

THE DEVELOPMENT AND TESTING OF AN INSTRUMENT
FOR PREDICTION OF EMPLOYEE POTENTIAL IN THE
ANIMAL HEALTH CARE DELIVERY SYSTEM ²⁰⁹

by

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CHAPTER I

INTRODUCTION

The problem selected for investigation was one of predicting employee potential in the animal health care delivery system.

BACKGROUND OF THE STUDY

The field of animal health care has traditionally enjoyed the enviable position of involving highly motivated employees. Many were attracted to the work of caring for animals because of their compassion and like of animals. Others were attracted so they might gain experience which would be meaningful in their application to colleges of veterinary medicine. Still others, and perhaps the largest group, entered employment with veterinarians as a terminal occupation.

As the health care delivery system in general has become more demanding, so has the animal health care system. The health care delivery system is defined as "that function that supplies the need of that portion of society that is ailing at that given time." Employees entering this field today have a greater need for detailed instruction and identifiable skills in order that they might perform the increasingly sophisticated and complex tasks required. In the animal health care field, employees must support the veterinarian who responds to increases in the types and character of therapeutic procedures expected by their clients.

PURPOSE OF STUDY

This study was designed towards the goal of developing an effective instrument for the veterinarian to use in screening prospective employees before investing in a costly training effort. Veterinarians need a "selection tool" to be used to screen for the type of employee desired.

The proposed instrument will be a written test used to evaluate an individual in areas other than factual knowledge. Experience has shown that even a well-informed employee may be unable to perform duties adequately. This may be due to problems associated with how one sees oneself or his/her understanding of the animal health care field.

The goal is to develop an instrument to help evaluate animal health care technicians with the possibility that it might serve as a model for other segments of the health care delivery system. Once the instrument has been created and found useful, attention must be directed to the long-term task of designing meaningful remedial actions to correct the weaknesses discovered by an evaluation.

JUSTIFICATION OF STUDY

Responses of most of the people the author has consulted concerning this study can be divided into three categories. The first group, extremely small, were those who seemed able to appreciate the nature of

the problem and willing to look for answers. The second group consisted of those who understood the problem, but either did not want to look for answers or felt that a solution could not be found. The final group, by far the largest, consisted of those who seemed not to grasp or to understand the problem at hand.

Education without exploration is a failure. The Swiss psychologist, Jean Piaget, has been quoted as saying the principal goal of education is to create men who are capable of new things, not simply of repeating what other generations have done -- men who are creative, inventive, and discoverers. No known accurate source is available for this quote.

MEANS OF ACCOMPLISHMENT

This study consisted of the subjective evaluation of ten employees, the selection of a standardized test that had a record of predicting self-concept, and the development of a 30-question attitude test that was administered to the same ten subjects. The three measurements were checked one against the other.

The study was concerned with one segment of the animal health care delivery system; i.e., technicians within a veterinary college complex.

Definition of Terms

Psychological Test: A test for other than factual knowledge that measures a person's attributes.

Likert Scale: A five-point scale where the respondent can express himself in graduation of his agreement or disagreement.

Animal Health Care Delivery System Employee: A person employed in the care of animals or tasks related thereto (not a veterinarian).

Faculty Members: Current members of the faculty at Kansas State University holding the degree Doctor of Veterinary Medicine and who have at some time in their career engaged in the private practice of veterinary medicine.

Animal Health Care Test (AHC): A test constructed for the purpose of evaluating one's attitude toward being an employee in the animal health care delivery service.

Standard: An established value against which something else is judged.

Reliability: The extent to which a test measures what it is supposed to measure.

Attitude: A person's feeling toward something at a given time.

Value: The extent, amount, or magnitude assigned an item or feeling.

Validity: The degree to which the predictions made by the test are confirmed by the performance of the subjects tested.

Attribute: A quality that denotes what a person really is in a given respect.

CHAPTER II

REVIEW OF LITERATURE

Despite the number of books and journal articles written on the subject of testing, it is interesting to note that this extremely important but inexact art has seldom been applied to the animal health care field.

One purpose of this study was to identify a standardized test to check against the results of the already developed attitude test. The bulk of the literature review was devoted to the field of standardized testing and the role attitude evaluation plays in the field of health care delivery.

No paper that deals even remotely with testing should go without a comment by Oscar Krisen Buros, Former Director of the Buros Institute of Mental Measurement. Such books as his Mental Measurement Yearbook, Test in Print, Personality Tests and Reviews and 23 other books on testing have provided the field of evaluation with the most comprehensive collection of data presently known.

But even with this great wealth of knowledge at his disposal, Oscar K. Buros, in a speech 28 March 1977 to the College of Education, University of Iowa, said:

"I would like to repeat a statement which I made forty-two years ago; Today it is practically impossible for a competent test technician or test consumer to make a thorough appraisal of the construction, validation, and use of most standardized tests being published because of the limited amount of trustworthy information supplied by test publishers and authors.

"My 1935 complaint is equally applicable today--especially so for secure tests." (Buros 77)

Verbal and written statements on the subject of psychological testing as it pertains to the health profession follows to a large extent a written record of the need to develop some instrument, but comparatively little is written concerning the actual tests themselves.

