE OF CONTENTS

	Page
List of Tables	v
List of Figures	vi
INTRODUCTION	1
PURPOSE	7
METHOD	9
Subjects	9
Materials	10
Procedures	13
RESULTS	15
Cluster Analysis	15
Rated Training Suggestions	22
Job Satisfaction	22
Segregation-Exclusion Attitude	22
Tenure	23
Object Cluster Analysis	26
Accuracy of Supervisor's Perceived Job Satisfaction	29
DISCUSSION	31
Attitude	34
O-Analysis	35
SUMMARY	41
LIST OF REFERENCES	44
APPENDICES	46
APPENDIX A: Attendant Nurse Survey	46
B: Training Suggestion Rating Procedure	52
C: Sample Rated Responses for Attendants' Training Subbestions	53

	Page
APPENDIX D: Attendant Cover Letter	56
E: Supervisor Cover Letter	57
F: Typological Classification of Subjects Based on Object Cluster Analysis:	
Minor O-Types	58

LIST OF TABLES

Table	Page
1. Areas of training need as seen by professional and attendant personnel from Barnet and Bensberg (1962)	6
2. Composition of the oblique clusters	19
3. Correlations between oblique cluster domains .	20
4. Correlations between tenure and training sug- gestion ratings	25
5. Correlations between attendant satisfaction scores and supervisor satisfaction scores . .	30

LIST OF FIGURES

Figure	Page
1. Per cent of attendant sample obtaining each of the possible ratings on the originality rating scale.	16
2. Per cent of attendant sample obtaining each of the possible ratings on the practicality rating scale	17
3. Per cent of attendant sample obtaining each of the possible ratings on the completeness rating scale.	18
4. Mean value of composite scores by cluster for <u>Ss</u> in types 1 through 4	27
5. Mean value of composite scores by cluster for <u>Ss</u> in types 5 through 7	28

INTRODUCTION

Within the past fifteen years, and particularly within the past decade, increasing attention has centered on the role of the institutional attendant in mental retardation institutions (Gardner and Giampa, 1971). One of the major reasons for greater interest in the attendant is the realization that she must be prepared to carry out some of the duties formerly considered to be the responsibility of the professional, while professionals are finding it necessary to spend increasing amounts of time serving consultant and leadership functions (Bensberg and Barnett, 1966). While it has long been intuitively apparent that the attendant would be a highly influential person in the patient's life, since the attendant is the one with whom the patient has twenty-four hour contact (Dinnage and Pringle, 1967), a little controlled research had been done before the 1960's (Gardner, 1967).

With this realization of the importance of the attendants role in effective treatment for the residents have come studies demonstrating the need for training programs (for a summary, see Bensberg and Barnett, 1966), attempting to isolate demographic, attitudinal and personality variables in attendants judged by supervisors as contributing to effective

attendant performance (Monsky, 1963; Clelend et al., 1967; Butterfield, Barnett, and Bensberg, 1966; Efron and Efron, 1967), and implementing and evaluating training programs (Schmidmayer and Weld, 1971; Gardner and Giampa, 1971; Bensberg and Barnett, 1966).

More specifically, attempts to isolate effective attendant variables have taken various forms. Monsky (1963) surveyed experience, working conditions and attitudes in a large sample of child service attendants in England. The attendants complained mainly of long hours, the majority of which was spent in domestic work rather than directly with the children; uneasy relationships with other staff members was also mentioned, while low pay was near the bottom of the list of complaints. High turnover rate was listed as a major problem by supervisors in the same study. It is this problem of high turnover rate that several researchers have studied. Clelend et al. (1967) attempted to find out which demographic and personality variables were correlated most highly with longest tenure for attendants in a training school for the retarded in Texas. They found the variables most highly correlated with tenure to be rural origin and birth order--in this case, non-firstborn. This finding did not change when they analyzed the findings on the basis of shift (day, evening, night shift) the attendant chose; however, correlations between tenure and rural origins were higher for night shift attendants than for either of the

other two groups of attendants. They suggest that early exposure to social deprivation in rural attendants may make them better able to deal with the social deprivation encountered in the work situation.

However, tenure--expressed negatively as turnover rate--may not be a powerful predictor of effectiveness as an attendant. Butterfield, Barnett and Bensberg (1966) attempted to determine which institutional characteristics influenced turnover rate among personnel. They found turnover rate to be independent of working conditions, with about fifty per cent ($\eta^2 = .47$) of the variance in turnover rate accounted for by economic climate of the counties in which the institutions were located, which included the factors of unemployment rate and the population change of those counties. When the unemployment rate is high, turnover rate is low; when population increase is high with greater immigration into the county, turnover rate is high. This suggests that the standard approach of attempting to discuss turnover rate in terms of institutional characteristics and attendant variables may be questionable.

Presence of experience and amount of training in dealing with mental retardation may both play parts in determining how an attendant views mental retardation. Using an experimental population of special education majors and special education teachers against a control population of college students, Efron and Efron (1967) developed an

attitude scale about mental retardation by means of which they isolated six factors: personal exclusion, cultural deprivation, hopelessness, segregation via institutionalization, non-condemnatory etiology, and authoritarianism. The three groups did appear to demonstrate differences in attitude according to the amount of special education training and amount of on the job experience each group had had. They found that special education teachers did not score as highly on the authoritarian scale as the control population, but the students in special education were less authoritarian than the teachers. Both the students and the teachers had less of a tendency to see retardates as necessarily institutionalized and segregated from the mainstream of society than the control group; and the students were more hopeful about retarded individuals than either the control group or the teachers. Assuming that the teachers and the special education students were initially from the same population, it does appear that the on-the-job experience makes them more authoritarian and less hopeful, but have less of a tendency to see retardates as necessarily institutionalized.

Although the previous study did not use an attendant population, the results may still show some support for use of training programs in that some training did appear to make a difference at least in attitude for the special education majors as opposed to the control population. Implemented training programs for attendants have taken the form

of classes, newsletters, group encounter techniques (Bensberg and Barnett, 1966); "intensive training", defined as a combination of inservice training, cross-staff exchanges of ideas, regular supervisor-administration-aide meetings, "thereby decreasing the variance in attitudes and improving care, training and treatment of residents" (Schidmayer and Weld, 1971). Although all programs mentioned report positive changes in attendant attitudes and behavior, each makes the assumption that someone other than the attendant knows best what training is required of the job--be it immediate supervisor, social worker or staff psychologist.

None of the above mentioned studies asked for the attendants opinions when it came to determining training procedure. The only study that reports asking the attendants what kinds of training they might find useful was Barnett and Bensberg (1962 mimeo, reported in Bensberg and Barnett, 1966) who surveyed attendants in 26 institutions. They did not quantify the data but reported that attendants ranked training areas needed differently from professionals (see Table 1). Attendants are never asked to rate their own performance as attendants, however. While they have been directly asked if they are satisfied with the job to some extent by asking them to list their objections to the job (Monsky, 1963), the most common expression of job satisfaction has been that felt to be implicit in turnover rate.

Table 1. Areas of training need as seen by professional and attendant personnel from Barnett and Bensberg (1962 mimeo, reported in Bensberg and Barnett, (1966)

Training Area	Professional Mean Rank	Attendant Mean Rank
Physical care	2	2
History and causes of mental retardation	6	1
Ward management techniques	5	5
Emotional development	1	3
Interstaff and Public relations	4	6
Patient development and training	3	4

Butterfield, Barnett and Bensberg (1966), however, have demonstrated that this may not be a very meaningful measure, since almost half of the variance in turnover rate can be accounted for by variables independent of either attendant personality or institutional variables.

PURPOSE

The purpose of this study, then, was to survey the attendants own view of their jobs, their past training programs, their attitudes toward mental retardation, and their suggestions for job training of attendants, and to relate these measures to demographic information. A second purpose of the study was to determine how well immediate supervisors can predict attendants' job satisfaction.

Specifically, some differences were expected to appear between the Ss who had just started working as opposed to those who had been working in the institution for years in attitude toward mental retardation (see Efron and Efron, 1967), and particularly in the ratings given and suggestions made for training programs. While the high experience attendants may not feel they need more training, they may have practical suggestions to make for a training program for other attendants. The low experience Ss, while perhaps not able to make practical suggestions, may have more innovative ideas, having not been exposed to the institutions patterns for as long, and being closer in time to their own training. It was possible to test whether or not the Ss with the longest tenure are the most satisfied with their jobs;

also, demographic variables were analyzed, together with the above mentioned variables by means of a cluster analysis (Tryon and Bailey, 1970) to discover possible relationships to job satisfaction and tenure. By comparing attendants in different locations of this state (Michigan) it was possible to see if there were differences due to location; for this purpose a more rurally located institution (Training School I) was compared to a less rurally located institution (Training School II).

