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ABSTRACT .

A structured interview procedure was used during the spring of 1975 as a tool in selecting nursing and dental hygiene students at Johnson County Community College. Potential students had two 20-minute interviews: one by a staff member of the program to which application was made, and one by another staff member. Interviewers rated the applicants on several personal characteristics including: perception of nursing, stamina, personal integrity and maturity, self insight and self concept, interpersonal competency, problem solving skills, social conscience and empathy, ethics, communication skills, ability to work with hands, and personal appearance. Interviewers also gave each applicant a percentile rating and an acceptability rating. Final selection was made by ranking applicants according to a total summed score obtained by adding the rating scores of the two interviewers. A bonus of 10 points was given to all Johnson County residents. An evaluation of the results revealed that nursing staff and non-nursing staff tended to give comparable ratings to the same applicant. A survey of the 34 interviewers showed a favorable overall reaction to the structured interview instrument and related procedures. Data are tabulated, previous selection methods are summarized, and the interview instrument is appended. (NHM)

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# NURSING AND DENTAL HYGIENE SELECTION PROCEDURES

## PART I

THE STRUCTURED INTERVIEW AS A TOOL  
FOR SELECTING STUDENTS INTO AN  
ASSOCIATE OF ARTS DEGREE PROGRAM



FALL 1975

U S DEPARTMENT OF HEALTH,  
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## PREFACE

The nursing and dental hygiene Program Criteria Selection Committee and the Board of Trustees requested that the administration do an evaluation of the nursing and dental hygiene selection procedures. The evaluation has been separated into two components. This report is part one which is a preliminary evaluation of the structured interview instrument used during the Spring of 1975 as a tool for the selection of the 1975-76 first year nursing and dental hygiene classes.

The second part of the evaluation will be an analysis of the available data for graduates and withdrawals for both the nursing and dental hygiene programs. A cursory examination of the data indicates that there will be insufficient data for a meaningful predictive study. Incorporated into the second report will be a summary of JCCC research and recommendations concerning data collection and a recommended procedure for incorporating these data into the annual selection process.

Dr. Diana Kelley had a major role in the early development of this report.

Elaine L. Tatham  
Director of Institutional Research

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## I.. BACKGROUND)

### Board Action

In a report made to the Board of Trustees during December 1974, the Program Criteria Selection Committee emphasized the potential value of an interview procedure for the evaluation of personal characteristics and relevant past experience of applicants to the nursing and dental hygiene programs. The committee received Board approval of the recommendation for inclusion of the interview as an integral part of the selection process. The committee also recommended and received approval for the employment of a consultant to the College whose goals were the development of the interview instruments and a video tape training package for the interviewers. The committee further recommended and received approval for the Office of Institutional Research to conduct an evaluation of the reliability and the validity of the structured interview instruments.

### Development of the Interview Instruments

The instruments were developed by the consultant in cooperation with members of the nursing and dental hygiene staff. The consultant met with staff members of each program twice. At these meetings, the staff provided the consultant with information concerning the characteristics deemed important for nursing or dental hygiene and assisted in the refinement of questions designed to reveal these characteristics.

Four separate interview instruments were developed - two for dental hygiene and two for nursing. For each program, one interview instrument was designed to be administered by a professional staff member of that program and the other instrument to be administered by other non-program professional staff members. The "program staff" nursing and dental hygiene forms were quite similar and consisted

of eleven separate sections. The "other staff" forms for nursing and dental hygiene were also similar and consisted of ten separate sections. Four sections were common to both the "program staff" and "other staff" forms. Each section consisted of a description of a characteristic and several optional questions designed to assess that characteristic. A copy of the interview instrument designed for nursing staff interviewers is presented in Appendix B.

## II. INTERVIEW METHODS

### Interviewers

The eleven members of the nursing staff and eleven other professional staff (e.g., basic science, social science or administrative staff) served as interviewers for applicants to the nursing program. The six members of the dental hygiene staff and six other professional staff served as regular interviewers for applicants to the dental hygiene program. Due to the unexpected absence of a regular interviewer, an additional staff member was asked to interview one applicant to the dental hygiene program.

### Interviewees

Eighty-two applicants were interviewed for the nursing program and thirty-four were interviewed for the dental hygiene program. All applicants interviewed had met the minimum academic criteria for acceptance to the programs.

### Interview Procedure

Each applicant was interviewed twice - once by a staff member of the program to which application was made and once by another staff member. Twenty minutes were allotted for the completion of each interview. For the convenience of the applicant, an attempt was made to schedule the two interviews in consecutive half hour intervals. The program staff interviewers rated the appli-

cant on each of the eleven separate characteristics from 1 (well below average), to 5 (well above average). Thus, 55 was the maximum number of points possible on the program staff interview form. The other staff interviewers rated the applicant on each of ten separate characteristics from 1 (well below average) to 5 (well above average). Thus, 50 was the maximum number of points possible on the other staff interview form.

Interviewers were also asked to provide a percentile rating for each applicant interviewed and to make a recommendation regarding the degree of acceptability of the applicant. The score obtained on each characteristic, the sum of these scores (the total item score), the percentile rating and the acceptability rating were recorded by the interviewer on a standard form for use by the selection committee. A copy of this form is presented in Appendix C.

#### Use of Interview Rating in Applicant Selection

The percentile rating and acceptability rating were requested from the interviewers for research purposes only. The total item scores given by each of the two interviewers for a given applicant were summed by the selection committee and used to rank the applicants. Thus, 105 was the maximum number of summed points an applicant could obtain on the interview. Johnson County residents were given preference over other applicants by adding ten points. Admission to the program began with those individuals who had the largest number of points.

### III. EVALUATION METHODS

#### Interviewer Opinionnaire

An opinionnaire developed by the Office of Institutional Research was sent by campus mail to each of the 34 staff members serving as interviewers. The instrument was designed to obtain information from the interviewers regard-

ing their opinion of the effectiveness of the interview tool and related scoring procedures. The interviewers were asked to make recommendations for improvement of the interview instrument and the interview training tape. A copy of the interviewer opinionnaire is included in Appendix D.

#### Analysis of Interview Data

The data analyses for the nursing applicants and the dental hygiene applicants were done separately. The data analyses compared the rating given by the "program staff" interviewers to the ratings given by the "other staff" interviewers for each of the three variables (total item score, percentile rating, acceptability rating). The ratings were examined for interrater agreement and interrater reliability. Interrater agreement represents the extent to which different raters make the same judgments about each subject. Interrater reliability, however, represents the degree to which the relationship of one subject to another subject is the same for different raters even though the raters may use different numbers to express the relationship. The three types of data analyses (group mean comparisons, correlations and cross-tabulations) summarized below were used to evaluate the interview instruments with respect to interrater reliability and interrater agreement.

*Group mean comparisons* - The average total item score was found for all interviewed applicants using both the ratings given by the "program staff" interviewers and the "other staff" interviewers. The number of items for the two forms was unequal. Total item scores could range from 11 to 55 on the "program staff" interview form and from 10 to 50 on the "other staff" form. For comparison purposes, therefore, the average total item score was divided by the number of items to determine the average single item score. In addition, the average percentile ratings and acceptability ratings assigned the total applicant group were computed using the ratings given by the "program staff"

and "other staff" interviewers. For purposes of computation, the acceptability ratings from unacceptable through outstanding were assigned the numbers 1 through 5. The  $t$  test for dependent samples was used for all of these comparisons as a measure of interrater agreement between the mean ratings given by the "program staff" interviewers and the mean ratings given by the "other staff" interviewers.

The averages for the total item score, single item score, percentile rating and acceptability rating assigned by the "program staff" and "other staff" interviewers were also computed for subgroups of the total applicant group. Nursing applicants were grouped according to those recommended by the selection committee for acceptance (N=40), alternate status (N=15) and rejected status (N=27). Because of the smaller number of applicants to dental hygiene, two groups were formed - those recommended by the selection committee for acceptance (N=20) and all others (alternates and rejected, N=14). For each of the four groups of interviewers, the  $t$  test for independent samples was used to compare the mean ratings of subgroups.

*Correlations* - The two total item scores, two percentile ratings and two acceptability ratings assigned each applicant were statistically analyzed to determine the level of agreement between "program staff" and "other staff" interviewers concerning the relative standing of the applicant. For each of the three pairs of measures, ratings given by the "program staff" interviewers were plotted versus ratings given by the "other staff" interviewers. For all three rating variables, the Pearson  $r$  was used as a measure of interrater reliability.

The same correlation analyses of the two total item scores, two percentile ratings and two acceptability ratings given each applicant by the program and other staff interviewers were also completed for each of the subgroups described in the preceding section on group mean comparisons.

*Cross-tabulations* - Cross tabulations were completed to compare the total item scores with the acceptability ratings. For each of several total item score ranges, the frequency for each of the five acceptability ratings was computed.

In addition, the frequency and percentage of total item scores given by individual interviewers in each of several total item score ranges were found. It was of interest to know whether individual interviewers tended to give a majority of very high or very low ratings or whether ratings tended to be distributed across the range of possible ratings.

#### IV. EVALUATION RESULTS - INTERVIEWER OPINIONNAIRE

Twenty-two or 65% of the thirty-four interviewers completed and returned the opinionnaire to the Office of Institutional Research. Responses made to questions one through six and question nine have been categorized and are presented in Table 1. Comments made in response to questions seven, eight and ten through twelve have been included in the summary of findings which follows.

##### Time for Interview

Seventy-seven percent of the interviewers felt that 20 minutes was sufficient time for completion of the interview. Twenty-three percent of the respondents preferred to have 30 to 40 minutes for completion of the interview. Comments made in response to this question indicated that some applicants were late for second interview appointments because the first interview had extended over the 20 minute limit.

##### Descriptions of Personal Characteristics

Seventy-two percent of the interviewers felt that the descriptions of the characteristics to be assessed were sufficient. Descriptions which were considered somewhat insufficient typically included abstract characteristics (ethics, social conscience and empathy, interpersonal integrity) and personal appearance.