Recognition of this need is found in the following statement,

"...The health professions are increasingly cognizant of the fact that success as a practicing professional involves many skills not sampled in the conventional scholastic aptitude test and that selection criteria should include consideration of this broader universe." (McGuire, 1978)

Many people are becoming more and more aware of the difference between testing for factual knowledge alone and the need to assess other items and their bearing on the delivery of health care.

"There is a distinction between those for which Empirical evidence can be provided and those which lie in the realm of human judgement i.e. in the arena of philosophy and values." (Tyler, 1976)

What may be identified as being in the arena of philosophy and values? Certainly a very large portion of personal values would be based on how a person reacts or feels concerning a particular situation at a given time in his existence. These feelings could be called attitudes. "What is often called the 'Affective Domain', can identify a class of learned capabilities called attitudes." (Krathwohl, 1964)

Attitudes, which we purport to measure, are affected by such a large number of factors and experiences that it makes them, because of their varied nature, elusive. Attitudes in the health care system, however, may be less varied to the particularly standardized training received by the health care professional. "Schools are often expected to establish socially approved attitudes such as respect for other people, cooperativeness, personal responsibility, as well as positive attitudes toward knowledge and learning, and an attitude of self-esteem." (Gagnie, 1974)

The need to measure such items as attitudes in the health care delivery system is especially pointed out in the following quote which was taken from a presentation made in opposition to assessing health care professionals where the evaluation was to test only knowledge:

"When one is making an assessment of a colleague, the sort of questions one wants to ask are:

1. Does he care?
2. Does he try?
3. Does he visit the patient?
4. Does he listen to the history?
5. Does he make an appropriate examination?
6. Does he communicate well with patients and relatives?
7. Does he provide meddlesome treatment?
8. Does he know?" (Pyke, 1974)

It is interesting that "Does he know?" is listed as number 8. Whether it was intended to purposefully place this statement in such a lowly position is not known, but it does seem to merit this ranking from the tone of the questioning. This investigator could find no more complete summary of what really is needed in the health care delivery system than that of D. A. Pyke.

Thurston and others have stated repeatedly that attitudes are more easily measured than defined. Despite the large number of definitions given for attitudes, the whole subject of attitudes may very well be summed up best by the following comment: "But there is really no necessity that social psychologists agree about the definition of attitude in order to measure attitudes. All that can be measured are specific properties. If, then, one person wishes to argue that something that has been measured is a property of an attitude, and another person wishes to argue that it is not, they may do so without in any way affecting the measurement process - or the validity of the resulting measurement scale." (Dawes, 1972)

Attributes in general and attitudes in particular, especially as they relate to the health care delivery system, encompass many things.

Certainly a high regard for life, both human and animal, would be necessary if one were devoting his working hours to the preservation of life.

That a person accepts such a belief is an indispensable attitude in being (or becoming) a useful, happy employee. Believing in the necessity of providing adequate health care would be of utmost importance.

Since the delivery of health care requires an extreme sensitivity toward not only animal needs but the human client that is always attached, this attitude appears as one that should be evaluated. Empathy and sensitivity may not readily be separated; at least a good differential definition did not appear in this investigator's reading, but being responsive to the feelings of those we deal with should require either or both of the attitudes.

Assuming a minimal educational background has been obtained when employees start work, it is important that an attitude toward learning be present. The change in the amount of knowledge of the health care field is quite rapid. The absence of a positive attitude toward learning would soon result in an employee becoming frustrated by his lack of the newer knowledge possessed by those with whom he works.

An appreciation of or a positive attitude toward the realities of the basic economic system, especially as it relates to the animal health care delivery system, is highly desirable in employees. Those new to

animal health care, particularly those who come from prior employment with the segment of health care that deals with humans, may suffer from a belief that charity, third party payment or governmental subsidies will be present to offset any lack of sound business practice. It may come as a shock to some that animal health care is rarely subsidized.

Having covered two of the attributes deemed desirable, it may be wise to ask the following question: In an inexact science such as psychologic testing, should, or can safeguards be established that in some way protect those involved? The foreword of the Ethical Standards of Psychologists, published in January 1963, addresses this question.

"The psychologist believes in the dignity and worth of the individual human being. He is committed to increasing man's understanding of himself and others. While pursuing this endeavor, he protects the welfare of any person who may seek his service or of any subject, human or animal, that may be the object of his study. He does not use his professional position or relationships, nor does he knowingly permit his own services to be used by others for purposes inconsistent with these values. While demanding for himself freedom of inquiry and communication, he accepts the responsibility this freedom confers: for competence where he claims it, for objectivity in the report of his findings, and for consideration of the best interests of his colleagues and of society." (Anastasi, 1976)

This investigator could not determine whether these high ideals were widely practiced but strongly feels they should be included in this study and every effort be made to conform to the lofty ideals. The fact that evaluation may in many instances fail to help can be tolerated. Poorly done evaluations may in some instances harm the individual for whom help was intended. Damage in areas involving one's career, self-concept or productivity is intolerable and should be avoided.