METHOD

Subjects

Volunteer attendant nurses, civil service ratings 03 and 05, on day shift in two Michigan State Home and Training Schools for the Mentally Retarded were used as Ss. The two training schools from which the Ss were surveyed were picked from the 5 training schools in Michigan on the basis of more rural location (Training School I) and less rural location (Training School II), estimated by population density of the location of the training school and proximity to a large, urban area, from the five training schools in the state of Michigan. Approximately 156 attendant nurses are employed on the day shift at Training School I, and approximately 250 at Training School II. A return rate of 40 per cent was obtained for Training School I and 43 per cent for the second institution, yielding a total return of 172 questionnaires.

The following is a list of characteristics of the attendant Ss, broken down first between schools, before a total statistic is given for the entire sample:

- a. Age: Training School I, average is 37.32 years;
Training School II, average age is 41.79 years.
Overall, average is 40.15 years.

- b. Sex: Training School I, males--24 per cent, females--76 per cent. Training School II, males--29 per cent, females--71 per cent. Total sample, males--27 per cent, females--73 per cent.
- c. Education level: Training School I, high school diploma (12.52 years); Training School II, high school diploma (12.12 years). Total sample, high school diploma (12.24 years).
- d. Tenure: Training School I, average number of years is 6.76; Training School II, average number of years 9.27 years. Total sample, average is 8.30 years. The difference in mean tenure between the two training schools is significant at $p \leq .01$.
- e. Previous job training: Training School I, 89 per cent had had some previous job training, while 11 per cent had not. Training School II, 86 per cent had had job training, 14 per cent had not. Total sample, 87 per cent had had training, and 13 per cent had not.

One measure, the Job Descriptive Index (JDI) was filled out by the immediate supervisors of the attendants. While sixty percent of the JDI's were returned by the supervisors, only 75 forms were able to be matched with completed questionnaires of attendants.

Materials

The following measures were taken for each participating attendant nurse (S), which she (he) filled out herself:

1. Personal History Questionnaire
2. Suggestions for Training of Attendant Nurses
3. Efrons' Attitude about Mental Retardation Scale
4. Job Descriptive Index

A copy of the questionnaire is shown in Appendix I.

A Personal History Questionnaire was written for this study, which obtained demographic data from the Ss, including sex, age, education, number of years employed at the Training School, previous employment, plus other pertinent information listed in Fairweather (1967, p. 86).

Suggestions for Training is a short, five item fill-in scale of openended and semi-openended questions designed for this study. It obtained Ss' opinions on the following information:

1. What training, if any, S received (described).
2. If S thought it was or was not (would or would not be) useful.
3. If S was planning a training program, would it be a) prior to working, b) on the job only, or c) a combination of the two.
4. Duration of the suggested program in weeks.
5. S listed descriptions of the suggested program, and explained how she would go about setting it up.

Item 1 was rated for number of descriptions, and was used as a baseline for the originality index in item 5. Items 2, 3, and 4 were simply coded as S responded. Item 5 was rated for four things: 1) number of suggestions, 2) originality of suggestions on a scale of 0-6; 3) practicality of implementing the suggested program on a scale of 0 to 6 and 4) completeness of the suggested program also on a scale of 0 -6. For a detailed account of the bases for rating and rating procedures, see Appendices B and C. The ratings were done by two trained, independent raters obtaining inter-rater

reliabilities for the three scales as follows: originality, $r = .93$; practicality, $r = .85$; completeness, $r = .89$; with average reliability of $r = .89$.

The Efrons' Attitude about Mental Retardation Scale is a fifty-six item, six-point Likert continuum comprised of items from the California F scale, Opinion about Mental Illness (OMI) Scale (Cohen, 1962), as well as items written by Efron and Efron. The scale has six factors: segregation via institutionalization, cultural deprivation, non-condemnatory etiology, personal exclusion, authoritarianism, and hopelessness. Using a criterion of factor loading equal to $\pm .40$, thirty-eight items were selected for use in this study.

The Cornell Job Descriptive Index (JDI) is a five scale measure of job satisfaction (Smith, 1965). A series of written words are presented to S and he is asked to respond to each on paper in the following manner: "Y" is written next to the item if that item describes that particular aspect of his work, "N" if it does not, and "?" if S cannot decide. A satisfaction score was obtained for the five scales (work, supervision, people, pay and promotion) by adding up the number of "satisfied" responses for each scale (a scoring key is provided in Appendix A). A total satisfaction score was obtained by summing the scores for the five scales. The scale correlates highly with other measures of job satisfaction (Smith, 1965).

Procedure

The State of Michigan Department of Mental Health personnel office granted permission to contact the two institutions. An introductory letter was then sent to the two superintendents of the training schools, briefly explaining the study and requesting their cooperation in distributing the preaddressed, stamped questionnaires to the day-shift attendants. Further details of the distribution procedure were then arranged by phone.

Each attendant and immediate supervisor was provided with a questionnaire and cover letter, which provided instructions for completing the questionnaire and mailing it, as well as a general explanation of the purpose of this study (see Appendices D and E). Questionnaire packets for each attendant were numbered with a corresponding number appearing on each supervisor's JDI form for perceived satisfaction for that attendant. Supervisors were asked to pencil in the attendant's name at the top at the time of distribution, fill it out at home, then erase the name before mailing the form. All subjects were thereby assured relative anonymity, although four attendant Ss tore off the corner of their questionnaires before mailing them.

In both attendant and supervisor cover letters, an offer for a copy of the results of the study was made and a card requesting information was provided to return with

the questionnaire. Similar offers to share the results were made to the State Department of Mental Health as well as to the Superintendents of the two training schools.

In an effort to gather information about non-volunteer Ss (those not returning the questionnaire), a request was made in the cover letter asking the attendants to answer, at least, the personal history questions and return that portion, even if they did not wish to complete the rest of the questionnaire. However, none responded to this request.

RESULTS

Relative frequency of originality, practicality and completeness ratings of the training suggestions are shown in Figures 1, 2 and 3. As can be seen from the figures, originality and completeness ratings appear to be fairly normally distributed, but practicality ratings are skewed left. In other words, the ratings given attendants for the practicality measure were generally high. Examples of each of the measures are given in Appendix B.

Cluster Analysis

Since the variables of particular interest in this study were the rated suggestions for training, Tryon and Bailey's (1970) method of Cluster Analysis was employed to test the relationships among these variables, and among tenure, job satisfaction, attendant attitude, and attendant personal history variables. Specifically, a V-Analysis was used to define the empirical clusters, yielding eight clusters, followed by a preset analysis. The preset analysis allowed the cluster of particular interest, rated training suggestions, to be placed in a position of primary importance--as the first cluster--and included three other clusters from the original V-Analysis. These were selected on the basis

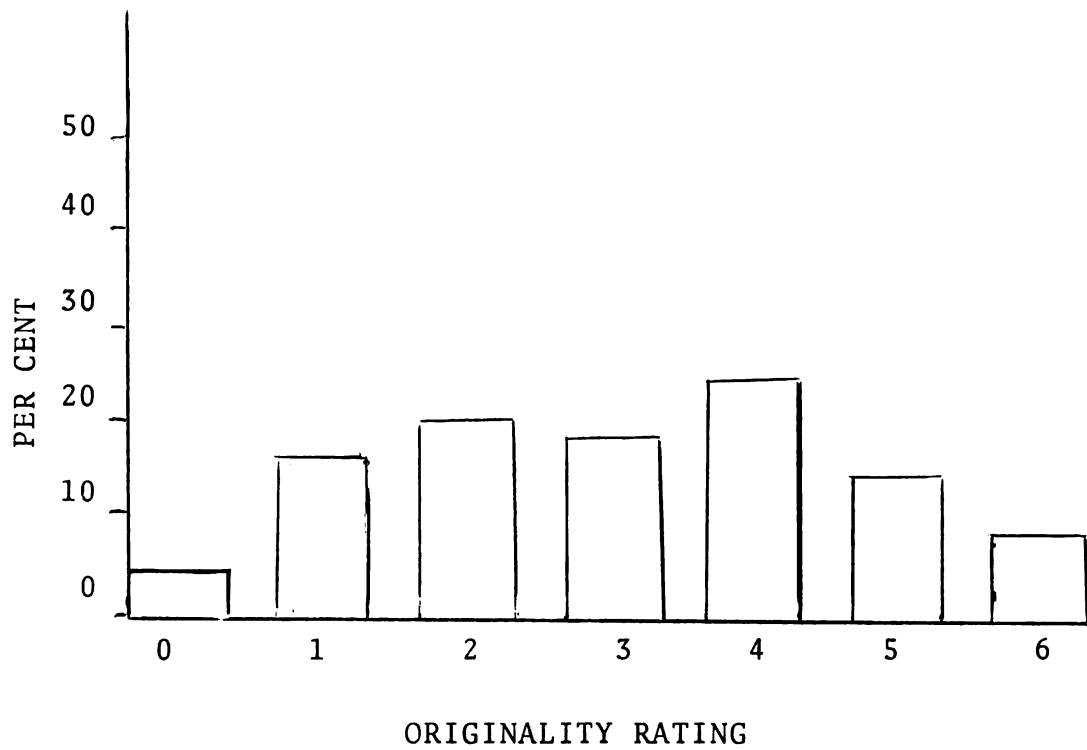


Figure 1. Per cent of attendant sample obtaining each of the possible ratings on the originality rating scale.