### Usefulness of Questions in Discriminating Applicants

Fifty-four percent of the interviewers felt the questions provided on the interview instrument were useful in discriminating between applicants in terms of the applicant's potential for nursing or dental hygiene. Twenty-three percent of the interviewers expressed doubts about the effectiveness of questions in one or more of the following areas: personal integrity and maturity, interests, communication skills, job experience and personal appearance.

### Range of Ratings for Personal Characteristics

Eighty-six percent of the interviewers were satisfied with the range of five possible item ratings (from well below average to well above average) and did not recommend expansion of the range of ratings. However, comments made in response to this question indicated a desire on the part of some interviewers for rating guidelines. For example, what level of a given characteristic may be considered "average" as opposed to "above average," etc.

### Flexibility of Interview Instrument

The majority of interviewers were pleased with the flexibility of the instrument. Eighty-six percent felt that the interview would not be improved by restricting the number of optional questions for each characteristic. Eighty-six percent felt that the interview would not be improved by requiring that all interviewers ask the same question to assess a given characteristic. Pertinent comments indicated a need for the "program staff" and "other staff" interviewers to discuss the characteristics to be assessed in terms of their application to nursing and dental hygiene. Again, the need was expressed for rating guidelines or some method of standardizing the ratings.

### Overall Impression of Interview Instrument

Seventy-seven percent of the interviewers had a favorable overall impression of the interview instrument. Unfavorable comments tended to emphasize

an interviewer's personal belief that the interview process was essentially a matter of subjective judgment, or was non-discriminative. In addition, the suggestion was made that "program staff" and "other staff" ratings be somehow reconciled.

#### Most Favorable Aspects of Interview Instrument

Aspects of the structured interview instrument which most favorably impressed the interviewers and the number of respondents indicating each were as follows:

- . Flexibility of instrument including list of optional questions (n=4)
- . Structured interview to assess the same characteristics for all applicants (n = 4)
- . Section of instrument assessing applicant's interests (n = 3)
- . Standardized rating forms which may provide an applicant profile (n = 2)
- . Scheduling of interviews for convenience of interviewers and sufficient time allotted for completion of interview (n = 2)
- . Descriptions of characteristics to be assessed (n = 1)
- . Comprehensive nature of instrument (n = 1)

#### Most Disliked Aspects of Interview Instrument

Aspects of the structured interview instrument most disliked by the interviewers and the number of respondents indicating each were as follows:

- . The percentile ranking (n = 6)
- . Inadequate definition of or questions about abstract characteristics (e.g., personal integrity and maturity, self-insight and self-concept, social conscience and empathy, ethics, intelligence; n = 6)
- . Inadequate notice of scheduled interview or too limited time for interview (n = 2)
- . Section pertaining to high school experiences (not applicable to all interviewees; n = 1)
- . Some characteristics of different value (e.g., intelligence vs. appearance, yet all were given same weight; n = 1)
- . Inadequate understanding of profession to permit fair evaluation of applicants to program (n = 1)

#### Interview Training Tape

Few comments were made in response to questions concerning the interview training tape. No recommendations were made to delete any aspects of the tape. Suggestions for additions to or improvement of the tape included the following:

- . Indicate methods which may be used to assess abstract qualities (e.g., ethics, integrity) in a concrete way.
- . Include methods of explaining the purpose of the interview and the expected length of the interview to the candidate.
- . Include guidelines for making rating decisions and show examples of rating.
- . Review other common interviewing errors and how and why to avoid them. The examples of errors already included in the tape were considered too blatant.

#### V. EVALUATION RESULTS - NURSING APPLICANT RATINGS

The frequency and percentage of ratings given by nursing staff interviewers in each of several total item score ranges are given in Table 2. The same information is presented for the non-nursing staff interviewers in Table 4. The frequency and percentage for each of the five acceptability ratings given by nursing and non-nursing interviewers are presented in Tables 3 and 5 respectively. Some of the major results concerning the distribution of ratings received by applicants include the following:

- . Approximately 60 percent of the applicants received at least 80 percent of the maximum number of possible points from each group of interviewers (nursing staff and non-nursing staff).
- . Sixty-four percent of the applicants were rated either obviously acceptable or outstanding by the nursing staff interviewers. The non-nursing staff interviewers gave the same ratings to 69 percent of the applicants.
- . The most commonly expressed opinion concerning the acceptability of applicants was "obviously acceptable." The nursing staff interviewers rated 45.7 percent of the applicants in this category while the non-nursing staff gave the same rating to 53.1 percent of the applicants.
- . Percentile ratings given by a majority of interviewers were high. Approximately 80 percent of the applicants were ranked at the 75th percentile or higher by each group of interviewers (nursing staff and non-nursing staff).

#### Interrater Agreement

The means for the total item score, single item score, percentile rating and acceptability rating given the applicants by the nursing and non-nursing staff interviewers are presented in Table 6.

The mean ratings given by the nursing staff were similar to the mean ratings given by the non-nursing staff interviewers on all three rating variables (total score adjusted for difference in number of items, percentile rating, acceptability rating). The interrater agreement was evidenced by a non-significant  $t$  ( $p > .10$ ) for each comparison of the means for all applicants.

#### Applicant Subgroup Mean Comparisons

For the purpose of ranking applicants, the selection committee summed the total item score given each applicant by the nursing staff and non-nursing staff interviewers. The maximum total possible was 105. Although ten points was added for all Johnson County residents, this bonus was not included in the data analyses. The average summed scores for the rejected, alternate and accepted groups were 73.66, 86.06, and 93.43, respectively. The average for all applicants was 85.57.

On the average, the nursing staff ratings significantly ( $p < .05$ ) differentiated the accepted applicants from the alternates with respect to total item score, but not with respect to percentile or acceptability ratings. The nursing staff ratings significantly ( $p < .01$ ) differentiated the alternates from the rejected on all three variables (total item score, percentile rating, acceptability rating).

The non-nursing staff ratings significantly ( $p < .05$ ) differentiated the accepted applicants from the alternates with respect to total item score and acceptability rating. At the 0.10 level of significance, the two groups were also differentiated with respect to percentile rating. The non-nursing staff interviewer ratings significantly ( $p < .05$ ) differentiated the group of alternates from those rejected with respect to all three variables (total item score, percentile rating, acceptability rating). The dispersion for the alternates on the acceptability rating was greater for the nursing staff interviewers than for the non-nursing staff interviewers. This is one reason

why the mean difference for the acceptability rating was significant for the non-nursing staff interviewers but not for the nursing staff interviewers when accepted and alternate applicants were compared.

#### Interrater Reliability

The matrix of correlation coefficients for the all applicant group is presented in Table 7. The analysis revealed low but significant ( $p < .01$ ) positive relationships between the ratings by nursing staff interviewers and non-nursing staff interviewers on all three variables (total item score, percentile rating, acceptability rating). Therefore, for each of these three ratings, if applicant A received a higher rating from a nursing staff interviewer than applicant B, then applicant A tended to receive a higher rating from a non-nursing staff interviewer than applicant B. Figures 1, 2 and 3, respectively, present the relationships for total item scores, percentile ratings and acceptability ratings.

#### Applicant Subgroup Correlations

The correlation coefficient matrices for each of the three nursing subgroups are presented in Tables 8, 9, and 10. The dispersion of total item scores for all applicants (presented in Figure 1) suggests that if the accepted, alternate and rejected sub-groups were analyzed separately, a non-significant or even a significant negative correlation between ratings assigned by nursing staff and non-nursing staff interviewers might be revealed. For the accepted group and for the alternate group, the analysis revealed a significant ( $p < .01$ ) negative relationship between the total item score assigned by the nursing staff interviewer and the corresponding score assigned by the non-nursing staff interviewer. Thus, there was a tendency for nursing staff and non-nursing staff interviewers to disagree on the standing of an accepted applicant relative to other accepted applicants. Within the accepted group, a low negative but not significant ( $p > .05$ ) relationship was found for the percentile and acceptability ratings.

Similar results were obtained for the alternate sub-group. More specifically,

there was a significant negative relationship between total scores given by nursing staff and non-nursing staff interviewers. For the percentile and acceptability ratings, there was a low negative but not significant ( $p > .05$ ) relationship between the nursing and non-nursing interviewers. Again, these negative correlations suggest some disagreement between the nursing and non-nursing interviewers regarding the relative standing of applicants within the sub-groups.

For the rejected sub-group the analyses revealed a significant ( $p < .05$ ) positive relationship between the acceptability ratings assigned by nursing staff interviewers and non-nursing staff interviewers. This relationship, which is shown in Figure 3, suggests a tendency for nursing and non-nursing staff interviewers to agree on the relative standing of a rejected applicant relative to other rejected applicants. There was lack of agreement, however, on total item scores and percentile ratings.

#### Total Score Distribution for Individual Interviewers

Typically, total item scores received by different applicants from the same interviewer were somewhat distributed across the range of possible total item scores. This suggests that the instrument did provide some degree of discrimination between applicants. However, two nursing interviewers and one non-nursing interviewer gave total item scores within the same two point range to more than 50% of the applicants they interviewed. For example, one nursing staff interviewer assigned five of the eight applicants interviewed a score between 53 and 55.

#### Relationship of Total Score to Acceptability Rating

The relationship of the total item score received by the applicant to the opinion of the interviewer regarding the acceptability of the same applicant is presented in Table 11 for the nursing interviewers and Table 12 for the non-nursing interviewers.

Overall, as the total item score received by an applicant increased, the acceptability ratings of the applicant increased. The correlation coefficients in Table 7 for total item scores with acceptability ratings were .79 and .82 for the nursing and non-nursing interviewers, respectively. These correlations were significant at the .01 level. As revealed in Tables 11 and 12, however, there was some degree of overlap and inconsistency in the acceptability ratings. The majority of this overlap occurred between the possibly, probably and obviously acceptable categories. In the case of nursing staff interviewers, for example, of the 20 applicants receiving total item scores in the 38 to 43 range, two were rated as possibly acceptable, 14 were rated as probably acceptable and four were rated as obviously acceptable.