REVIEW OF TESTS

Self-Directed Search

The Self-Directed Search is especially geared to test the person who may in some way feel threatened by having someone evaluate his performance and attitudes. By incorporating this approach into the test, the necessary directions and mechanisms required for the person to draw conclusions have been established and the need for external counsel eliminated.

The test is concerned with questions on activities, competencies, occupations and self estimates. The questions are presented in different manners that require different responses.

The activities portion lists 66 items such as how to fix electric things, solve math or chess puzzles, or write business letters. The respondent is to check whether he likes or dislikes this activity.

Another 66 items are given in the competencies portion with "yes" or "no" responses depending upon one's assessment as to whether or not he is competent in that given field. Items listed include, "I can type 40 words a minute; I am a good judge of personality; I can use a microscope."

The third section is labeled "Occupations" and contains 84 occupations such as a bank teller, chemist, or poet. One is instructed to respond with a "yes" to those occupations that are interesting and appealing and a "no" to those that are not.

The last section contains twelve traits such as mechanical ability and math ability. The individual taking the test is to rate his ability high, average, or low. While the "self-directed search" is to be commended in many ways, such as being non-threatening, it is not without problems.

The major weakness of a test such as the "self-directed search" would be its lack of ability to help the person who is not a self-starter or who needs direction and help in any evaluation or endeavor. This type of person is the individual who is most often in need of help. The person who can analyze himself may rarely need assistance with any undertaking.

A self-evaluation would be of doubtful value for use as a predictive test. While the "self-directed search" is to be commended as a thoroughly tested instrument, it was not deemed of value for this study.

Hall Occupational Orientation Inventory

The Hall Occupational Orientation Inventory contains 220 statements that are descriptions of situations or feelings toward work. One is instructed to respond as most desirable, desirable, not important, undesirable, or very undesirable, depending upon his feeling about that particular statement. Responses are to be placed on a sheet that requires special scoring.

The grading consists of scoring the responses to selected statements to determine if the subject falls into a given category. The general heading of the various areas is Values and Needs, Job Characteristics, and Worker Traits. The subheadings are broken down as:

- Creativity, Independence
- Risk
- Information, Knowledge
- Belongingness
- Security
- Aspiration
- Esteem
- Self-Actualization
- Personal Satisfaction
- Routine-Dependence
- Data Orientation
- Things Orientation
- People Orientation
- Location Concern
- Aptitude Concern
- Monetary Concern
- Physical Abilities Concern
- Environment Concern
- Co-worker Concern
- Qualifications Concern
- Time Concern
- Defensiveness

The wide range of items and the thought-provoking statements that make up this test were impressive. Since the statements were mixed, it was not possible for the individual taking the exam to decide: Here is a place to put "all desirable" or here is a place to put "undesirable". This feature, coupled with the wide range of statements and categories where the responses are placed, greatly enhances this test's ability to help select occupational interests.

The small number of statements pertinent to animal health care makes this test less applicable to this project's need than the one selected, even though it may be a useful test in certain situations.

Strong-Campbell Interest Inventory

If a major criterion for evaluating measurement devices was a given instrument's ability to stand the test of time, the Strong-Campbell Interest Inventory would probably be accepted as best. Written originally in 1933 and revised fifteen times since then, it is still widely used.

The scoring of the Strong-Campbell test places respondents into six major categories and twenty-three minor categories. The breakdown of these is as follows:

Realistic:	Agriculture
	Nature
	Adventure
	Military Activities
	Mechanical Activities

Investigative:	Science Mathematics Medical Science Medical Service
Artistic:	Music/Dramatics Art Writing
Social:	Teaching Social Service Athletics Domestic Arts Religious Activities
Enterprising:	Public Speaking Law/Politics Merchandising Sales Business Management
Conventional:	Office Practices

A major concern in using the Strong-Campbell test was the problem that employees in the health care delivery system may have completed this test during their secondary education and remembered the results. While no attempt was made to ascertain who had taken which exam previously, this investigator felt there was too much risk of prior exposure to the Strong-Campbell. In addition, health care was not included as a major or sub-category.

Thorndike Dimensions of Temperament Instrument

The Thorndike Dimensions of Temperament has been primarily designed as a counseling aid. The exam is divided into ten sets of ten statements each. The respondent is requested to fill in the answer sheet with "which three of the statements in each set was the most like himself and which three was the most different from himself."

The responses are scored depending on whether the individual being evaluated possesses a positive or a negative attitude toward the dimension measured by each set of statements.

The dimensions and the positive and negative adjectives are as follows:

<u>DIMENSION</u>	<u>POSITIVE</u>	<u>NEGATIVE</u>
1. Sociable	Sociable	Solitary
2. Ascendant	Ascendant	Withdrawing
3. Cheerful	Cheerful or Objective	Gloomy or Sensitive
4. Placid	Placid	Irritable
5. Accepting	Accepting	Critical
6. Tough-Minded	Tough-Minded (Masculine)	Tender-Minded (Feminine)
7. Reflective	Reflective	Practical
8. Impulsive	Impulsive	Planful
9. Active	Active	Lethargic
10. Responsible	Responsible	Casual

It was not deemed the appropriate exam for health care individuals because of the lack of statements that would judge such dimensions as empathy and caring.