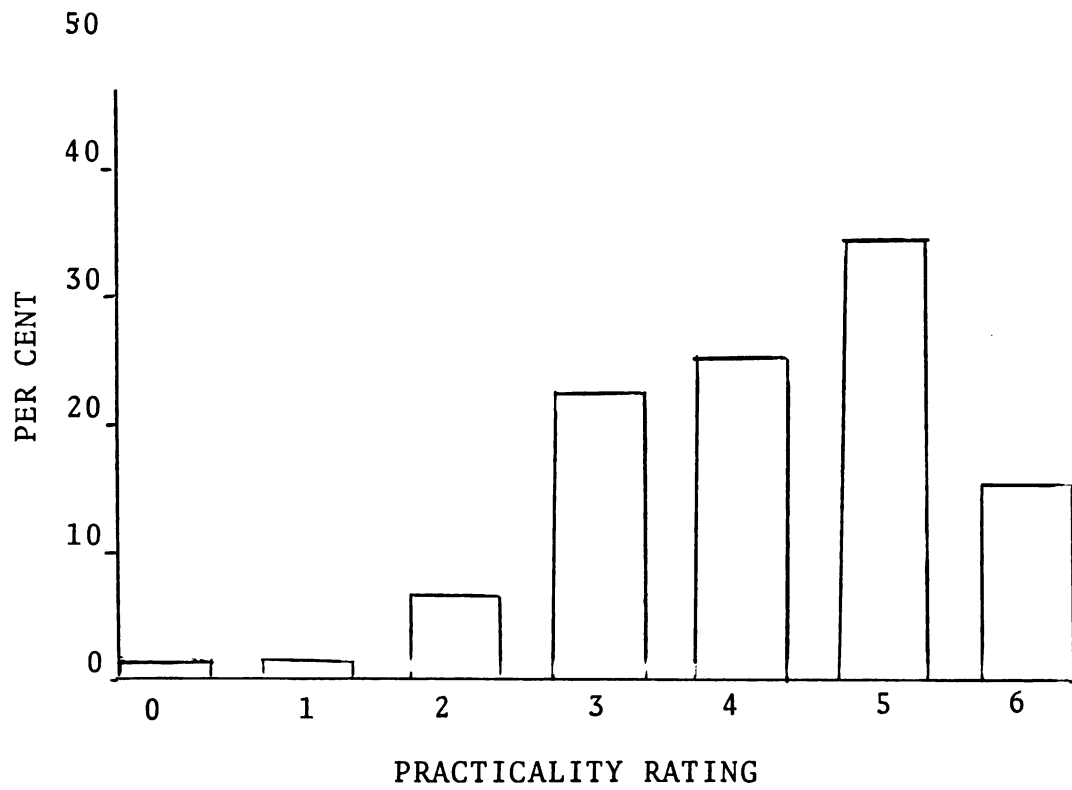


Figure 2: Per cent of attendant sample obtaining each of the possible ratings on the practicality rating scale.

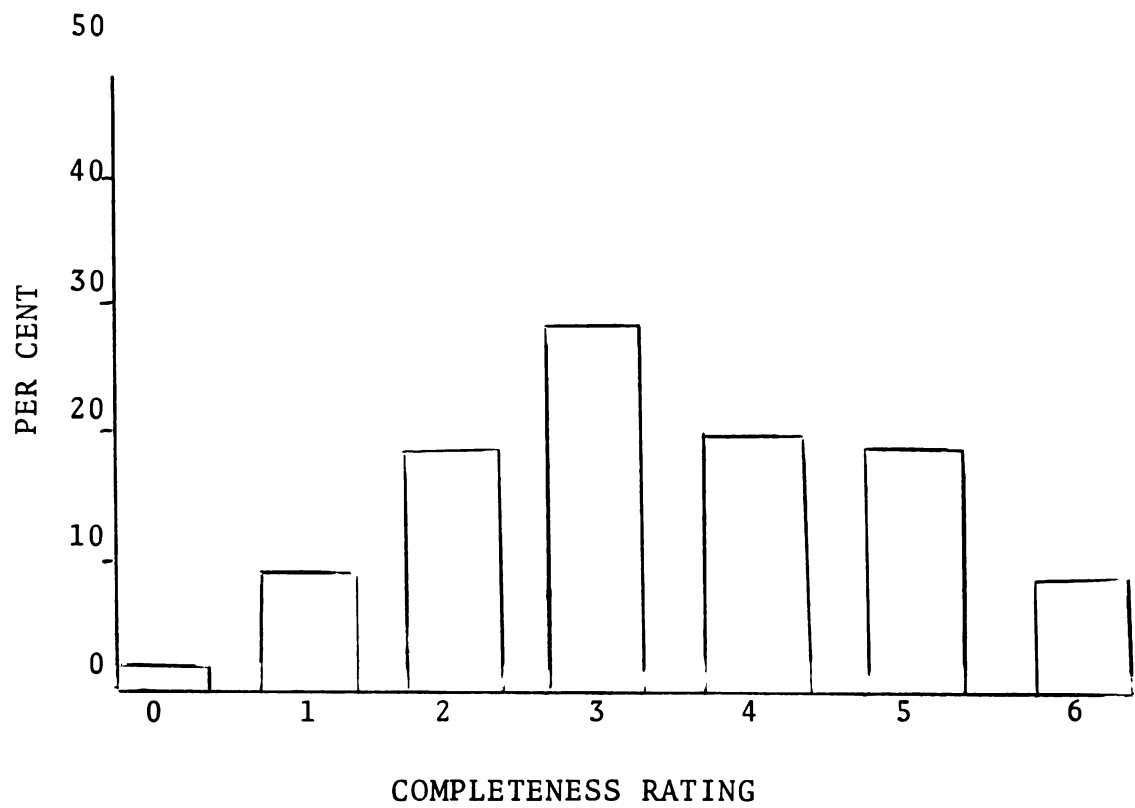


Figure 3: Per cent of attendant sample obtaining each of the possible ratings on the completeness rating scale.

Table 2. Composition of the oblique clusters.

Item	Loading
CLUSTER 1 RATED TRAINING SUGGESTIONS Reliability = .83	
Comprehensive rating	.90
Originality rating	.75
Practicality rating	.74
Number of training suggestions	.53
CLUSTER 2 JOB SATISFACTION Reliability = .89	
Total satisfaction	1.00
People satisfaction	.73
Supervision satisfaction	.71
Work satisfaction	.66
Promotions satisfaction	.45
CLUSTER 3 SEGREGATION-EXCLUSION ATTITUDE Reliability = .83	
Mentally retarded children should live in special institutions	.90
Most mental retardates are better off in an institution with others of their kind.	.83
Retardates should live among themselves and everything should be done to help them live happy lives.	.66
Separate schools for the retarded would provide them with the special programs they need.	.52
It is unfair to the normal children to have retardates in the same classroom.	.49
It would be kinder to establish separate communities for retardates where they would not feel so out of place.	.41
CLUSTER 4 TENURE Reliability = .74	
Age of attendant	.81
Number of years worked at institution	.72
A mental retardate cannot live just as useful a life as a normal person	.42

Table 3. Correlations between oblique cluster domains.

CLUSTER	1	2	3	4
1. RATED TRAINING SUGGESTIONS	-			
2. JOB SATISFACTION	-.11	-		
3. SEGREGATION/ EXCLUSION	-.14	-.27	-	
4. TENURE	-.17	.14	.32	-

of, a) amount of variance accounted for by the cluster, b) cluster reliability, and c) whether or not the content of each cluster was of primary interest in this study.

In general, for both the empirical V-analysis and the preset analysis, variables were excluded from clustering whose factor loading was below .40 and whose communality was below .20; these cutoffs are determined by the Cluster Analysis program. Twenty-six of the 72 variables failed to meet these requirements in the V-analysis, while 55 variables failed to meet them for the preset analysis. Thus, the results tend to support the hypothesis that the obtained clusters, described below, are very specific in nature, and exclude most demographic and supervisor-perceived satisfaction scores, as well as many of the attitude items.

The preset analysis yielded four clusters shown in Table 2, which account for approximately 64 per cent of the variance in the original correlation matrix. All four clusters are fairly reliable, and seem to be dealing with distinct, independent concepts. The generally low intercorrelations, illustrated in Table 3, between the clusters support this observation

The four clusters are described as follows:

Rated Training Suggestions

Cluster 1 deals specifically with the training suggestions each attendant made. Suggestions were rated for completeness, originality and practicality as well as the number of suggestions made, and all of these variables cluster together with a cluster reliability of .82. This cluster accounts for 13 per cent of the variance in the original correlation matrix.