#### VI. EVALUATION RESULTS - DENTAL HYGIENE APPLICANT RATINGS

The frequency and percentage of ratings given by dental hygiene staff interviewers and non-dental hygiene staff interviewers are presented in Tables 13 and 15 respectively. The frequency and percentage for each of the five acceptability ratings given by these two groups of interviewers are presented in Tables 14 and 16. Some of the major results concerning the distribution of ratings received by applicants include the following:

- Approximately 60 percent of the applicants received at least 80 percent of the maximum number of possible points (55) from the dental hygiene interviewers. From the non-dental hygiene staff, approximately 70 percent of the applicants received at least 80 percent of the maximum number of possible points (50).
- Fifty-nine percent of the applicants were rated either obviously acceptable or outstanding by the dental hygiene staff interviewers. The non-dental hygiene staff interviewers gave the same ratings to 68 percent of the applicants.
- The most commonly expressed opinion concerning the acceptability of the applicant was "obviously acceptable." The dental hygiene staff gave this rating to 50 percent of the applicants. The non-dental hygiene staff interviewers gave 46 percent of the applicants the same rating.

Percentile ratings given by a majority of interviewers were high. The dental hygiene staff rated 88 percent of the applicants at the 75th percentile or higher. Eighty-one percent of the applicants received similar ratings from the non-dental hygiene interviewers.

#### Interrater Agreement

The means for the total item score, single item score, percentile rating and acceptability rating given the applicants by the dental hygiene and non-dental hygiene staff interviewers are presented in Table 17. The mean acceptability rating given by the dental hygiene staff was similar to the mean acceptability rating given by the non-dental hygiene staff. However, the mean ratings were somewhat dissimilar for the other two rating variables (total item score adjusted for difference in number of items and percentile rating). Interrater agreement on the acceptability rating was evidenced by a non-significant  $t$  ( $p > .10$ ) used for the comparison of the means for the group of all applicants. Lack of interrater agreement on the percentile rating was evidenced by a significant  $t$  ( $p < .05$ ). There was also a tendency for a lack of agreement on the total score rating (adjusted for the difference in number of items) as evidenced by a significant  $t$  at the 0.10 level of significance. In both cases, non-dental hygiene interviewers tended to give higher ratings than did the dental hygiene staff interviewers. It should be noted that although not significant, the mean group acceptability rating was also higher from the non-dental hygiene interviewers than from the dental hygiene staff.

#### Applicant Subgroup Mean Comparisons

For the purpose of ranking applicants, the selection committee summed the total score given each applicant by the dental hygiene staff and non-dental hygiene staff interviewers. The maximum total was 105 points. Although ten points was added for all Johnson County residents, this bonus was not included in the data analyses. The average summed score for all applicants was 86.29. The averages for the accepted and combined alternate-rejected groups were 92.50 and 77.43, respectively.

On the average, the dental hygiene staff ratings significantly ( $p < .01$ ) differentiated the accepted applicants from the alternate-rejected applicants on all three variables (total score adjusted for difference in number of items, percentile rating, acceptability rating). This was also the case for the non-dental hygiene staff for all three ratings.

#### Interrater Reliability

The matrix of correlation coefficients for the all applicant group is presented in Table 18. The analysis revealed a significant ( $p < .05$ ) positive relationship between the ratings by dental hygiene staff interviewers and the non-dental hygiene staff interviewers on two variables (total item scores and percentile rating). Therefore, if applicant A received a higher total item score (or percentile rating) from a dental hygiene staff interviewer than applicant B, then applicant A tended to receive a higher total item score (or percentile rating) from a non-dental hygiene staff interviewer than applicant B. Figures 4 and 5 graphically present the relationships for total item scores and percentile ratings, respectively.

For the acceptability rating, there was a non-significant relationship between ratings assigned by dental hygiene staff and non-dental hygiene staff interviewers. The relationship is presented graphically in Figure 6.

#### Applicant Subgroup Correlations

The correlation coefficient matrices for the accepted and the rejected-alternate sub-groups are presented in Tables 19 and 20, respectively. Within both the accepted and rejected-alternate sub-groups the analysis revealed non-significant relationships between the ratings by dental hygiene staff interviewers and non-dental hygiene staff interviewers on all three variables (total item score, percentile rating, acceptability rating). The plots of these non-significant relationships suggest some lack of agreement between dental hygiene staff and non-dental hygiene staff interviewers regarding the relative

standing of applicants within a given sub-group.

#### Total Score Distribution for Individual Interviewers

Overall, total item scores received by different applicants interviewed by the same individual were somewhat distributed across the range of possible total item scores. This suggests that the instrument did provide some degree of discrimination between applicants. However, there was tendency for a few interviewers to assign a high percentage of applicants they interviewed the same or very similar total item scores. For example, one non-dental hygiene staff interviewer assigned five of the seven applicants interviewed a score at or between 47 and 49.

#### Relationship of Total Score to Acceptability Rating

The relationship of the total item score received by the applicant to the opinion of the interviewer regarding the acceptability of the same applicant is presented in Table 21 for the dental hygiene staff interviewers and Table 22 for the non-dental hygiene staff interviewers.

Overall, applicants with high total score ratings received high acceptability ratings. For the all applicant group (Table 18), the correlation coefficients for total item scores with acceptability ratings were .71 and .66 for the dental hygiene and non-dental hygiene interviewers, respectively. These correlations were significant at the .01 level.

Tables 21 and 22 reveal that there was some degree of overlap and inconsistency between total score and acceptability rating. For example, one applicant receiving a total item score in the 29 to 31 range from a non-dental hygiene staff interviewer was rated by the interviewer as "outstanding" (rating #5). However, an applicant receiving a total item score in the 32 to 34 range from another non-dental hygiene interviewer was rated by the interviewer as "possibly acceptable" (rating #2).

The majority of overlap occurred between the "probably" and "obviously acceptable" categories (rating #3 and #4). For example, of the sixteen applicants receiving a total item score in the 38 to 46 range from dental hygiene staff interviewers, eight were rated as "probably acceptable" and eight were rated as "obviously acceptable".

## VII. DISCUSSION

The overall results of this evaluation indicated that the development and use of the structured interview instruments this past year was successful in several important respects. The findings of the interviewer opinionnaire revealed that the majority of the interviewers had a favorable overall reaction to the structured interview instruments and related interview procedures. The majority of the respondents did not feel that major revisions should be made in the instruments, the scoring procedures or the time allotted for the interview. A high percentage of the interviewers indicated that the use of optional questions provided them a desired latitude. This flexibility enabled them to approach a given characteristic in a manner which suited them personally. While some of the interviewers were critical of the subjectivity involved in the rating system, the majority of the interviewers did not comment that they were particularly uncomfortable making subjective judgments regarding an applicant's qualifications.

In addition to perceptions by the interviewers, the evaluation was concerned with examining the validity and reliability of the interview instruments. The validity of the interview instrument can best be examined after the students selected during the spring of 1975 have graduated from JCCC. However, an instrument which is not reliable cannot be valid. Therefore, an examination of the reliability does provide some evidence for the

inference of validity. Some writers including Tinsley and Weiss (1975), have emphasized the distinction between "interrater agreement" and "interrater reliability" and the need for both types of evidence when examining ratings. The interrater agreement and interrater reliability information was presented in Section V for the nursing applicant ratings, and in Section VI for the dental hygiene applicant ratings. The discussion which follows is an integration of the results for both the nursing and dental hygiene applicant ratings.

#### Interrater Agreement Between Program Staff and Other Interviewers

The characteristics measured by the "program staff" and "other staff" interviewers were not selected to be exclusive from each other. Rather, the two groups of interviewers were to rate equally important aspects of an effective nurse or dental hygienist. The question of interrater agreement is whether a rating assigned an applicant by a single interviewer is independent of whether the interviewer is a member of that particular program staff. If so, the ratings given by the program staff should be similar to the ratings given by the non-program staff interviewers.

Overall, the nursing staff interviewers gave ratings to the nursing program applicants which were very similar to the ratings given by the non-nursing staff interviewers on all three variables (total score adjusted for difference in number of items, percentile rating, acceptability rating). The ratings by dental hygiene staff interviewers and non-dental hygiene staff interviewers were similar with respect to acceptability ratings. However, there was some lack of agreement between their ratings on the other two variables (total score adjusted for difference in number of items, percentile rating). For each of the latter two variables, the ratings from the non-dental hygiene staff tended to be higher than the ratings from the dental hygiene staff.

Since the final selection of applicants is based upon the total item scores, the interrater agreement is particularly important for this variable. If the ratings are very dissimilar, a low rating by one interviewer could result in the applicant's rejection even if the other interviewer's rating were maximum. The reason this could occur is that the two scores are summed and the lower rating would contribute little to the total score. For example, a rating of 55 (maximum) from a dental hygiene staff member coupled with a rating of 10 (minimum) from a non-dental hygiene staff member would result in a total score of 65. Such an applicant would be rejected. Although the difference between the mean total score ratings was significantly different only for the two groups of dental hygiene program interviewers, some discrepancies for individual applicants did occur between the two groups of nursing program interviewers.

Low interrater agreement may occur when interviewers who are not members of the program staff are not thoroughly familiar with the program for which they are interviewing applicants. An understanding of the characteristics as related to the particular program may assist an interviewer in differentiating one level such as "average" from another level such as "above average." Compared to nursing, dental hygiene is a career which is undoubtedly less familiar to most persons. As a result, some of the demands on a dental hygienist may require attributes of which the non-dental hygiene staff interviewers may not be aware. This may partially account for the fact that there is lower interrater agreement for dental hygiene than for nursing.

The cross-tabulations between acceptability ratings and total item score ranges for both nursing and dental hygiene interviewers also indicate some lack of understanding concerning the meaning of ratings. These data are presented in Tables 11 and 12 for nursing interviewers and in Tables 21 and 22

for dental hygiene interviewers. The cross-tabulations reveal some differences between interviewers in their perception of what total item scores differentiate an acceptable applicant from an outstanding applicant. These differences probably reflect some disagreement in the assignment of ratings on single items as well. The written comments from the interviewers (see page 7 of this report) indicated a need for the "program staff" and "other staff" interviewers to discuss the characteristics to be assessed in terms of their application to nursing and dental hygiene. This comment is pertinent and such a discussion may be essential for dental hygiene interviewers before the interviewing process is conducted again. Since there was some disagreement by interviewers of nursing applicants, an interchange between nursing staff and non-nursing staff interviewers would also be helpful. Staff Development Week might be one possible time for such an interchange.