Personal Attribute Inventory

The Personal Attribute Inventory is a test that consists of 50 positive adjectives and 50 negative adjectives. Respondents are instructed to indicate thirty adjectives they feel best describe themselves. The test is so designed that one can select 50 adjectives to describe another individual or group of individuals.

This test is designed to measure one's self-concept. The Personal Attribute Inventory was selected as the most appropriate standardized test written for the specific purpose as predictors of useful employees. Self concept is used here to indicate how one sees himself/herself as a positive or negative thinking individual.

Scoring of the Personal Attribute Inventory is accomplished by counting the negative adjectives a person has checked in describing himself. The person who checks a high number of negatives would be determined to have a lower self-concept than one checking fewer negative adjectives.

The simplicity of this test is one of its very strong points. Any evaluation instrument should be of such a nature that it measures what is intended and not an indication of one's ability to overcome a lengthy, confusing arrangement of words.

The Personal Attribute Inventory can be taken in a short period of time, approximately five minutes. It takes less than a minute to score the test. Accordingly, it is a test that could be used in conjunction with a job interview and on an individual basis.

"The Personal Attribute Inventory, which was developed from Gough's Adjective Check List, was developed to improve the quality of attitude measurement by simplifying the construction to measure only effect and to produce an instrument that would have sufficiently broad utility and appeal." (Parrish, 1976)

CHAPTER III

MATERIALS AND METHODS

Procedure

The first phase of the project was to review the more relevant of the available testing materials. It was decided that the vast field of testing was best covered by thorough review of the publications by people who had studied the field extensively; i.e., Anastasi-1976, Thurston-1929, Gronlund-1976, Lemon-1973, Dawes-1972, Reamers-1954. Publications by these authors as well as the comprehensive files kept by the Department of Psychology at Kansas State University were studied to identify those tests purportedly written for adults. Articles written for such specialized groups or interests as the mentally and physically handicapped, art appreciation, muscular endurance, or for skills such as clerical or manual dexterity were excluded. Tests were evaluated for a level of vocabulary consistent with that expected of a person in the animal health care delivery system and for relevancy in judging such attributes as interest, self worth, occupational orientation, vocational planning, personal inventory assessment, and personality traits. The purpose of reviewing a number of tests was to select a test or tests which could be used as a standard for testing the animal health care technician.

The five tests selected based on the above values were reviewed in Chapter II. They were: The Self-Directed Search (Consulting Psychologists Press Inc.), Hall Occupational Orientation (Scholastic Testing Service), The Strong-Campbell Interest Inventory (Stanford University Press), Thorndikes Dimension of Temperament (Science Research Associates), and the Personal Attributes Inventory (Consulting Psychologists Press Inc.).

The Personal Attributes Inventory was selected for its ability to test several attributes, the major one being self-concept. Considerable data exists to support a claim of reliability and ability to predict success. The Personal Attributes Inventory (PAI) test was used as the standardized test against which the Animal Health Care Test, developed by this investigator, would be compared. The evaluation of the employees by supervisors, using a form developed by the investigator, was used for additional comparison.

The PAI test was administered to ten employees and scored by counting the number of negative adjectives a person ascribes to himself/herself. The subjects were then rank ordered with the person who picked the fewest negative adjectives ranking number one and the one who picked the most ranked number ten.

The second phase of the project was to develop an attitude test designed specifically for animal health care personnel, hereafter

referred to as the AHC test. This was accomplished by developing a list of attitudes pertinent to animal health care delivery. These statements were reviewed by 10 faculty members and listed as being either positive, negative, or not relevant. The 15 statements most frequently categorized as negative along with the 15 judged as positive formed the basis of the 30-question AHC test.

Ten fourth-year veterinary students with a history of employment in Veterinary Hospitals were asked to respond to the items; they served as a pretest group. Discussions were held with the pretest group, after they took the test, to discuss and analyze their responses for two purposes. One purpose was to look at the negative, positive, or not relevant characteristics of the test items. The other analysis was for content and mechanical make-up of the items. The items were arranged in the final form by placing the three most positive items first, based on the average of all 10 referees' opinions. Numbers representing the other 27 statements were placed in a bowl and drawn one by one. The test was arranged in order of the numbers drawn. This resulted in the random placement of the remaining items except for the first three.

The test was designed for scoring by using the Likert scale with "strongly agree" getting five points and "strongly disagree" getting one point on the positive attitudes. The reverse was true on the negative statements.

Method of Selecting Respondents

The AHC test and the standard PAI were given to ten employees of the Veterinary Hospital. Tests were administered individually during the early portion of the work day at the employees' place of work. A maximum of twenty minutes was allowed for taking the test. Confidentiality was supported by using code numbers in place of the names of the employees.

The results of the standard PAI test and the developing AHC test were evaluated to determine the degree of correlation. In addition both the PAI and AHC tests were compared with the results of an employee evaluation rendered by the immediate supervisor and the department head and based on the following traits: productivity, quality of work performed, ability to work with others, initiative, ability to accept delegated authority or responsibility, personal growth in relation to time employed, complexity of the job performed, creation of disciplinary problems, participation in supervised training programs, ability to impart knowledge to fellow workers, attendance, and appearance as it related to their job function. The traits were selected by the investigator and placed in a format designed by the investigator.