Job Satisfaction

This cluster includes the subscale scores from the Cornell Job Descriptive Index (JDI) as well as a total satisfaction score, and has a cluster reliability of .89. It accounts for about 14 per cent of the variance. One subscale from the JDI, the Pay scale, was not included and is of interest in that it might be indicative of the lack of variability of response across all attendants--most reported low satisfaction scores for the pay scale. It may also be, however, that pay is not an important variable in job satisfaction for this population.

Segregation-Exclusion Attitude

The segregation-exclusion cluster (Cluster 3) accounts for 25 per cent of the variance and has a cluster reliability of .83. It is completely composed of items from two of the original Efron and Efron factors, namely the

segregation via institutionalization and personal exclusion factors. Together, these items comprise the idea of segregation-exclusion of the retardates from the rest of society. Attendant scoring highly on this cluster would be likely to have attitudes condoning segregation of retarded children, and the items include some rationalization for this, such as the item: "It is unfair to normal children"

Tenure

This cluster is composed of only three items: number of years at the training school, age, and score on one "hopelessness" attitude item. This cluster has the lowest reliability of any of the preset clusters, but is still within an acceptable range. The presence of the hopelessness item lends some support to the Efron and Efron (1967) hypothesis that people working with retarded children score higher on that type of factor the longer they work with them, although the other hopelessness items did not have sufficient communality to cluster with these items.

The tenure cluster accounts for 12 per cent of the variance in the original correlation matrix, but was maintained as a cluster of interest because of the original hypotheses about relationship of tenure with the other variables, particularly the rated training suggestions.

The intercorrelations between the clusters are also of interest. It was predicted that practicality and

originality ratings would be related to tenure, but the low observed correlation between Cluster 1 and the tenure cluster (Cluster 4) of $r = -.13$ does not support this hypothesis. This hypothesis and the apparent lack of support for it can be observed in greater detail in Table 4, and will be discussed later. Suggestion ratings show a similar lack of relationship with job satisfaction ($r = -.09$) and attitude about segregation of retardates from society ($r = -.11$).

A minimal, but significant ($p < .05$) relationship appears to exist between job satisfaction and attitude about segregation of retardates ($r = -.27$). The negative nature of this relationship indicates that a high satisfaction score would be associated with a low segregation score, or opposition to segregation of retardates from society.

A positive relationship ($r = .32$) appears to exist between favoring segregation and tenure, which might be interpreted in one of two ways. First, in order to justify working there, attendants begin to favor institutionalization of retardates, or it may reflect attitudinal differences between different aged people in society.

Cleland et al. (1967) found correlations between tenure-related variables and family size. In support of this finding, a factor loading of .31 was obtained for the item "number of children" on the tenure cluster. This might be reflecting the age differences in the sample rather than

Table 4. Correlations between tenure and training suggestion ratings.

	No. Years Worked (Tenure)
No. descriptions	-.03
Originality rating	-.08
Practicality rating	-.01
Completeness rating	-.10

* $p = .05$

** $p = .01$

any direct influence of family size on tenure. Since "number of brothers and sisters" had a factor coefficient of $-.09$, it looks as though observed age differences between attendants may account best for this relationship.

Ruralism of the institution was also predicted to be positively associated with tenure, and the institutions were selected with their settings in mind. A significant positive correlation ($r_{pbi} = .58, p < .01$) was observed between the single variables school and tenure, which would indicate that, if anything, the opposite is taking place. The attendants in the less rural setting had longer tenure, on the average, than the attendants in the most rural institutions.

Object Cluster Analysis

An object cluster analysis (O-Type Analysis, Tryon and Bailey, 1970) was performed on each attendant's scores on each of the four preset clusters. The analysis transforms these cluster scores to standard scores, imposing a mean of 50 and a standard deviation of 10 on the distribution. The purpose of the O-type analysis is to differentiate Ss into profiles or types of scores on the clusters of variables, defining each cluster in terms of high (greater than one standard deviation above the mean), medium (within one standard deviation of the mean) or low (greater than one standard deviation below the mean). Mean values of standard scores for individuals showing the same cluster score profile constitute an O-type.

The main results of the O-type analysis in the present study are presented in Figures 4 and 5. The mean value of standard scores for each cluster are shown in Figures 4 and 5 for each of seven types (O-types). Thirteen other "minor" O-types, encompassing 66 Ss, were generated by this analysis but were discarded because each of their memberships consisted of less than 5 per cent of the total number of Ss in the study (172). The results for the minor O-types are presented in Appendix F. The profiles of cluster scores for 22 individuals were so unique that they did not belong to any of the O-types.

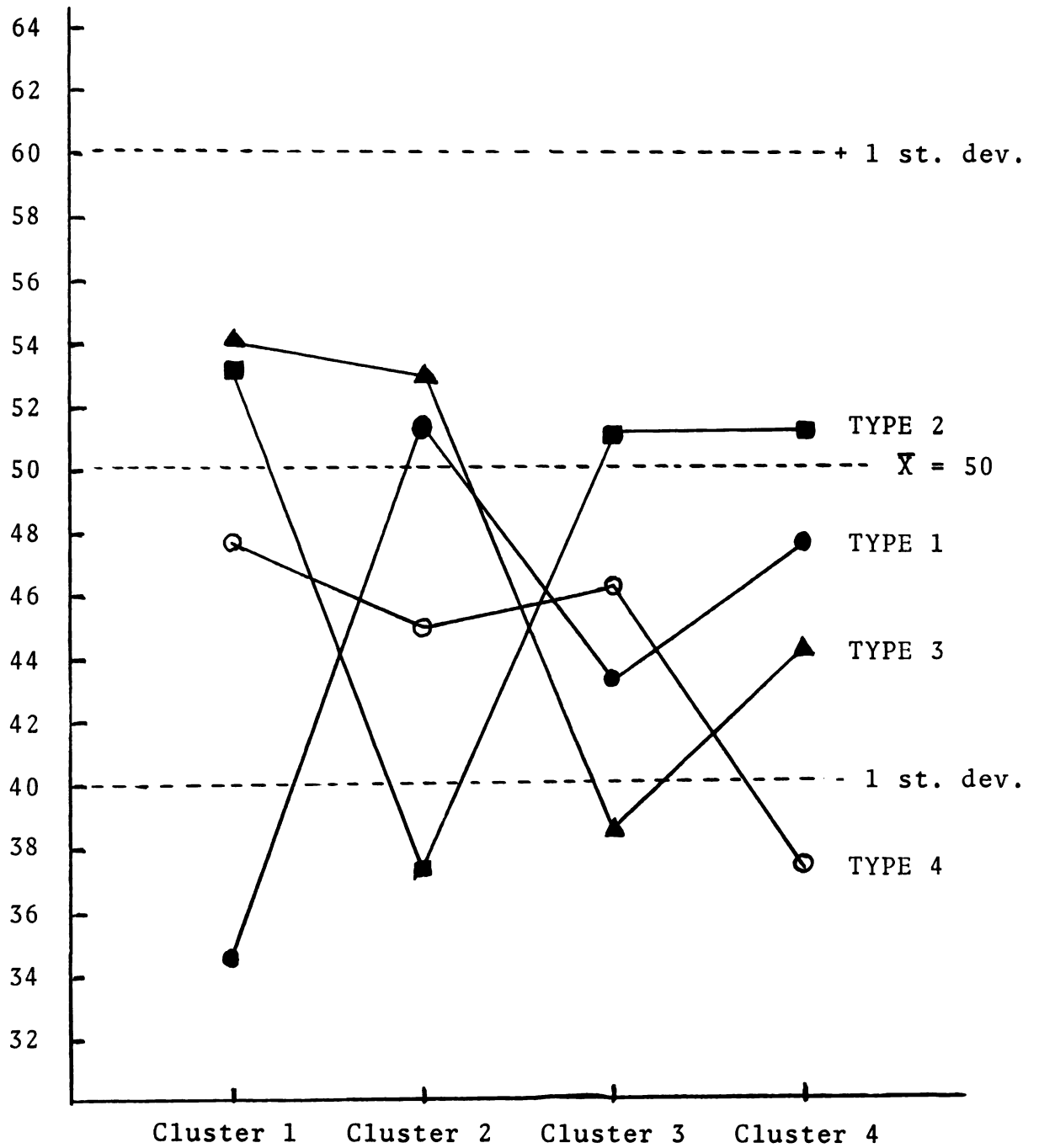


Figure 4. Mean value of composite scores by cluster for \bar{S}_s in types 1 through 4.