#### Bonus for Johnson County Residents

Seventy-one (87%) of the 82 applicants to the nursing program and 19 (56%) of the 34 applicants to the dental hygiene program were from Johnson County. The data analyses for this report excluded the ten point bonus given to residents of Johnson County. The reason for the exclusion was to remove a variable not directly related to the perceptions of applicants by the interviewers. However, the interpretation of the results must include a consideration of the effect that the ten point bonus did have upon the final applicant selection. It is worth noting that 90 percent of those finally accepted into the nursing program and 54 percent of those finally accepted into the dental hygiene program were from Johnson County. If the total scores without the bonus for the Johnson County residents were comparable to the total scores for the non-residents, the percentage of residents in the final accepted group would be expected to be larger than the percentage of residents in the entire interviewed group.

For each program, the two percentages were comparable (90% and 87% for nursing, 54% and 56% for dental hygiene). Therefore, as a group, the total scores for Johnson County residents tended to be lower than for non-residents. The use of the bonus did help some residents gain preference over non-residents who obtained higher or similar interview ratings. Thus, the bonus is a factor that explains some of the total score overlap between accepted and alternate applicants or between alternate and rejected applicants.

#### Interrater Reliability

The question of interrater reliability is whether the ratings by either a program staff or a non-program staff interviewer could be relied on as a means of ranking the applicants relative to one another. The ratings given by the program staff need not be the same as the ratings given by the non-program staff, but either set of ratings should result in a similar ranking of applicants.

Fifty-four percent of the interviewers (see page 7 of this report) felt the questions on the interview instrument were useful in discriminating between applicants in terms of their potential for nursing or dental hygiene. Twenty-three percent expressed some doubts. The interviewer comments are consistent with the analysis of the applicant ratings. For both nursing and dental hygiene, there was a significant positive relationship between the program staff and non-program staff on two variables (total item score and percentile rating). For nursing, there was also a significant positive relationship on the acceptability rating. However, the correlations ranged from 0.38 to 0.40 for the nursing applicants and from 0.16 (acceptability rating) to 0.60 (percentile rating) for the dental hygiene applicants. None of these correlations is very large. Thus, there

was some disagreement between program staff and non-program staff regarding the relative ranking of applicants. The disagreement was more evident when the correlations were examined for the subgroups (accepted, alternates, rejected). The subgroup correlations for the program staff and non-program staff ratings tended to be non-significant or negative. In part, these negative or non-significant relationships are an artifact of the way the subgroups were formed. As the plots in Figures 1-6 reveal, however, there are a few instances where program staff and other staff interviewers show a strong disagreement. This suggests that unless these cases of disagreement can be resolved, it is inappropriate to base selection of applicants on a ranking based solely on the sum of the total scores received from the two interviewers. The effect of the summing of two total scores which are somewhat in disagreement coupled with the effect of the bonus for Johnson County residents can be illustrated by considering two nursing applicants. One applicant (A) received scores of 31 and 51 while a second applicant (B) received scores of 31 and 55. Applicant A was rejected while applicant B, who as a resident received a bonus of ten points, was accepted. The ratings (31 and 31) by the non-nursing staff were very low compared to the nursing staff ratings (51 and 55). The opinion of a third interviewer who was knowledgeable about nursing may have helped determine why the two interviewers gave such divergent ratings.

#### Implications and Changes in Selection Procedures

With some disagreement concerning the relative ranking of applicants and some applicants receiving dissimilar ratings from two different interviewers, some changes may need to be made in the procedure for the final selection. For applicants who receive two diverse ratings, the applicant might be asked to return for a third interview. If the third interview concurred with one of the other two, the remaining rating might be discarded.

It is possible, however, that the third interview may not concur with either of the originals. The problem may then be to decide whether the third interview does concur or not.

During the final selection of the class of 1977, the selection committee found that there were a number of ties when the summed total scores were used to rank applicants. The appeals committee also found that it was difficult to make a decision for some of the appeals. The selection committee was given the authority to "break the tie" using other specified criteria. The ACT test scores were one acceptable criterion, but these were not available for all applicants. Some members of the appeals committee have indicated that one more piece of information available for all applicants would have helped them in reaching their final decision.

After the interview and appeals process was completed for the class of 1977, the Program Selection Criteria Committee recommended that all applicants to the nursing and dental hygiene programs be required to take the ACT test. The Board of Trustees approved the change in selection procedure during August 1975. As ACT data will provide one piece of uniform data for all applicants, this information could provide a means for making a decision for an applicant who receives two diverse interview ratings. Since the use of a third interview may not reconcile the difference and interviewing is a costly item, a procedure could be developed to incorporate the ACT test scores into the final applicant ranking. The ACT scores could also be used to "break ties" for applicants with identical interview ratings. However, the ACT tests measure academic ability and the interview process was concerned with personal characteristics other than academic ability.

## VIII. SUMMARY AND RECOMMENDATIONS

A structured interview was used during the spring of 1975 as a tool for the final selection of nursing and dental hygiene students. The final selection was made by ranking applicants according to a total summed score obtained by adding the total score rating by a program staff interviewer to the total score rating by a non-program staff interviewer. A bonus of ten points was given to all Johnson County residents. Although not used for selection purposes, interviewers also gave each applicant a percentile rating and an acceptability rating (from unacceptable through outstanding). The results of the evaluation of the structured interview instruments are summarized below.

- . The majority of interviewers had a favorable overall reaction to the structured interview instrument and related procedures.
- . Nursing staff and non-nursing staff tended to give comparable ratings to the same applicant. While nursing staff and non-nursing staff did give divergent ratings to some applicants, there were fewer dissimilarities for nursing than for dental hygiene. The ratings given by the dental hygiene staff tended to be lower than the ratings given by the non-dental hygiene staff.
- . Although the correlation coefficients used to assess the similarity of the ratings by the program staff and the non-program staff interviewer were statistically significant, they were low with the maximum being 0.60. Thus, there was some disagreement between program staff and non-program staff regarding the relative ranking of applicants.

A summary of the major implications of these results and previous research findings is presented below together with the accompanying recommendations.

### Continuation of Structured Interview

The structured interview instrument and related procedures may not be appropriate to use as the only means for selecting applicants into the nursing and dental hygiene programs. However, the evidence indicates that

the structured interview does offer a means to identify students who should be rejected. The major problem is one of distinguishing those who should be accepted from those who should be alternates.

*Recommendation 1:* That the structured interview continue to be used as a tool for selecting nursing and dental hygiene students.

#### Interviewer Understanding of Health Related Programs

There is a need for discussion between the program staff and non-program staff prior to the interviewing process. The interchange is almost essential before the dental hygiene interviewing begins. The field of nursing is familiar to more persons than is the field of dental hygiene, but some discussion would undoubtedly also benefit interviewers of nursing applicants.

*Recommendation 2:* That for both the nursing and dental hygiene programs the program staff and non-program staff meet prior to the interviewing of applicants and discuss the personal characteristics which are indicative of an applicant's potential for that particular health program. The discussion should include consideration of the various levels of a given characteristic ranging from "well below average" to "well above average."

#### Decisions for Applicants with Tied Rank or Dissimilar Ratings

Some procedure needs to be developed so that decisions can be made for applicants with two dissimilar interview ratings. A procedure is also needed for making a decision of "accept" or "alternate" for some applicants who receive tied ranks. If two applicants with the same rank can be accepted, there is no problem. But if only one can be accepted and one must be an alternate, someone must make that decision.

A third interview with a member of the appropriate career program staff is one possibility which would permit another assessment of an applicant's strengths and weaknesses. One of the original two interviewers may have detected primarily the strengths while the second interviewer may have

detected primarily the weaknesses. An interview with another member of the program staff would permit an assessment as to whether the strengths can compensate for any perceived weaknesses. To accomplish this assessment, the third interview would need to be a less structured interview. Also, to accomplish this within a reasonable amount of time would require that this program staff interviewer have access to the applicant's complete file prior to the interview.

A similar procedure could be used for students who receive tied ranks. In view of the data on interrater agreement, it is unlikely that for a specific applicant the rating received from a program staff interviewer will be identical to the rating received from a non-program staff interviewer. Therefore, if two or more applicants do receive the same rank and only one can be accepted, an interview by another member of the program staff is one way to make an informed decision. Again, the interview should be less structured and the applicant's complete file should be available prior to the interview.

*Recommendation 3:* That a second member of the appropriate career program interview all applicants who receive two dissimilar ratings in the original interviewing process and all applicants with tied ranks for whom a decision of "accept" or "alternate" must be made. Prior to these interviews, the interviewer will have access to the applicant's complete file.

The term "dissimilar ratings" will need to be defined more fully. For the first year, the Program Criteria Selection Committee should make some decision with the understanding that in future years the definition may change as the staff becomes more familiar with the interviewing process. Initially, the definition would be expected to include more applicants than would be expected in a couple of years.

*Recommendation 4:* That the Program Criteria Selection Committee develop a definition of "dissimilar ratings" to be used for the class of 1978 with the understanding that the definition for future classes may change. Prior to implementation, the definition should be presented to the administration and other relevant college staff for their input.

## REFERENCES

Tinsley, H.E.A. and Weiss, D.J. Interrater Reliability and Agreement of Subjective Judgments. Journal of Counseling Psychology, 1975, 22 (1), 358-376.