An employee evaluation chart was prepared with the attributes listed at the top and the subjects' names down the side. The evaluator was instructed to rank the employee on each item on a basis of one to ten, giving the best a number one and the poorest number ten. The person with the most complex job was to get a number one and the person with the least complex job would get a number ten. The person with the lowest score was to be rank ordered number one and the person with the highest score was to be rank ordered number ten.

CHAPTER IV

RESULTS AND DISCUSSION

The two written tests, the PAI and the AHC were tabulated in accordance with the procedure outlined in the materials and methods chapter of this thesis. The evaluation of the employees by the supervisors and department head was completed using the form included as figure 1.

The resulting scores were then plotted on the charts shown as figures 2, 3, 4 on the following pages. In each case the ten members of the sample were rank ordered as shown in the charts.

Graphic description of the correlation between the three evaluations are shown in figures 4 through 6. These graphs illustrate the ranking of one through ten as well as the scores received.

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										PRODUCTIVITY
										QUALITY OF WORK
										ABILITY TO WORK WITH OTHERS
										INITIATIVE
										ACCEPTANCES OF AUTHORITY
										PERSONAL GROWTH
										COMPLEXITY OF JOB
										DISCIPLINARY
										PARTICIPATION IN TRAINING PROGRAM
										ABILITY TO IMPART KNOWLEDGE TO OTHERS
										ATTENDANCE
										APPEARANCE AS IT RELATES TO JOB FUNCTION
										TOTAL RANK

Figure 1

Employee Evaluation

Rating Form

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THAT ARE CROOKED
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INFORMATION ON
THE PAGE.**

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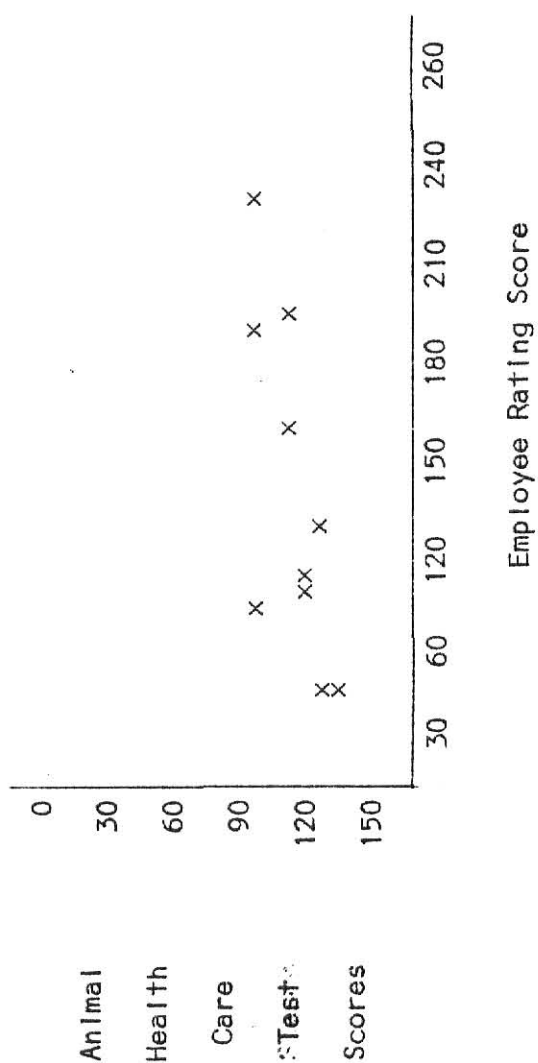


Figure 2
Relationship between the scores
of the Animal Health Care test
and of the Employee Rating,