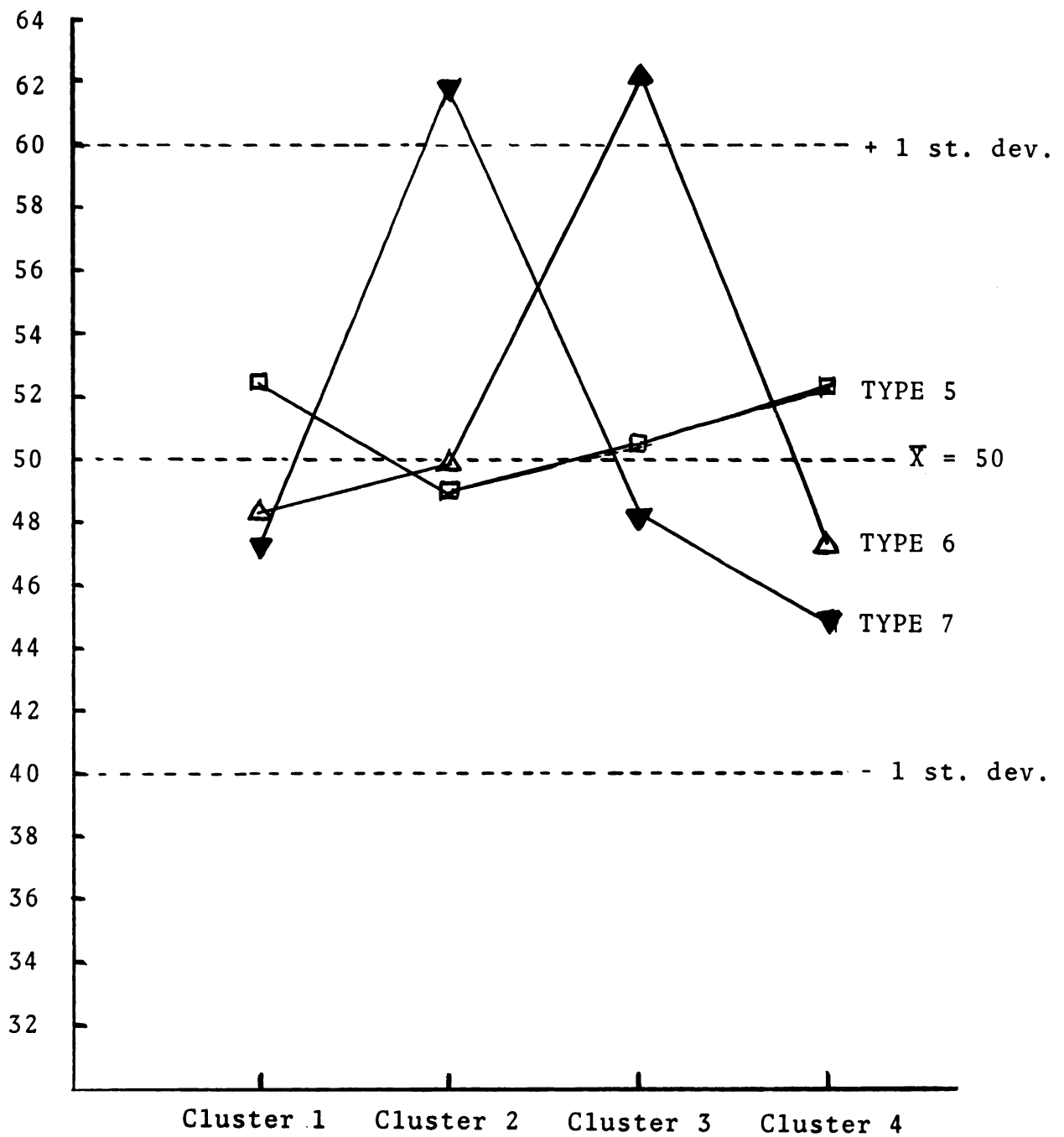


Figure 5. Mean value of composite scores by cluster for \underline{Ss} in types 5 through 7.

The seven profiles illustrated in Figures 4 and 5 can be labeled on the basis of the cluster on which individuals represented by that profile scored beyond one standard deviation away from the mean (mean composite scores of 60 or higher or 40 or lower). These seven profiles are therefore labeled (in order of O-type number): low training suggestion ratings; low satisfaction; low segregation scores; low tenure; medium scores; high segregation scores; and high job satisfaction.

Accuracy of Supervisors' Perceived Job Satisfaction

Seventy-five supervisor-perceived job satisfaction ratings were returned for Ss who had also completed that portion of the questionnaire, although many more attendants (a total of 150) and supervisors (a total of 89) had filled out this scale. As can be seen in Table 5, there is almost no relationship observed between how the attendants responded to the job satisfaction measures and the supervisors' perceived satisfaction responses.

However, it can also be noted that the attendants responses to the "pay" subscale may be related to how the supervisor perceives the attendant's job satisfaction, since significant correlations were achieved for three of the supervisor perceived satisfaction scales with the attendant pay scale. Total reported satisfaction and total perceived satisfaction correlated only .20, accounting for only four per cent of the variance in this matrix.

Table 5. Correlations between attendant satisfaction scores and supervisor satisfaction scores.

SATIS- FACTION SCORE	ATTENDANT					
	WORK	SUPER- VISOR	PEOPLE	PAY	PRO- MOTION	TOTAL
SUPERVISOR	WORK	.15	.12	.08	.09	.18
	SUPERVISOR	.13	.11	.13	.02	.14
	PEOPLE	.17	.06	.12	.35**	.18
	PAY	-.11	.05	.01	.31**	.06
	PROMOTION	.16	-.08	.08	.05	.13
	TOTAL	.15	.07	.11	.25*	.13

* p < .05

** p < .01

What these results indicate, then, is that at least these supervisors could not predict how satisfied a given attendant is with her (his) job. It appears that what the supervisors are using to estimate job satisfaction in general is the attendant's satisfaction with her pay, which the supervisors could estimate fairly accurately. They could not, however, estimate at all how satisfied attendants were with their work, the people with whom they worked, promotional policy, and, particularly, supervision they receive.

DISCUSSION

The first finding that needs emphasis is that the attendant nurses, given the opportunity, were very articulate about the kinds of training programs that they felt should be implemented. The vast majority (85%) felt that formal job training should not only include classroom experience prior to the job, but on the job training as well, before being expected to take the full responsibilities associated with the job. They suggested training programs ranging in duration from a few days to the entire duration of the job, with an average suggested duration of 18.4 weeks, or at least the first four months of the job.

The ratings from the training suggestions showed that in general the attendants are quite practical (average practicality score was 4.23 on a six point scale) and also fairly original (average score 3.09 on a six point scale), since most attendants included suggestions different from their own training. Completeness ratings were also near the midpoint of the scale (3.4). Examples are cited in Appendix C. Of these ratings, only the originality rating in this study can be considered at all valid. This rating was based on responses attendants gave when asked to describe

training they had received, while practicality and completeness ratings were made relative to the range of suggestions offered by all attendants. The higher inter-rater reliability found for the originality ratings reflects this relationship. Validating the completeness and particularly the practicality measure would involve the participating of the institutions' staffs, which were not available for this study. If the measures are to be used again by this investigator or by others, validating procedures should be carried out.

Even keeping these limitations in mind, the cluster analysis revealed the similarity in these ratings and their strong positive association with each other. Contrary to expectation, attendants that rated highly on originality were not necessarily rated lower on practicality or completeness. In fact, the opposite was true; those that were rated highly on one tended to be rated highly on the other two.

It was also found that, contrary to prediction, scoring highly on any of the above criteria appeared to have no relationship with tenure. While it is risky to interpret negative results, the lack of any differences between low, medium and high tenure attendants may be reflecting attendant abilities to answer questionnaire-type questions. Certain aspects of the job common to all attendants might also account for the lack of differences. Although the responses are not scored individually on the job satisfaction index

(JDI) that was used, perhaps a technique such as a cluster or factor analysis on these individual responses might reveal some of these common factors.

On the basis of the above conclusions, it seems logical that attendants can do at least as well determining training procedure for attendant nurses as is done by professionals. Since a 0 point on the scale of originality was determined by the response "same training as I received," even a midpoint response indicates some proficiency in outlining a training program for attendants. It is suggested, then, that attendants at least be consulted in future job training programs being planned at these two institutions.

High tenure was not related either to more ruralism or large family size, contrary to what Cleland et al. (1967) found in a Texas institution. In fact, the variables which exhibited significant differences between schools were the ones that were negatively related to ruralism. These differences in results between the two studies may be due to several factors. Cleland et al. defined ruralism in terms of each attendant's background. In this study, ruralism was defined in terms of the training school's setting, defined in terms of population density of the town the Training School is in and distance from a large metropolitan area. These different definitions may account for some of the differences in findings, since many attendants at both institutions live as many as 30 miles away from the institution. Secondly,

the disparate findings may be due to regional differences in the country. Whereas Texas is a large state with relatively less population density than Michigan, Michigan may not have the same extremes in ruralism in attendants that the Texas study observed. It may also be due to institutionally specific variables as well.