TABLE 1

INTERVIEWER OPINIONS OF THE NURSING AND DENTAL HYGIENE  
STRUCTURED INTERVIEW INSTRUMENT

Item	Number Responding	Percentage
Was 20 minutes sufficient time to satisfactorily complete the interview?		
Yes	17	77%
No	5	23%
Were the explanations for each of the characteristics to be assessed sufficient?		
Yes	16	72%
Some explanations insufficient	3	14%
No	3	14%
Did the questions provided in the instrument permit you to differentiate between applicants in terms of their potential for nursing or dental hygiene?		
Yes	12	54%
Ambivalent	5	23%
No	1	5%
No response	4	18%
Should the range of possible ratings be expanded from five (well below average, below average, average, above average, well above average) to some larger number?		
Yes	2	9%
No	19	86%
Don't know	1	5%
Would the interview instrument be improved by limiting the number of optional questions on each characteristic?		
Yes	0	0%
No	19	86%
No response or don't know	3	14%
Would the interview instrument be improved by requiring that each interviewer ask the same question on each characteristic?		
Yes	1	5%
No	19	86%
Don't know	2	9%
What was your overall impression of the structured interview instrument?		
Favorable	17	77%
Unfavorable	3	14%
Other	2	9%

TABLE 2

FREQUENCY AND PERCENTAGE OF TOTAL ITEM SCORES  
ASSIGNED BY NURSING STAFF INTERVIEWERS

Total Item Score Range (a)	Frequency	Percentage
29-31 (b)	3	3.7%
32-34	2	2.4
35-37	5	6.1
38-40	11	13.4
41-43	10	12.2
44-46	13	15.9
47-49	12	14.6
50-52	16	19.5
53-55	10	12.2
Total	82	100.0%

- (a) There were 11 items on the form used by the nursing interviewers. For each item, the responses ranged from 1 (denoting well below average) to 5 (denoting well above average). Thus, total item scores could range from 11 to 55 on the nursing interview form.
- (b) No applicant received a total item score lower than 29.

TABLE 3

FREQUENCY AND PERCENTAGE OF ACCEPTABILITY RATINGS  
ASSIGNED BY NURSING STAFF INTERVIEWERS

Acceptability Rating	Frequency	Percentage
1 (unacceptable)	1	1.2%
2 (possibly acceptable)	8	9.9
3 (probably acceptable)	20	24.7
4 (obviously acceptable)	37	45.7
5 (outstanding)	15	18.5
Total	81 (a)	100.0%

- (a) One of the nursing interviewers did not assign an acceptability rating to one interviewee.

TABLE 4

FREQUENCY AND PERCENTAGE OF TOTAL ITEM SCORES,  
ASSIGNED BY NON-NURSING STAFF INTERVIEWERS

Total Item Score Range (a)	Frequency	Percentage
20-22 (b)	1	1.2%
23-28	2	2.4
29-31	6	7.3
32-34	5	6.1
35-37	10	12.2
38-40	12	14.6
41-43	14	17.1
44-46	23	28.1
47-50	9	11.0
Total	82	100.0%

- (a) There were 10 items on the form used by the non-nursing interviewers. For each item, the responses ranged from 1 (denoting well below average) to 5 (denoting well above average). Thus, total item scores could range from 10 to 50 on the non-nursing interview form.
- (b) No applicant received a total item score lower than 20.

TABLE 5

FREQUENCY AND PERCENTAGE OF ACCEPTABILITY RATINGS  
ASSIGNED BY NON-NURSING STAFF INTERVIEWERS

Acceptability Rating	Frequency	Percentage
1 (unacceptable)	2	2.5%
2 (possibly acceptable)	6	7.4
3 (probably acceptable)	17	21.0
4 (obviously acceptable)	43	53.1
5 (outstanding)	13	16.0
Total	81 (a)	100.0%

- (a) One of the non-nursing interviewers did not assign an acceptability rating to one interviewee.

TABLE 6

MEANS FOR FOUR VARIABLES ON INTERVIEW INSTRUMENT  
FOR PROSPECTIVE NURSING STUDENTS

Applicant Group	Total Item Score (a)	Average Item Score (b)	Percentile Rating (c)	Acceptability Rating (d)
Accepted				
Nursing				
interviewers	49.63	4.51	88.95	4.20
Non-nursing				
interviewers	<u>43.80</u>	4.38	89.47	4.18
Total	93.43			
Alternates				
Nursing				
interviewers	45.13	4.10	85.47	3.79
Non-nursing				
interviewers	<u>40.93</u>	4.09	82.17	3.79
Total	86.06			
Rejected				
Nursing				
interviewers	38.96	3.54	69.30	2.93
Non-nursing				
interviewers	<u>34.70</u>	3.47	72.16	3.04
Total	73.66			
All Applicants				
Nursing				
interviewers	45.29	4.12	81.84	3.70
Non-nursing				
interviewers	<u>40.28</u>	4.03	82.14	3.73
Total	85.57			

- (a) There were 11 items on the form used by nursing interviewers and 10 items on the form used by non-nursing interviewers. For each item, the responses ranged from 1 (denoting well below average) to 5 (denoting well above average). Total item scores could range from 11 to 95 on the nursing interview form and from 10 to 50 on the non-nursing interview form.
- (b) Since the number of items on the two forms was unequal, the average total item points was divided by the number of items to permit some comparison.
- (c) Each interviewer was requested to evaluate the applicant overall using a percentile ranking.
- (d) Each interviewer was requested to rate the applicant overall from 1 (unacceptable) to 5 (outstanding).

TABLE 7

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR ALL APPLICANTS  
NURSING PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 82)	--	--	--	--	--
2	.71 ( 82)	1.00 ( 82)	--	--	--	--
3	.79 ( 81)	-.70 ( -81)	1.00 ( 81)	--	--	--
4	.38 ( 82)	.42 ( 82)	.36 ( 81)	1.00 ( 82)	--	--
5	.31 ( 71)	.40 ( 71)	.31 ( 70)	.89 ( 71)	1.00 ( 71)	--
6	.37 ( 81)	.41 ( 81)	.39 ( 80)	.82 ( 81)	.84 ( 71)	1.00 ( 81)

TABLE 8

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR ACCEPTED APPLICANTS  
NURSING PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 40)	--	--	--	--	--
2	.22 ( 40)	1.00 ( 40)	--	--	--	--
3	.56 ( 40)	.34 ( 40)	1.00 ( 40)	--	--	--
4	-.39 ( 40)	-.08 ( 40)	-.24 ( 40)	1.00 ( 40)	--	--
5	-.32 ( 34)	-.14 ( 34)	-.24 ( 34)	.88 ( 34)	1.00 ( 34)	--
6	-.30 ( 40)	-.06 ( 40)	-.16 ( 40)	.67 ( 40)	.76 ( 34)	1.00 ( 40)

Variable Number	Variable Name
1	Total item scores by nursing staff interviewers
2	Percentile rating by nursing staff interviewers
3	Acceptability ratings by nursing staff interviewers
4	Total item scores by non-nursing staff interviewers
5	Percentile ratings by non-nursing staff interviewers
6	Acceptability rating by non-nursing staff interviewers

Note: The numbers in parentheses denote the number of students for whom the interviewers had provided data on both variables.

TABLE 9

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR ALTERNATE APPLICANTS  
NURSING PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 15)	--	--	--	--	--
2	.44 ( 15)	1.00 ( 15)	--	--	--	--
3	.70 ( 14)	.61 ( 14)	1.00 ( 14)	--	--	--
4	-.68 ( 15)	-.19 ( 15)	-.30 ( 14)	1.00 ( 15)	--	--
5	-.86 ( 12)	-.17 ( 12)	-.42 ( 11)	.90 ( 12)	1.00 ( 12)	--
6	-.60 ( 14)	.01 ( 14)	-.25 ( 13)	.79 ( 14)	.84 ( 12)	1.00 ( 14)

TABLE 10

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR REJECTED APPLICANTS  
NURSING PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 27)	--	--	--	--	--
2	.70 ( 27)	1.00 ( 27)	--	--	--	--
3	.68 ( 27)	.64 ( 27)	1.00 ( 27)	--	--	--
4	-.01 ( 27)	.10 ( 27)	.05 ( 27)	1.00 ( 27)	--	--
5	.10 ( 25)	.18 ( 25)	.17 ( 25)	.80 ( 25)	1.00 ( 25)	--
6	.20 ( 27)	.20 ( 27)	.34 ( 27)	.75 ( 27)	.78 ( 25)	1.00 ( 27)

Variable Number	Variable Name
1	Total item scores by nursing staff interviewers
2	Percentile ratings by nursing staff interviewers
3	Acceptability ratings by nursing staff interviewers
4	Total item scores by non-nursing staff interviewers
5	Percentile ratings by non-nursing staff interviewers
6	Acceptability ratings by non-nursing staff interviewers

Note: The numbers in parentheses denote the number of students for whom the interviewers had provided data on both variables.

TABLE 11

FREQUENCY OF ACCEPTABILITY RATINGS BY TOTAL ITEM SCORE RANGES  
FOR NURSING STAFF INTERVIEWERS

Total Item Score Range (c)	Acceptability Rating (a)					Total
	1	2	3	4	5	
29-31	1	1	-	1	-	3
32-34	-	2	-	-	-	2
35-37	-	3	2	-	-	5
38-40	-	1	8	1	-	10
41-43	-	1	6	3	-	10
44-46	-	-	2	9	2	13
47-49	-	-	1	10	1	12
50-52	-	-	1	12	3	16
53-55	-	-	-	1	9	10
Total	1	8	20	37	15	81 (b)

- (a) For purposes of computation the acceptability ratings - unacceptable, possibly acceptable, probably acceptable, obviously acceptable, and outstanding - were assigned values of 1 through 5, respectively.
- (b) One applicant was not assigned an acceptability rating by a nursing staff interviewer.
- (c) No applicant received a total item score of less than 29 from a nursing staff interviewer. Total item scores could range from 11 to 55 on the nursing staff interview form.