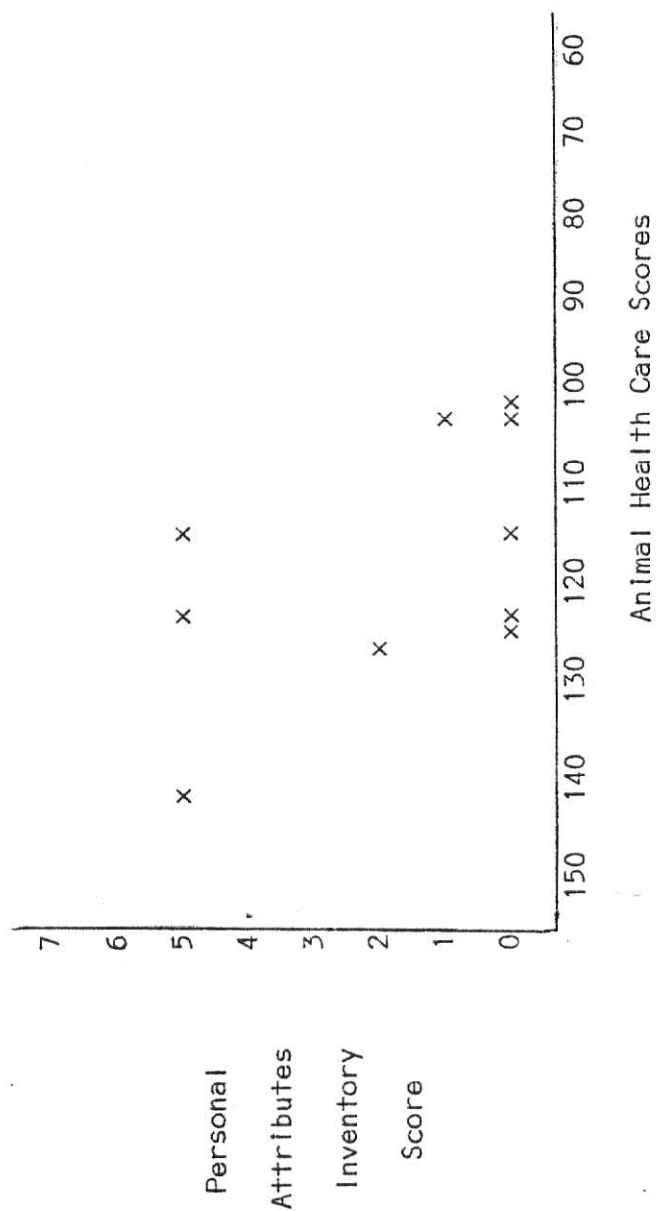


Figure 3
Relationship between the Personal Attributes
Inventory test scores and the Animal
Health Care test scores.

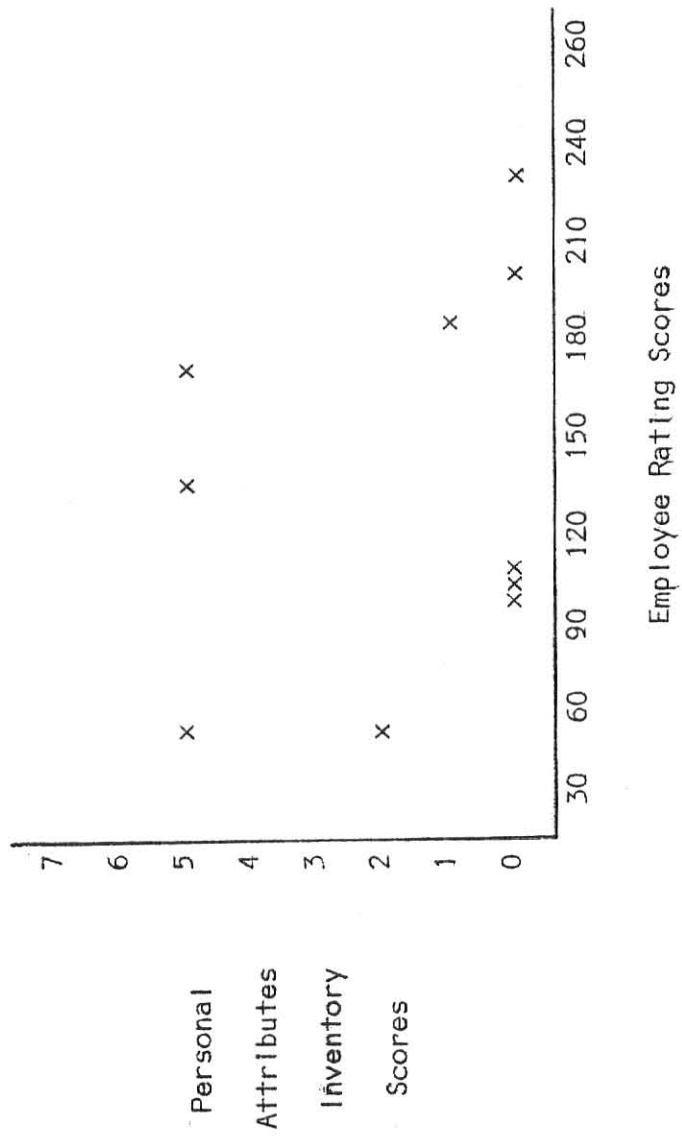


Figure 4

Relationship between the Personal Attributes Inventory test scores and the Employee Rating Scores.