Differences observed in tenure between the two Training Schools in this sample might well be interpreted as support for the Butterfield et al. (1966) hypothesis that tenure reflects the economic climate of the surrounding area more than any other factor. Unemployment has been generally high in this state, particularly around the large urban centers of the state, and the high tenure of the least rural institution may more closely reflect the uneasiness about re-employment. This is emphasized by the lack of relationship between tenure and job satisfaction.

Attitude

In general, the Efron and Efron Attitude about Mental Retardation items did not cluster as in the original factors. One cluster did appear to be made up of very similar segregation via institutionalization items and two personal exclusion items. The original segregation via institutionalization factor was the most reliable factor from the original attitude scale. Not all ten of the original factored items used in this study, however, did cluster together.

They may be an unfair test of the attitude scale's reliability, since it was not clustered separately, but only as one section of very different kinds of variables. Due to the nature of the cluster analysis, specifically that it clusters variables until 95 percent of the variance is accounted for in the correlation matrix of the V-analysis, most of the variance had been accounted for by other types of variables (e.g., training suggestions, job satisfaction) that had high communalities before the attitude items (with the exception of the segregation-exclusion items and one hopelessness item) had a chance to cluster.

This does mean, however, that in this study, those attitude variables that did not cluster (authoritarianism, cultural deprivation, noncondemnatory etiology, hopelessness) did not account for much of the variance. Since this was also true of most of the personal history variables (e.g., birth order, religion, number of children, organizations belonged to) it may be concluded that for the focal interest areas of this study--training suggestions and tenure and associated job satisfaction--these attitudinal and personal variables account for little of the total variance in other variables.

O-Analysis

From the O-analysis (Figures 4 and 5), it is possible to interpret the individual Ss' profiles emerging (each

including at least five percent of the sample). It must be assumed that the clusters have normal theoretical distributions, and that scores within one standard deviation of the standardized mean (50) are expected values. It is then possible to discuss these individual profiles on the basis of which cluster is characteristically beyond one standard deviation from the mean in either direction.

The following are descriptions and interpretations of the O-types illustrated in Figures 4 and 5. Fifty percent of the attendants in the total sample are included in these seven O-types.

Type 1: Low Training Suggestion Ratings

Ten individuals, roughly five percent of the sample, were found to rate low on the training suggestion cluster, but were within one standard deviation (medium) on all other clusters. The moderately low index of homogeneity (IH) indicates that there was some variability between individuals in this O-type. While these people appear to be rated low on the training suggestions, giving suggestions closely resembling their own training, this does not seem to relate to their satisfaction, tenure or attitude about segregating retarded children from society. It is worthwhile to note that this is the only profile including a low score on the suggestion ratings.

Type 2: Low Satisfaction

While these 12 individuals (seven percent) are low on satisfaction, they have medium scores on the other three clusters. They are probably dissatisfied with their jobs, have moderately rated training suggestions, and are only moderately in favor of segregating retardates via institutionalization. Their job satisfaction does not seem to motivate them to quit because they have, in general, moderate tenure. On the other hand, as can be seen both in the major and minor (Appendix F) O-types, there are no profiles including both low satisfaction scores and high tenure, indicating that these may be some of the most likely individuals either to quit within the next few years, or change their minds about job satisfaction.

Type 3: Low Segregation Scores

One of the largest of the seven major O-types, this one includes 15 persons (about 9 percent of the sample). These individuals indicated that they are opposed to the segregation of retardates by institutionalizing them. In general, they are of medium tenure, were rated only moderately for any of the training suggestions, and report themselves not dissatisfied with their work. While they basically oppose the segregation of retarded people from society, there must be enough rewarding aspects of the job to keep their satisfaction in the medium range; they might be labeled

the "missionaries" of the institution who work for the residents, although disagreeing in principle with segregation. If one wanted to introduce new techniques of training retardates to be self-sufficient and return to the community, these individuals might be the ones to engage as potential change agents (Fairweather, 1968) within the institution.

Types 4 and 5: Medium Scores

These individuals collectively are those attendants of medium suggestion ratings, medium job satisfaction, medium support of institutionalization, and low and medium tenure. They are described together because the low tenure group will likely join the second in profile as soon as they have worked long enough to obtain medium tenure ratings. Together, they comprise about 12 percent of the sampled attendants, and might be titled "the middle workers." Middle workers are competent, moderately satisfied with their jobs, and don't feel particularly one way or the other about institutionalizing or not institutionalizing retarded people, even though they work in an institution for the retarded.

Type 6: High Segregation

In about equal number to the low segregation profile (13 people) are a group feeling strongly that retarded individuals should be institutionalized. They are moderately

satisfied with their jobs and were able to articulate training suggestions as well as most other attendants. They are also of medium tenure.

Type 7: High Job Satisfaction

The largest single type (10 percent of the sample) is made up of people who are highly satisfied with their jobs, but are not differentiatable on the other three clusters. This O-type had an extremely high IH, indicating a fairly homogeneous group. These individuals were moderately articulate about training suggestions, and would be those people that might be predicted to continue working at the institution from the standpoint of the institution's staff. However, based on the findings of this study--specifically that job satisfaction and tenure are not significantly related--one cannot make this prediction.

It must be noted that a highly rated training suggestion group is missing from the major O-types. Twenty-six such individuals exist in the minor O-types, but varied too widely in their profiles on the other three clusters to constitute a single profile. It is these individuals that the institutions might most logically look to for assistance in planning new training programs. They rated highly on cluster 1, indicating an ability to articulate original, practical and complete job training programs for attendant nurses.

There is much work to still be done in identifying variables related to tenure of attendants. In general, this study would support the hypothesis that institutionally specific variables such as the economic climate of the region might be the most fruitful experimental emphases.

Attendants seem able to participate in planning training programs on the basis of the originality, practicality and completeness of the suggestions they gave in response to this questionnaire. They would seem to be, in general, at least as competent as those now devising the training programs and should definitely be allowed to have input into the training decisions of the institution. An additional study is needed to test out the attendant's ability to independently plan and implement training programs for attendant nurses.

SUMMARY

The present study was designed to see if attendants in two mental retardation training schools could plan job training programs for other attendants, and whether attitude, personal history and job satisfaction variables were related to planning ability. Tenure was also investigated, specifically to see which, if any, of the above mentioned variables accounted for variance in tenure. Tenure was also investigated in terms of its relationship to the setting of the two training schools, specifically, most rural and least rural location. In addition, immediate supervisors of the 172 volunteer attendant nurse ss were surveyed with the same job satisfaction measure (Cornell Job Descriptive Index) to observe the relationship between actual attendant job satisfaction and job satisfaction of the attendant as perceived by the supervisor.

The data was analyzed by means of a Cluster Analysis (Tryon and Bailey, 1970), and four clusters of variables were obtained, accounting for 65 percent of the variance in the correlation matrix. These four clusters pertained to (a) attendants' training suggestions rated for number of responses, originality, practicality and completeness; (b) job

satisfaction; (c) attitude about segregation of retarded individuals via institutionalization; and (d) tenure related variables.

The training suggestion ratings were found not to be related to tenure, and was similarly not related to either of the other two clusters. Job satisfaction was found to be negatively related to attitude in favor of segregating retardates, and not related to tenure. A positive relationship was also found between segregation attitude and tenure.

Tenure was not found to be related to more ruralism; the least rural setting training school had the highest average tenure. This was discussed, and interpreted in favor of the Butterfield, Barnett and Bensberg (1966) hypothesis that tenure is related to regional factors such as economic climate of the county and institution is located in more than attendant attitude or personal history variables.

An Object Cluster Analysis (O-type analysis, Tryon and Bailey, 1970) was also performed, yielding 20 attendant profiles on the four cluster scores for each attendant. Seven of these profiles (O-types) contained at least five percent of the sample in each profile, and collectively contained 50 percent of the sample. These were labeled: low training suggestion ratings; low satisfaction; low segregation scores; low tenure; medium scores; high segregation scores; and high job satisfaction. The nature of these profiles was discussed.

Supervisor perceived job satisfaction was found to have little relationship to attendant reported job satisfaction. Significant correlations between the two sets of job satisfaction data were between supervisors ratings on the "pay" and "people" subscales of the JDI and attendant "pay" satisfaction scores, which was interpreted as the supervisor interpreting pay satisfaction as total job satisfaction on the other subscales as well.

It was concluded that attendants could specify what elements should go into a training program for other attendants, and recommended that they be included in planning new training programs by the two Training Schools' staffs.