TABLE 12

FREQUENCY OF ACCEPTABILITY RATINGS BY TOTAL ITEM SCORE RANGES  
FOR NON-NURSING STAFF INTERVIEWERS

Total Item Score Range (c)	Acceptability Rating (a)					Total
	1	2	3	4	5	
20-22	1	-	-	-	-	1
23-25	-	-	-	-	-	0
26-28	-	2	-	-	-	2
29-31	1	2	2	1	-	6
32-34	-	2	1	2	-	5
35-37	-	-	8	2	-	10
38-40	-	-	4	7	-	11
41-43	-	-	2	12	-	14
44-46	-	-	-	17	6	23
47-49	-	-	-	2	7	9
Total	2	6	17	43	13	81 (b)

- (a) For purposes of computation the acceptability ratings - unacceptable, possibly acceptable, probably acceptable, obviously acceptable, and outstanding - were assigned values of 1 through 5, respectively.
- (b) One applicant was not assigned an acceptability rating by a non-nursing staff interviewer.
- (c) No applicant received a total item score lower than 20 from a non-nursing staff interviewer. Total item scores could range from 10 to 50 on the non-nursing staff interview form.

TABLE 13

FREQUENCY AND PERCENTAGE OF TOTAL ITEM SCORES  
ASSIGNED BY DENTAL HYGIENE STAFF INTERVIEWERS

Total Item Score Range (a)	Frequency	Percentage
32-34 (b)	1	2.9%
35-37	3	8.8
38-40	6	17.7
41-43	4	11.7
44-46	6	17.7
47-49	11	32.4
50-52	2	5.9
53-55	1	2.9
Total	34	100.0%

- (a) There were 11 items on the form used by the dental hygiene staff interviewers. For each item, the responses ranged from 1 (denoting well below average) to 5 (denoting well above average). Thus, total item scores could range from 11 to 55 on the dental hygiene staff interview form.
- (b) No applicant received a total item score lower than 32.

TABLE 14

FREQUENCY AND PERCENTAGE OF ACCEPTABILITY RATINGS  
ASSIGNED BY DENTAL HYGIENE STAFF INTERVIEWERS

Acceptability Rating	Frequency	Percentage
1 (unacceptable)	0	0.0%
2 (possibly acceptable)	3	8.8
3 (probably acceptable)	11	32.4
4 (obviously acceptable)	17	50.0
5 (outstanding)	3	8.8
Total	34	100.0%

TABLE 15

FREQUENCY AND PERCENTAGE OF TOTAL ITEM SCORES  
ASSIGNED BY NON-DENTAL HYGIENE STAFF INTERVIEWERS

Total Item Score Range (a)	Frequency	Percentage
26-28 (b)	1	2.9%
29-31	1	2.9
32-34	4	11.8
35-37	2	5.9
38-40	2	5.9
41-43	5	14.7
44-46	8	23.6
47-49	10	29.4
50	1	2.9
Total	34	100.0%

- (a) There were 10 items on the form used by the non-dental hygiene staff interviewers. For each item, the responses ranged from 1 (denoting well below average) to 5 (denoting well above average). Thus, total item scores could range from 10 to 50 on the non-dental hygiene staff interview form.
- (b) No applicant received a total item score lower than 26.

TABLE 16

FREQUENCY AND PERCENTAGE OF ACCEPTABILITY RATINGS  
ASSIGNED BY NON-DENTAL HYGIENE STAFF INTERVIEWERS

Acceptability Rating	Frequency	Percentage
1 (unacceptable)	0	0.0%
2 (possibly acceptable)	2	7.2
3 (probably acceptable)	7	25.0
4 (obviously acceptable)	13	46.4
5 (outstanding)	6	21.4
Total	28 (a)	100.0%

- (a) Six of the dental hygiene applicants did not receive acceptability ratings from a non-dental hygiene staff interviewer.

TABLE 17

MEANS FOR FOUR VARIABLES ON INTERVIEW INSTRUMENT  
FOR PROSPECTIVE DENTAL HYGIENE STUDENTS

Applicant Group	Total Item Score (a)	Average Item Score (b)	Percentile Rating (c)	Acceptability Rating (d)
Accepted				
Dental hygiene interviewers	46.70	4.25	86.58	3.85
Non-dental hygiene interviewers	45.80	4.58	92.44	4.25
Total	<u>92.50</u>			
Alternates-Rejected				
Dental hygiene interviewers	40.14	3.65	76.71	3.21
Non-dental hygiene interviewers	37.29	3.73	75.14	3.25
Total	<u>77.43</u>			
All Candidates				
Dental hygiene interviewers	44.00	4.00	82.39	3.59
Non-dental hygiene interviewers	42.29	4.23	84.88	3.82
Total	<u>86.29</u>			

- (a) There were 11 items on the form used by dental hygiene staff interviewers and 10 items on the form used by non-dental hygiene staff interviewers. For each item, the responses ranged from 1 (denoting well below average) to 5 (denoting well above average). Total item scores could range from 11 to 55 on the dental hygiene staff interview form and from 10 to 50 on the non-dental hygiene staff interview form.
- (b) Since the number of items on the two forms was unequal, the average total item points was divided by the number of items to permit some comparison.
- (c) Each interviewer was requested to evaluate the applicant overall using a percentile ranking.
- (d) Each interviewer was requested to rate the applicant overall from 1 (unacceptable) to 5 (outstanding).

TABLE 18

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR ALL APPLICANTS  
DENTAL HYGIENE PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 34)	--	--	--	--	--
2	.73 ( 33)	1.00 ( 33)	--	--	--	--
3	.71 ( 34)	.74 ( 33)	1.00 ( 34)	--	--	--
4	.42 ( 34)	.55 ( 33)	.42 ( 34)	1.00 ( 34)	--	--
5	.36 ( 16)	.60 ( 16)	.45 ( 16)	.95 ( 16)	1.00 ( 16)	--
6	.19 ( 28)	.39 ( 27)	.16 ( 28)	.66 ( 28)	.82 ( 16)	1.00 ( 28)

TABLE 19

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR ACCEPTED APPLICANTS  
DENTAL HYGIENE PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 20)	--	--	--	--	--
2	.78 ( 19)	1.00 ( 19)	--	--	--	--
3	.60 ( 20)	.66 ( 19)	1.00 ( 20)	--	--	--
4	-.21 ( 20)	.03 ( 19)	-.02 ( 20)	1.00 ( 20)	--	--
5	-.23 ( 9)	.22 ( 9)	-.20 ( 9)	.68 ( 9)	1.00 ( 9)	--
6	-.24 ( 16)	.13 ( 15)	.12 ( 16)	.37 ( 16)	.29 ( 9)	1.00 ( 16)

Variable Number	Variable Name
1	Total item scores by nursing staff interviewers
2	Percentile ratings by nursing staff interviewers
3	Acceptability ratings by nursing staff interviewers
4	Total item scores by non-nursing staff interviewers
5	Percentile ratings by non-nursing staff interviewers
6	Acceptability ratings by non-nursing staff interviewers

Note: The numbers in parentheses denote the number of students for whom the interviewers had provided data on both variables.

TABLE 20

INTERCORRELATION MATRIX OF SIX INTERVIEW  
VARIABLES FOR ALTERNATE-REJECTED APPLICANTS  
DENTAL HYGIENE PROGRAM

Variable Number	Variable Number					
	1	2	3	4	5	6
1	1.00 ( 14)	—	—	—	—	—
2	.52 ( 14)	1.00 ( 14)	—	—	—	—
3	.68 ( 14)	.71 ( 14)	1.00 ( 14)	—	—	—
4	.08 ( 14)	.46 ( 14)	.33 ( 14)	1.00 ( 14)	—	—
5	-.26 ( 7)	-.42 ( 7)	-.15 ( 7)	.80 ( 7)	1.00 ( 7)	—
6	-.19 ( 12)	.22 ( 12)	-.24 ( 12)	.43 ( 12)	.84 ( 7)	1.00 ( 12)

<u>Variable Number</u>	<u>Variable Name</u>
1	Total item scores by nursing staff interviewers
2	Percentile ratings by nursing staff interviewers
3	Acceptability ratings by nursing staff interviewers
4	Total item scores by non-nursing staff interviewers
5	Percentile ratings by non-nursing staff interviewers
6	Acceptability ratings by non-nursing staff interviewers

Note: The numbers in parantheses denote the number of students for whom the interviewers had provided data on both variables.

TABLE 21

FREQUENCY OF ACCEPTABILITY RATINGS BY TOTAL ITEM SCORE RANGES  
FOR DENTAL HYGIENE STAFF INTERVIEWERS

Total Item Score Range (b)	Acceptability Rating (a)					Total
	1	2	3	4	5	
32-34	-	1	-	-	-	1
35-37	-	2	1	-	-	3
38-40	-	-	3	3	-	6
41-43	-	-	2	2	-	4
44-46	-	-	3	3	-	6
47-49	-	-	2	8	1	11
50-52	-	-	-	1	1	2
53-55	-	-	-	-	1	1
Total	0	3	11	17	3	34

- (a) For purposes of computation the acceptability ratings - unacceptable, possibly acceptable, probably acceptable, obviously acceptable, and outstanding - were assigned values of 1 through 5, respectively.
- (b) No applicant received a total item score lower than 32 from a dental hygiene staff interviewer. Total item scores could range from 11 to 55 on the dental hygiene staff interview form.

TABLE 22

FREQUENCY OF ACCEPTABILITY RATINGS BY TOTAL ITEM SCORE RANGES  
FOR NON-DENTAL HYGIENE STAFF INTERVIEWERS

Total Item Score Range (c)	Acceptability Rating (a)					Total
	1	2	3	4	5	
26-28	-	1	-	-	-	1
29-31	-	-	-	-	1	1
32-34	-	1	3	-	-	4
35-37	-	-	2	-	-	2
38-40	-	-	-	2	-	2
41-43	-	-	1	4	-	5
44-46	-	-	1	5	1	7
47-49	-	-	-	2	4	6
50	-	-	-	-	-	0
Total	0	2	7	13	6	28 (b)

- (a) For purposes of computation the acceptability ratings - unacceptable, possibly acceptable, probably acceptable, obviously acceptable, and outstanding - were assigned values of 1 through 5, respectively.
- (b) Six applicants did not receive an acceptability rating from a non-dental hygiene staff interviewer.
- (c) No applicant received a total item score lower than 26 from a non-dental hygiene staff interviewer. Total item scores could range from 10 to 50 on the non-dental hygiene staff interview form.