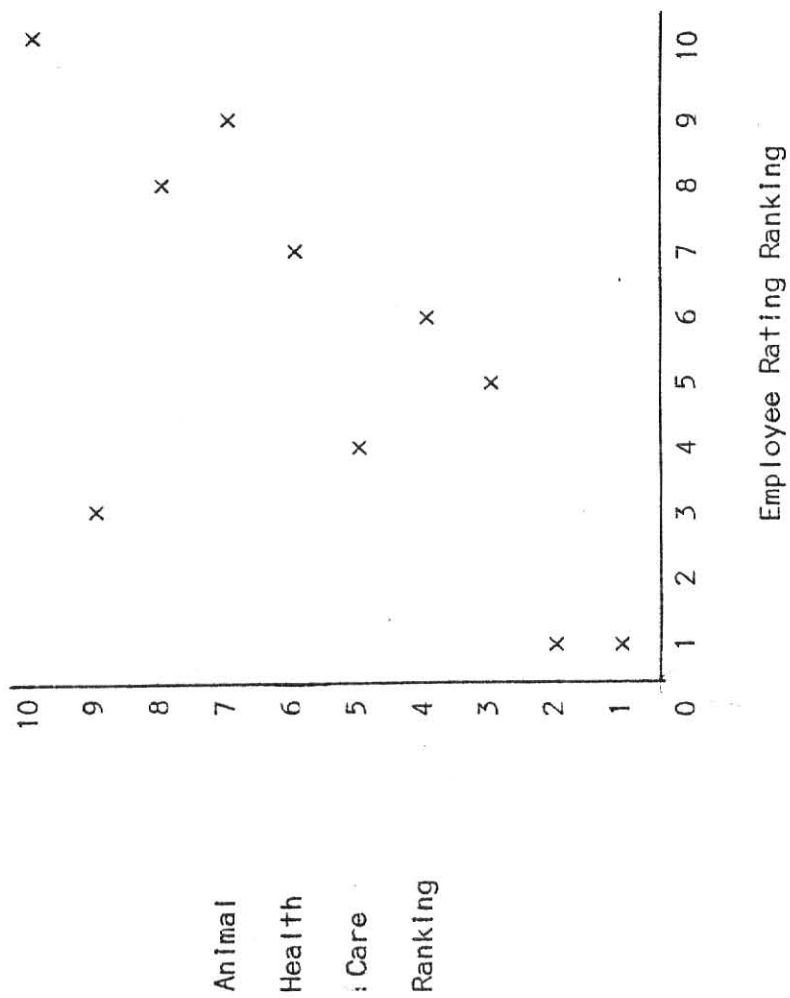


Figure 5

Relationship between the Animal Health Care Ranking and the Employee Rating Ranking.

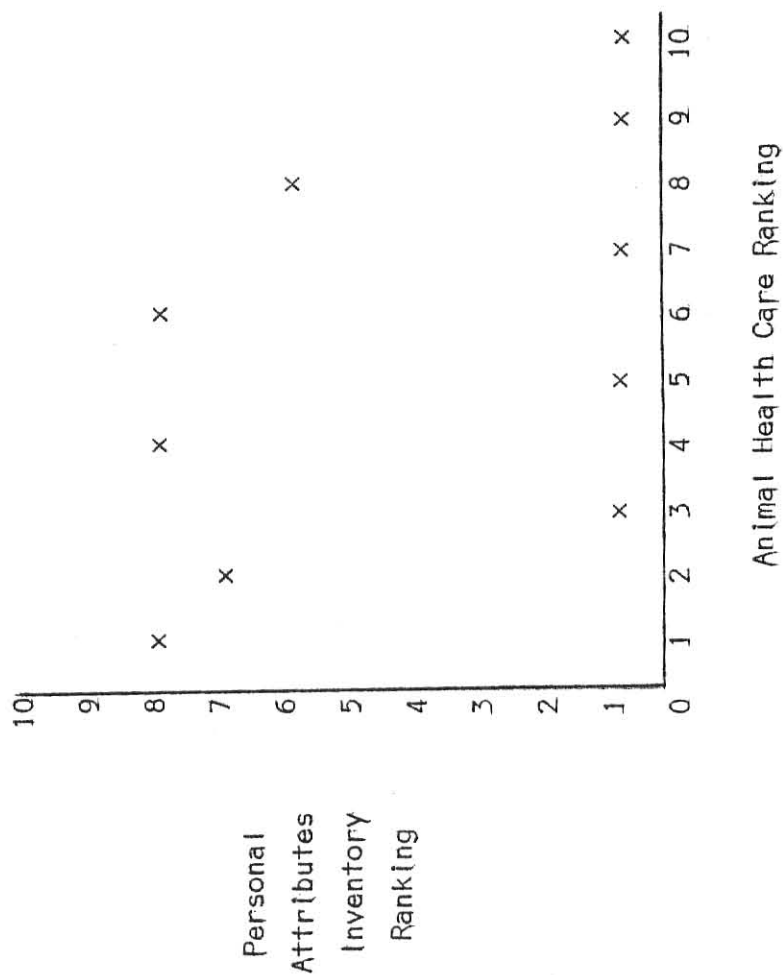


Figure 6

Relationship between the ranking of the Personal Attributes Inventory and the Animal Health Care tests.