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APPENDICES

APPENDIX A

Attendant Nurse Survey

APPENDIX A

Attendant Nurse Survey

Part I: General Information

1. Age _____
2. Sex: M F (Circle one)
3. Last year of school completed: (Circle one)
 - a. High school year _____ (fill in year)
 - b. High school diploma or equivalent
 - c. One year college
 - d. Two years college
 - e. Three years college
 - f. Bachelors degree
 - g. Graduate study _____ (specify amount)
4. Marital status: a. single b. married (Circle one)
5. Number of children: _____
6. Number of brothers and sisters: _____
7. If you do have brothers and sisters, were you: (Circle one)
 - a. First born
 - b. Second born
 - c. Third born
 - d. Other _____ (specify)
8. Religion: (optional)
 - a. Protestant
 - b. Catholic
 - c. Jewish
 - d. Other _____ (specify)
 - e. None
9. List the organizations and voluntary associations you belong to (for instance, Church Women's Auxiliary, Grange)

10. Number of years you have worked at the State Home and Training School:_____.
11. Is this the first institution for the mentally retarded you have worked for?
a. Yes
b. No
12. If no to question 11, how many years did you work in any institution for the mentally retarded prior to coming to work at this State Home and Training School?
_____.

In which states? _____

Part II: Suggestions for an Attendant Nurse Job Training Program.

1. Describe the job training you did receive (if none, write "none") _____

2. If you did receive job training, was it useful?
a. Yes _____ b. No _____.
If you had no training, do you think it would have been useful? a. Yes _____ b. No _____.

3. If you were planning a job training program for attendant nurses, would it be:
a. Prior to beginning the job
b. On the job training only
c. A combination of the two.
4. If you were planning a training program for attendant nurses, how long would it take each attendant nurse to complete the program? _____
5. List descriptions of the training program you would plan for attendant nurses in the space below (for example, "prior to beginning the job, attendant nurses would be given four lectures on causes of mental retardation;" or "movies on ward procedure"):

If you need additional space, use the back of the page.

Part III: Questions about Mental Retardation

For each of the following questions, please circle the number to the left of the question which most closely matches your feeling about that question. Please use the following categories:

1. strongly disagree
2. disagree
3. somewhat disagree
4. somewhat agree
5. agree
6. strongly agree

Example:

① 1 2 3 4 5 6 In winter, the weather is generally warmer than in summer.

1 2 3 4 5 6 It is wrong to laugh at a mental retardate in every case.

1 2 3 4 5 6 The majority of the mentally retarded are the children of the more disadvantaged classes of our society.

1 2 3 4 5 6 Retardation is one of the two largest causes of sex crimes.

1 2 3 4 5 6 It would be kinder to establish separate communities for retardates where they would not feel so out of place.

1 2 3 4 5 6 Any perfectly normal parents may have a retarded child.

1 2 3 4 5 6 Most of our social problems would be solved if we could somehow get rid of the immoral, crooked and feeble minded people.

1 2 3 4 5 6 Once someone is retarded, little can be done for him.

1 2 3 4 5 6 Minimally retarded persons are more nearly comparable to the most profoundly retarded than they are to the nonretarded.

1 2 3 4 5 6 To be perfectly honest, this would be a safer place if there were no mentally retarded.

1 2 3 4 5 6 A mental retardate can live just as happy a life as a normal person.

- 1 2 3 4 5 6 As sad as it is to admit it, there really is little hope for the mentally retarded.
- 1 2 3 4 5 6 If people obeyed God, there would be less mental deficiency.
- 1 2 3 4 5 6 You can generally identify a retardate by his looks.
- 1 2 3 4 5 6 Except for the fact that they are not so smart, mental retardates are the same as other children.
- 1 2 3 4 5 6 There are many causes of retardation, but sinning parents is not one of them.
- 1 2 3 4 5 6 A substantial cause of mental retardation is cultural and educational impoverishment.
- 1 2 3 4 5 6 I'd rather see a child born dead than mentally retarded.
- 1 2 3 4 5 6 Decent parents are just as likely to have a mentally retarded child as any other parents.
- 1 2 3 4 5 6 It is unfair to the normal children to have retardates in the same classroom.
- 1 2 3 4 5 6 Programs, such as Headstart, that broadens the child's experience at an early age prevent cases of mental retardation.
- 1 2 3 4 5 6 Most people don't realize how much our lives are controlled by plots hatched in secret places.
- 1 2 3 4 5 6 Retardates are responsible for more crimes than their proportion in the population.
- 1 2 3 4 5 6 In many cases, illiteracy and mental retardation are indistinguishable.
- 1 2 3 4 5 6 I would trust a mentally retarded person as a baby-sitter.
- 1 2 3 4 5 6 Retardates should be prevented from having children by a painless operation.
- 1 2 3 4 5 6 I could see myself having a mental retardate as a true friend.

- 1 2 3 4 5 6 There is a sharp dividing line between "normal" and "mentally retarded."
- 1 2 3 4 5 6 Mental retardation often leads to mental illness.
- 1 2 3 4 5 6 I would do everything in my power to prevent my daughter from marrying a mental retardate.
- 1 2 3 4 5 6 Having a retardate is one way God punishes people.
- 1 2 3 4 5 6 The wild sex life of the old Greeks and Romans was tame compared to some of the goings on in this country, even in places where people might least suspect.
- 1 2 3 4 5 6 Mentally retarded children should live in special institutions where they can be supervised and protected.
- 1 2 3 4 5 6 Science has its place, but there are many important things that can never possibly be understood by the human mind.
- 1 2 3 4 5 6 What this country needs most, more than laws and political programs, is a few courageous, tireless devoted leaders in whom the people can put their faith.
- 1 2 3 4 5 6 Retardates should live among themselves and everything should be done to help them live happy lives.
- 1 2 3 4 5 6 Separate schools for the retarded would provide them with the special programs they need.
- 1 2 3 4 5 6 A mental retardate can live just as useful as a normal person.
- 1 2 3 4 5 6 Most mental retardates are better off in an institution with others of their kind.
- 1 2 3 4 5 6 Obedience and respect for authority are the most important virtues children should learn.

Part IV: Job Description

Please put a "Y" beside an item if the item describes that aspect of your job; "N" if the item does not describe your job; or "?" if you cannot decide.

<u>Work</u>	<u>Supervision</u>	<u>People</u>
<u>Y</u> Fascinating	<u>Y</u> Asks my advice	<u>Y</u> Stimulating
<u>N</u> Routine	<u>N</u> Hard to please	<u>N</u> Boring
<u>Y</u> Satisfying	<u>N</u> Impolite	<u>N</u> Slow
<u>N</u> Boring	<u>Y</u> Praises good work	<u>Y</u> Ambitious
<u>Y</u> Good	<u>Y</u> Tactful	<u>N</u> Stupid
<u>Y</u> Creative	<u>Y</u> Influential	<u>Y</u> Responsible
<u>Y</u> Respected	<u>Y</u> Up-to-date	<u>Y</u> Fast
<u>N</u> Hot	<u>N</u> Doesn't supervise enough	<u>Y</u> Intelligent
<u>Y</u> Pleasant	<u>N</u> Quick-tempered	<u>N</u> Easy to make enemies
<u>Y</u> Useful	<u>Y</u> Tells me where I stand	<u>N</u> Talk too much
<u>N</u> Tiresome	<u>N</u> Annoying	<u>Y</u> Smart
<u>Y</u> Healthful	<u>N</u> Stubborn	<u>N</u> Lazy
<u>Y</u> Challenging	<u>Y</u> Knows job well	<u>N</u> Unpleasant
<u>N</u> On your feet	<u>N</u> Bad	<u>N</u> No privacy
<u>N</u> Frustrating	<u>Y</u> Intelligent	<u>Y</u> Active
<u>N</u> Simple	<u>Y</u> Leaves me on my own	<u>N</u> Narrow interests
<u>N</u> Endless	<u>Y</u> Around when needed	<u>Y</u> Loyal
<u>Y</u> Gives a sense of accomplishment	<u>N</u> Lazy	<u>N</u> Hard to meet

<u>Pay</u>	<u>Promotions</u>
<u>Y</u> Income adequate for normal expenses	<u>Y</u> Good opportunity for advancement
<u>N</u> Barely live on income	<u>N</u> Opportunity somewhat limited
<u>N</u> Bad	<u>Y</u> Promotion on ability
<u>Y</u> Income provides luxuries	<u>N</u> Dead-end job
<u>N</u> Insecure	<u>Y</u> Good chance for promotion
<u>N</u> Less than I deserve	<u>N</u> Unfair promotion policy
<u>Y</u> Highly paid	<u>N</u> Infrequent promotions
<u>N</u> Underpaid	<u>Y</u> Regular promotions
	<u>Y</u> Fairly good chance for promotion

APPENDIX B

Training Suggestion Rating Procedure

APPENDIX B

Training Suggestion Rating Procedure

Two psychology graduate students (including this investigator) underwent three training sessions for rating procedure, during which the training the attendants had had was outlined for them from the attendants' own descriptions of their training. The range of suggestions made by the 172 attendant Ss was also defined, yielding three rating scales: originality or suggestion(s); practicality of suggestion(s); and completeness of the training program suggested. Each of the ratings was assigned on a scale of 0 to 6 points.