VARIABLE	27,000	32,000	33,000	35,000	39,000	42,000	45,000	48,000	51,000	54,000	57,000
49,000	PRIMARILY REJECTED	PRIMARILY ACCEPTED									
48,200											
48,000											
47,400											
46,800											
46,200											
45,600											
44,800											
43,800											
42,800											
42,000											
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21,800											
21,200											
20,400											
19,800											

Variable 4 (Total Item Score by Non-Nursing Staff Interviewers)

Acc=Accepted    Alt=Alternate    Rejected    Only the exceptions are noted.

Figure 1. Cross-tabulation Plot of Total Item Scores Assigned by Nursing Staff and Non-Nursing Staff Interviewers





VARIABLE 1 (Total Item Score by Dental Hygiene Staff Interviewers)

VARIABLE 4	34,000	36,000	38,000	40,000	42,000	44,000	46,000	48,000	50,000	52,000	54,000
53,400											
52,800											
52,200											
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24,600											
24,000											
23,400											

PRIMARYLY ACCEPTED

PRIMARYLY ALTERNATES OR REJECTED

Variable 4 (Total Item Score by Non-Dental Hygiene Staff Interviewers)

Acc = Accepted A/R=Alternate or Rejected Only the exceptions are noted.

Figure 4. Cross-tabulation Plot of Total Item Scores Assigned by Dental Hygiene Staff and Non-Dental Hygiene Staff Interviewers





APPENDIX A

SUMMARY OF PREVIOUS  
SELECTION METHODS

## SUMMARY OF PREVIOUS SELECTION METHODS

### First Graduation Class

The first nursing students graduated in 1973 while the first dental hygiene students graduated in 1974. In both cases, the selection was based on policies developed by the coordinator. The policies were approved by the Assistant Dean of Instruction and other appropriate individuals within the college structure.

Each selection committee included the appropriate coordinator and another instructor in the program. All applicants to the nursing program were interviewed either by the nursing coordinator or the nursing instructor who was a member of the selection committee. All applicants to the dental hygiene program were interviewed by the dental hygiene coordinator.

The final selection of the dental hygiene students to be admitted was primarily based on the interview with the coordinator and the coordinator's professional judgment of the applicant. The nursing applicants were ranked from 1 to 60 by each member of the selection committee. Each individual's overall qualifications were considered in the ranking. With limited exceptions, the committee members gave similar rankings to the majority of the applicants. Candidates were selected on the basis of committee composite rankings.

### Nursing Class of 1973 - Enrolled August 1971

Admitted -	50
Withdrew -	9
Death	- 1
Changed goals	- 4
Academic problems	- 2
Personal problems	- 1
Pregnancy	- 1
Transfer In -	4
Graduates -	45
Successfully pass State Board Examinations	
1st attempt -	39
2nd attempt -	6

Dental Hygiene Class of 1974 - Enrolled August 1972

Admitted - 24

Withdrew - 1

Accident during last semester, could not perform clinically, but did pass National Boards (academic) though she did not attempt Regional Boards (clinical).

Graduates - 23

Passed National Boards (graduates only)

1st attempt - 22

2nd attempt - 1

Passed Regional Boards - 23

Completed program (including summers)

in 5 semesters - 22

in 6 semesters - 1

Licensed - 23

Second Graduation Class

No interview was required of applicants to either the nursing or dental hygiene program. The dental hygiene coordinator did meet and personally counsel a limited number of applicants. However, a majority of dental hygiene applicants were not counseled by anyone knowledgeable about the profession and its unique demands and rewards. The nursing applicants were not interviewed by any of the nursing staff members.

For both programs, candidates who met the minimum academic criteria were admitted, according to the order in which their applications were received. For the first time, an appeals procedure was available for nursing applicants. Space was reserved for successful appeals.

Nursing Class of 1974 - Enrolled August 1972

Admitted - 35

Withdrew - 4

Health - 2

Dissatisfied with Nursing - 1

Academic problems - 1

Transfer In - 2

Graduates - 33

Successfully pass State Board Examinations

1st attempt - 31

2nd attempt - 2

Dental Hygiene Class of 1975 - Enrolled August 1973

Admitted - 24  
Withdrew - 9  
    Death - 1  
    Lack of dexterity - 1  
    In wrong program - 3  
    Reason Unknown - 4  
Graduates - 15  
Passed National Boards  
    1st attempt - 14  
    2nd attempt - 0  
    3rd attempt - has not been taken yet  
Passed Regional Boards - 15  
Completed program (including summers)  
    in 5 semesters - 13  
    in 6 semesters - 2  
Licensed - 14 (another one yet could)

Third Graduation Class

The procedure for the selection of students into both programs was based on a random selection process. All applications received by a specified date were reviewed to identify students who met the minimum academic criteria. The accepted students were selected at random from the respective pool of academically qualified students. Again, no interview was required.

Nursing Class of 1975 - Enrolled August 1973

Admitted - 50  
Withdrew - 13  
    Academic problems - 10  
    Family responsibilities - 1  
    Health - 1  
    Changed goal - 1  
Transfer In - 1  
Readmitted to program - 3  
    From class of 1973 - 1  
    From class of 1974 - 2  
Graduates - 41

Dental Hygiene Class of 1976 - Enrolled August 1974

Admitted - 27  
Withdrew - 8  
    Academic problems - 2  
    In wrong program - 3  
    Financial - 1  
    Health - 1  
    Program too demanding - 1

If comparisons are made with preceding years, the dental hygiene data for the class of 1976 must be interpreted with care. These students are just beginning their second year in the program, so the withdrawals are for only the first year.

#### Fourth Graduation Class

The nursing students were again selected at random from the group that met the minimum academic criteria. Since the dental hygiene program started one year after the nursing program, the number of graduation classes is always one less than for the nursing program. Thus, the fourth dental hygiene class was admitted for the Fall of 1975. The procedure for the selection of these students included the use of the structured interview which is presented and discussed in this report. If comparisons are made with preceding years, the data below must be interpreted with care. The nursing data included withdrawals for only the first year and the dental hygiene data are for only the first six weeks.

#### Nursing Class of 1976 - Enrolled August 1974

Admitted	-	50
Withdrew	-	12
Academic problems	-	5
Personal problems	-	3
Changed goal	-	3
Moved	-	1
Transfer In	-	4

#### Dental Hygiene Class of 1977 - Enrolled August 1975

Admitted	-	26
Withdrew	-	0 (as of October 1, 1975)

The dental hygiene program had room for only 24 students. The extra two students had been admitted since for both previous classes, at least two students had withdrawn within the first month.

Fifth Graduation Class

The structured interview presented in this report was used as a tool for the selection of the nursing students for this class.

Nursing Class of 1977 - Enrolled August 1975

Admitted - 50

Withdrew - 0 (as of October 1, 1975)

APPENDIX B

STRUCTURED INTERVIEW INSTRUMENT USED  
BY NURSING STAFF INTERVIEWERS

STRUCTURED INTERVIEW FOR SELECTION

OF NURSING STUDENTS

PROFESSIONAL INTERVIEW

JCCC

\_\_\_\_\_  
Today's Date

\_\_\_\_\_  
Interviewer's Name

\_\_\_\_\_  
Applicant's Name

The following content areas are suggested for inclusion in a "Structured Interview" to be given applicants to the Department of Nursing, Johnson County Community College, Overland Park, Kansas. The items are not meant to be totally inclusive, since the interviews should have a degree of flexibility which allows the interviewer to follow the lead of the interviewee. This can, perhaps, best be done by asking "open-ended" questions which draw out the applicants ideas, and by being supportive so as to put the applicant at ease. Questions which ask for behavioral evidence in addition to an applicant's ideas or feelings on a subject should also be included. The interviewer should feel free to pose his own questions if he chooses.

Please check the appropriate blank relative to how well you felt the applicant responded in each content area. We would also appreciate your comments in the space provided on the last page as well as whether you feel the applicant should be accepted or rejected. Further, please indicate where you felt the applicant performed in terms of percentile ranking. For example, 50% average, 75% above average, 90% exceptional, etc.

by Michael M. Burgess, Ph.D.

## 1. Perception of Nursing

Questions in this area should be directed at obtaining information from the applicant relative to their perception of nursing. Questions might cover areas including: the understanding of nursing as a profession, the role of a nurse, the health care delivery system, the influence behind their interest in nursing, what they feel the model for a nurse should be, and what contact they may have had with nursing and/or health care.

In obtaining responses to interview questions the interviewer is interested in determining whether the applicant has insight into the following issues relative to nursing:

- a. Demonstrates an interest in the concept of job security related to nursing.
- b. Recognizes the need for continuing education in nursing.
- c. Recognizes the need to relate theory to practice.
- d. Demonstrates awareness of psycho-social and socio-economic aspects of illness and its effect upon patients.
- e. Appears intellectually capable of understanding and accepting patients with chronic illness, acutely ill patients, dying patients, and death.
- f. Demonstrates recognition that the patient is an intricate part of the family unit and that the patient and family must be treated accordingly.
- g. Demonstrates awareness that patients need to be educated in terms of family health care and maintenance.
- h. Is able to see the nurse as a potential change agent in improving overall health care.

Specific interview questions might include:

- a. How does it happen that you are now thinking about becoming a nurse?  
Who influenced you?
- b. What initially peaked your interest in nursing?
- c. What have you done to find out about the activities and role of a nurse?
- d. What do you think nurses should do in their role as a health care practitioner besides administering physical care to patients?
- e. What have you done to investigate other career possibilities?
- f. What do you think you might dislike about being a nurse and how would you deal with this?

g. Under what circumstances have you seen nurses in "action?"

h. Has anyone encouraged you in this choice or discouraged you?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
Well below average      Below average      Average      Above average      Well above average

2. Stamina

While this concept relates to motivation, it refers more specifically to the applicant's capacity for endurance over an extended period of time and his tolerance for stress. In short, has the applicant demonstrated that they can work longer than others and not only complete the task but complete it well? Can the applicant physically endure the rigors of a seemingly impossible schedule? Questions appropriate to this construct might include:

a. What has been the most difficult job you have ever undertaken? Why was it difficult?

b. In starting a job that is difficult to finish, how do you handle it? If it does not get finished, why?

c. How would you compare your energy with that of most of your friends?

d. In dealing with a stressful situation how do you handle anxiousness and the tendency to retreat?

e. How might shift work interfere with your personal or family adjustment?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
Well below average      Below average      Average      Above average      Well above average

3. Personal Integrity and Maturity

This area is an attempt to learn whether the applicant has the capacity for self-directed and self-motivated behavior. For example, is the applicant patient, profit from experience and demonstrate emotional stability, a sense of responsibility, an absence of anxiety and/or depression, good physical health, excitement about learning and growing while remaining mentally alert in order to render independent judgments. In short, this is an attempt to determine whether the applicant has the capacity to function in a healthy, well integrated and goal directed way consistent with the applicant's age. Questions would include the following:

a. What has motivated you to study and work?

b. How do you spend your non-scheduled time?

- c. What do you plan to do if not accepted into this program?
- d. Do you have a dream of what you would like to do and if so, tell me about it. What have you done to make your dream come true?
- e. How do you respond intellectually or emotionally when you come up against a complex problem with no immediate or apparent solution?
- f. What would you do if you completely disagreed with the plan of action of the person in charge of a project you may be working on or working with?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

Well below average      Below average      Average      Above average      Well above average

4. Self Insight and Self Concept

This is an attempt to identify whether the applicants have realistic insight about themselves and their subjective and objective feelings about self-like or dislike. For example, can the applicant praise their capabilities in a straightforward manner and also recognize their shortcomings and deal with negative comments that might stem from these deficits. Questions in this area also relate to the individuals ability to look at their own feelings honestly, accept responsibility for their own behavior, remain accountable for their own behavior, utilize and accept feedback whether positive or negative, recognize their own limitations, and recognize the consequences of their own actions. Questions would include the following:

- a. What do you consider your strong points and abilities?
- b. What do you consider your weak points and abilities? How might you proceed to overcome them?
- c. What qualities do you possess that seem especially suited to health care?
- d. Have you considered other health care careers? What? (This is an opportunity to, perhaps, provide the applicant with some useful information as well as to find out how realistic the applicant is about their interest and abilities).
- e. How do you feel you stack-up against most people you come in contact with?
- f. Are there some bosses and/or teachers you have come in contact with who were not qualified?

- g. Upon entering a new interpersonal situation what do you expect to happen?
- h. How do you feel you have done in life so far?
- i. Do you feel you have a lot of friends? If yes, why? If no, why?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

Well below average      Below average      Average      Above average      Well above average

### 5. Interpersonal Competency

In this content area the interviewer is seeking information on the applicants interpersonal skills. Do they enjoy working with people? Are they relaxed in the interview situation? How anxious were they to end the interview? One is interested in the applicant's ability to work with people, manifest open and positive attitudes, remain sensitive, and relate to people of various backgrounds. Applicants must show a basic interest in people, possess a basic congenial personality and good sense of humor, and demonstrate an ability to take instructions. Questions in this area might include the following:

- a. What qualities do you look for in a friend?
- b. Tell me about any experiences you have had meeting with people different from you in terms of age, race, religion, handicaps, etc? What did you learn from these experiences?
- c. What do you do when you find yourself disagreeing with other members of the group you are assigned to?
- d. What kind of activities do you pursue by yourself in your free time? In a group?
- e. What would you do if you were in charge of a group project and the other members threatened to quit?
- f. Do you like to be "in charge" of activities or do you prefer to just go along?
- g. Tell me about your friends, what they are like, what you do together.
- h. What sort of student is the most popular at your school or what kind of person is most popular in your work? Are you that kind of person? If not, to what extent has this bothered you? What have you done to make yourself feel more at ease at your school or job?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
 Well below average      Below average      Average      Above average      Well above average

6. Problem Solving Skills

This is an attempt to determine how well the applicant deals abstractly in terms of finding solutions to difficult problems. Questions here would provide information as to an applicant's ability to integrate and synthesize information from a variety of sources, remain flexible in the process of problem solving. Efforts should be made to question the applicant along such lines as:

- a. How can quality health care be provided for the disadvantaged? Applicants should consider the problem that good policy does not always get put into good practice.
- b. Given one oxygen tank and two patients needing oxygen, one of them is younger, the other an older established member of the community, who gets the oxygen? (The issue here is not whether the applicant comes up with the proper solution but the process the applicant goes through in obtaining a solution).
- c. If you had a difficult problem to solve at school or in your job and after a considerable time no solution is achieved through normal routine procedures, would you suggest an alternative course or stay within the same program?
- d. If your car stalled and you had to get somewhere for an important appointment (test, job interview), what would you do?
- e. What complex problems have you solved and how did you go about it?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
 Well below average      Below average      Average      Above average      Well above average

7. Social Conscience and Empathy

Included here are such concepts as dedication and compassion, the ability to be empathic, caring and affectionate to people, and the ability to demonstrate the appropriate effect, desire and willingness to help others. In addition, this is an attempt to determine whether the applicant understands current social problems and is committed to help in solving them. In short, does the applicant have a compassionate if not idealistic attitude towards his fellow man which extends beyond his own economic gain. Questions in this area would include the following:

- a. How does poverty affect health care in this country?

b. What might be done to improve the health care of lower income groups in this country, why do you think the poverty cycle continues?

c. Is it fair for there to be more than one standard of medical care in this country? Why?

d. Does everyone in this country have the right to the same quality of health care?

e. How do you feel about more women and minority groups students being admitted to the professional schools?

f. How do you feel about individuals who are physically ill?

g. How do you feel about individuals who are mentally ill?

h. Is it more important to provide good medical care at the expense of emotional support or does emotional support play a role?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

Well below  
average

Below average

Average

Above average

Well above  
average

#### 8. Ethics

This is an attempt to ascertain the applicant's internal standards which have developed in the course of growing up. Areas which are of interest here include trustworthiness, the capacity for truthfulness even in reporting ones own errors, care in handling dangerous drugs, keeping patient and family information confidential, and coming to terms with ethical issues such as abortion. Questions include:

a. How do you feel about the number of lawyers involved in criminal activities in recent months? Why?

b. What need is there to be concerned about the ethical behavior of nurses?

c. How does concern for the quality of life relate to the practice of nursing?

d. Here is a hypothetical situation. You become aware of unethical practices on the part of physicians that you are associated with. What is your responsibility to the nursing profession?

e. Consider another hypothetical situation in which a female patient and/or friend you knew had been exposed to measles early in pregnancy and she is requesting

an abortion. What would be your response?

f. What should you do if you gave the patient the wrong medication and/or dosage?

g. Do you feel that nurses have any special responsibility regarding the use of drugs including alcohol?

h. What responsibility does a nurses supervisor have if any, when she discovers that one of her nurses is cutting medical corners like taking a patient's vital signs in order to treat other patients?

### 9. Communicating Skills

This is an attempt to determine whether an individual possesses the capacity for communicating either in writing or orally his ideas and skills. Further, does the applicant possess the capacity to listen to others, follow instructions, and discuss difficult issues even though angry. Questions would include:

a. Are you able to make a point even though angry?

b. Can one learn more by listening attentively or responding orally?

c. Do you correspond regularly with friends by letter, phone, or in person?

d. Do people have difficulty accepting your explanations or can you usually convince them?

e. Will people usually tell you what you want to know simply by asking straightforward questions or is the indirect route the most effective?

f. Is quietness a sign of nervousness or simply shyness?

g. In the past have you had close friends that you shared secrets with?

h. Can you condense information to a relevant point or two and understand what is being said?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

Well below  
average

Below average

Average

Above average

Well above  
average

### 10. Ability to Work With Hands

Questions in this content area should relate to job and/or school experiences which have required manual dexterity including both large and small muscle coordination. Questions include:

a. What are your favorite sports and do you engage in them as a participant?

b. Do you engage in activities such as, sewing, mechanics, music? If so, how would you rate your skill?

c. In working around the house or job would you classify yourself as capable or clumsy in handling a number of tasks with virtual ease?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
Well below average      Below average      Average      Above average      Well above average

11. Personal Appearance

This is a straightforward attempt to assess how well the applicants present themselves when under a stressful situation. The interviewer should assess not only whether their dress is appropriate but also their grooming, poise, manner of approach, and physical condition. Consider if the applicant is relaxed, nervous, outgoing, aggressive, insistent on taking over the interview, etc.

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
Well below average      Below average      Average      Above average      Well above average

Recommended Decision, please check one:

- Unacceptable
- Possibly acceptable
- Probably acceptable
- Obviously acceptable
- Outstanding

Recommended ranking in terms of percentiles \_\_\_\_\_  
(Range from 1-100)

Comments:

**APPENDIX C**

**CANDIDATE PROFILE FORM USED BY  
NURSING STAFF INTERVIEWERS**

CANDIDATE PROFILE

Student Name \_\_\_\_\_ Interviewer \_\_\_\_\_

Characteristic	Rating				
	Well Below Average	Below Average	Average	Above Average	Well Above Average
1. Perception of Nursing	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
2. Stamina	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
3. Personal integrity	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
4. Self insight and self concept	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
5. Interpersonal competency	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
6. Problem solving skills	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
7. Social conscience and empathy	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
8. Ethics	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
9. Communicating skills	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
10. Ability to work with hands	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
11. Personal appearance	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>

Total Score \_\_\_\_\_

Percentile Ranking (Range from 1 - 100) \_\_\_\_\_

Recommended Decision (Check One):

- Unacceptable
- Possibly acceptable
- Probably acceptable
- Obviously acceptable
- Outstanding

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

APPENDIX D

INTERVIEWER OPINIONNAIRE



7. What one aspect of the structured interview instrument did you particularly like?

8. What one aspect of the structured interview instrument did you particularly dislike? What improvements do you suggest?

9. What was your overall impression of the structured interview instrument?

10. What interview techniques would you add to the training tape?

11. What aspects of the training tape would you delete?

12. How could the training tape be otherwise improved?

UNIVERSITY OF CALIF.  
LOS ANGELES

JAN 30 1976

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