At the end of the three training sessions, the raters were checked for inter-rater reliability on 30 randomly selected questionnaires, and obtained inter-rater reliabilities of $r = .93$ for originality ratings; practicality reliability was $.85$; and reliability for the completeness ratings was $.89$, with an overall inter-rater reliability of $r = .89$.

The 142 remaining questionnaires were randomly divided into two equal piles, and each rater took one half of the questionnaires to rate. Rating was completed within a week of the final training session.

APPENDIX C

Sample Rated Responses for Attendants' Training Suggestions

APPENDIX C

Sample Rated Responses for Attendants' Training Suggestions

Rating	Sample Response
ORIGINALITY	
0	Same training I received.
1	Putting up medications, bandaging wounds.
2	Lectures and movies, plus tour of buildings before duty. On the job training under trained personnel for a certain length of time before being put on active duty alone.
3	Prior to beginning the job one week of relating the new employee to retardation, its causes and cures (what cures that are available). One week on the job training in the building where employee is to work. One week back in classroom atmosphere to discuss prior two weeks. Movie on procedures are useless unless each building supervisor has their own.
4	Prior to beginning the job, attendant nurses would be given a chance to see the type of mental retardation films in which will give them the type of children they will be expected to work with. Also have them understand what is expected of them once they start the job. While on the job let them learn about each child--their likes and dislikes and care for as few as possible. While doing this it is possible to understand a child's reasons for being mentally retarded. This also gives closer contact with mental retarded.

Rating	Sample Responses
--------	------------------

ORIGINALITY	
-------------	--

- | | |
|---|--|
| 5 | We have a very good training program here. One phase I might suggest would be something on understanding and dealing with the parents of the retardates. |
| 6 | Basics in nursing care, lectures and talks on retardation. Go into the rights of the retardate in detail. Movies are a great help. |

PRACTICALITY	
--------------	--

- | | |
|---|--|
| 0 | Fly around the country to see how other attendants are trained. |
| 1 | Attendants each be given a ward to direct as on the job training. |
| 2 | On the job training is the most useful. Movies if the right kind would be helpful. Most people learn more by doing. |
| 3 | How to keep the retardate happy; how to put up and give medications; how to teach the retardate personal hygiene. |
| 4 | Lecture movie prior to going into building. 2. going into area where you will be working to observe is most beneficial--too much is thrown at you and only confuses most people--this is most frightening. 3. Always have another friendly attendant with you to explain certain behaviors. |
| 5 | Lectures on understanding the mentally retarded (before starting employment)--movies on training for eating habits and pottyng--also a brief course on medications and how to set them up. Also acquainting the help with the grounds and procedures to date. |
| 6 | One week basic orientation at the beginning of the job explaining procedures of giving medications. Movies showing different types of situations--i.e., seizure patient, heart patient, etc. After approximately six months I would like to see another two week course given. I would be in favor of a refresher course given every two years to every employee...to bring him up to date with new procedures and techniques. |

Rating	Sample Response
--------	-----------------

COMPLETENESS	
--------------	--

0	Movies
---	--------

1	Prior training would be fine if they told things the way they really are instead of filling you of grand ideas then sending you to a building where you learn all over again.
---	---

2	Movies and lectures. Work in the worst areas first, then work up to easier areas. All new attendants should have an idea of how bad it can be.
---	--

3	Full 150 hour course already established plus tours of programs already in progress to see some of the results already accomplished--placement, job training, etc. Also a close follow-up of progress for at least one year.
---	--

4	1. Lectures and movies on mental retardation, learn medication symbols and terms, etc. Give more information on the kind of patients they will be taking care of--some of the movies and lectures (given) have nothing to do with our type of resident. Work with a one-to-one basis for one week with a resident, etc.
---	---

5	Prior to beginning the job, the person would be shown the areas he was to work in--and then with up to date movies of the problems and duties he or she would be dealing with! Of course, a detailed course in medicine is very important--as well as instruction of fire drills, use of fire extinguishers, etc. Recommended books on the mentally retarded as required reading would be most essential.
---	---

6	Prior to the job: movies on headbanging, behavioral programs with questions and answers. Practical demonstrations on putting up and giving medication. On the job--actually putting up and giving medication. How to care for and handle disturbed children. Making out medication cards and sign out sheets--all aspects of daily work and care of children.
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APPENDIX D

Attendant Cover Letter

APPENDIX D

MICHIGAN STATE UNIVERSITY East Lansing, Michigan

Department of Psychology, Olds Hall

April 10, 1972

Dear Attendant Nurse:

This letter is a request for your cooperation in a project initiated at Michigan State University, dealing with attendant nurses' ideas for attendant nurse training programs, job satisfaction, and some general questions about mental retardation. I would very much appreciate it if you would fill the questionnaire out at home and return it in the stamped, addressed envelope provided for you. In addition to the questions mentioned above, there is a section asking for general information about you. Even if you choose not to fill out the other sections, please fill out the general information section and mail it back to me.

Please do not discuss your responses with other attendant nurses until after you have mailed the questionnaire back to me. After the information is analyzed, I will be happy to send you a copy of the results; if you would like a copy, fill out the attached card and put it in the envelope with your questionnaire before mailing it. I will also probably be coming to the State Home and Training School to discuss the results with the staff during the summer.

No names will be recorded, so no one will know which is your questionnaire. Thank you very much in advance for your cooperation.

Sincerely,

Karen M. Lounsbury
Graduate Research Assistant

APPENDIX E

Supervisor Cover Letter

APPENDIX E

MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48823

Department of Psychology • Olds Hall

Dear Supervisor:

This is a request for your cooperation in a project initiated at Michigan State University, dealing with attendant nurses' ideas for training programs, job description and information about mental retardation. In addition to this information, I would like to have supervisors fill out the same job description questions as if the supervisor were the attendant nurse. If there is more than one supervisor in a cottage, you need not both fill out forms for the same attendant nurse; rather, each take half of the forms.

The numbers on the forms correspond to the numbers on the attendant nurse questionnaires. Before handing an attendant nurse his/her questionnaire, please pencil in the attendant nurse's name on a correspondingly numbered form so that you will know who you are supposed to be filling the job description form out for. Then, please fill out the forms at home. Please erase the names as you complete the form; I do not want names recorded, but will match the numbers. After you have completed these forms, please place them in the stamped, addressed envelope and mail them back to me.

Please do not discuss your responses with attendant nurses or other supervisors until after you have mailed the forms. After the information is analyzed, I will be happy to send you a copy of the results; if you would like a copy, fill out the attached card and put it in the envelope with your forms before mailing it. I will also probably be coming to the State Home and Training School to discuss the results with the staff during the summer.

Thank you very much for your cooperation.

Sincerely,

Mrs. Karen M. Lounsbury
Graduate Research Assistant

APPENDIX F

Typological Classification of Subjects Based on Object Cluster Analysis: Minor O-Types

APPENDIX F

Typological Classification of Subjects

Based on Object Cluster Analysis: Minor O-Types

Type	Number of Subjects	CLUSTER 1		CLUSTER 2		CLUSTER 3		CLUSTER 4		Factor
		MSCS	IH	MSCS	IH	MSCS	IH	MSCS	IH	Scores
8	4	37.16*	.95	45.82	.93	57.61	.98	61.57*	.96	.96
9	5	35.96*	.76	52.10	.96	62.23*	.91	48.74	.90	.88
10	5	37.18*	.91	55.19	.96	64.17*	.97	66.91*	.89	.93
11	4	45.87	.86	23.51*	.90	56.06	.97	40.04	.97	.92
12	7	49.15	.95	47.81	.96	46.09	.66	66.69*	.98	.90
13	4	42.80	.96	43.16	.84	64.99*	.98	66.73*	.89	.92
14	4	60.86*	.94	65.32*	.98	26.93*	.88	36.83*	.98	.87
15	7	45.28	.91	60.04*	.95	46.77	.97	62.16*	.85	.92
16	3	63.07*	.99	31.38*	.94	65.96*	.99	52.36	.82	.94
17	7	63.54*	.97	54.84	.82	42.66	.89	38.79*	.98	.91
18	6	63.30*	.92	49.25	.91	54.35	.81	42.43	.99	.91
19	6	62.33*	.88	47.50	.84	55.30	.93	63.82*	.96	.90
20	4	69.97*	.59	60.69*	.96	48.58	.96	47.20	.99	.78

MSCS--denotes the mean value of standard composite scores on a cluster for subjects in a type.

IH--denotes the index of homogeneity for the standard composite scores of subjects in a type.

*--indicates that the value is more than one standard deviation away from the mean standard composite score for the total sample.

Factor Scores indicate the overall homogeneity across all dimensions given for each type.