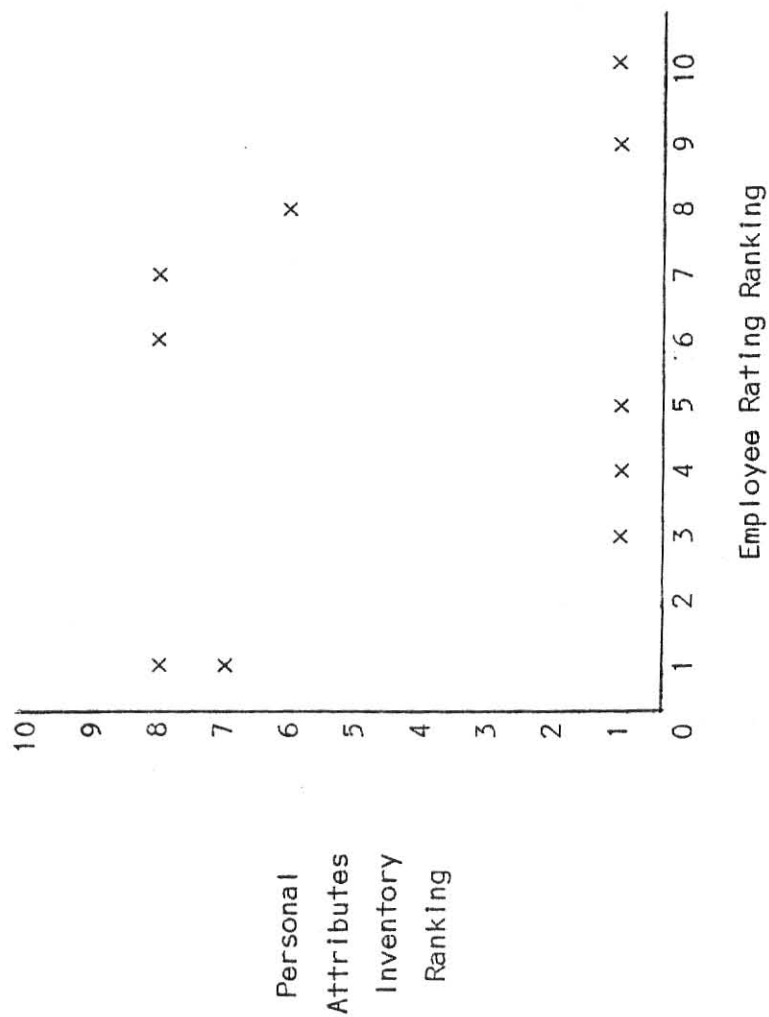


Figure 7

Relationship between the Personal Attributes Inventory Ranking and the Employee Rating Ranking.

The following three tables, I, II, and III, indicate various correlations resulting from the Spearman rank order correlation analysis. The highest correlation is the comparison between the AHC test and the employee rating.

The values of a Spearman rank-order correlation may range from a perfect correlation of one to an absolute non-correlation of negative one. Thus the .69 correlation between the AHC test and the employee rating is a positive one. The other comparisons show negative correlations. In the case of the PAI and the AHC test, the value is a negative .40. In the comparison of the employee rating and the PAI test, a negative .17 was calculated.

The tied scores are averaged. Thus as we see on Table II, the five employees who tied for first are shown as being third. This procedure is done as per Gronlund. (Gronlund, 1976)

TABLE I

Spearman ranking correlation study between the Employee Rating and the Animal Health Care test evaluations.

Employee Number	Rating	Animal Health Care	Average Difference	Average Difference Squared
1	1.5	2	.5	.25
2	3	9	6	36
3	5	3	4	4
4	1.5	1	.5	.25
5	7	6	1	1
6	9	7	2	4
7	6	4	2	4
8	4	5	1	1
9	8	8	0	0
10	10	10	0	0

$$1 - \frac{6XED^2}{N(N^2-1)} = 1 - \frac{6X50.5}{10(10^2-1)} = 1 - \frac{303}{990}$$

$$= 1 - .306(31) = 1 - .31 = .691$$

* If #2 is left out and the correlation is figured with a sample of 9 the correlation would be +.87.

TABLE II

Spearman Ranking correlation study between the Animal Health Care and
Personal Attributes Inventory evaluations.

Employee Number	Animal Health Care	Personal Attributes Inventory	Difference	Difference Squared
1	2	7	-5	25
2	9	3	6	36
3	3	3	0	0
4	1	9	-8	64
5	6	9	-3	9
6	7	3	4	16
7	4	9	-5	25
8	5	3	2	4
9	8	6	2	4
10	10	3	7	<u>49</u>
				232

$$1 - \frac{6 \sum ED^2}{N(N^2-1)} = 1 - \frac{1392}{990} = 1 - 1.40 = -.40$$

TABLE III

Spearman ranking correlation study between the Employee Rating and the
Personal Attributes Inventory test.

Employee Number	Rating	Personal Attributes Inventory	Difference	Difference Squared
1	1.5	7	-5.5	30.25
2	3	3	0	0
3	5	3	2	4
4	1.5	9	-7.5	56.25
5	7	9	-2	4
6	9	3	6	36
7	6	9	-3	9
8	4	3	1	1
9	8	6	2	4
10	10	3	7	<u>49</u>
				193.50

$$1 - \frac{6 \sum ED^2}{N(N^2-1)} = 1 - \frac{1161}{990} = 1 - 1.17 = -.17$$

Analysis of Data

In an exploratory study with a limited number of cases such as this, it is difficult to get meaningful and definite data. The small sample size may magnify any one result. The best illustration of this is the great difference in the ranking of respondent number two. Number two ranks third in the employee rating, but is number nine in the AHC test. In a sample size of 50 or more, one extreme divergence such as this would have only a small influence on the correlation statistic.

The small sample size may also be a major factor in the lack of correlation of the PAI test with either of the other evaluations. The large number of ties may have adversely affected these results. There were five respondents tied for the fewest number of negative adjectives. There were three persons tied for the most negative adjectives chosen.

Items that may have altered the outcome of the employee rating by the supervisors because they may not have been definitive enough were three: complexity of job, ability to impart knowledge to others, and participation in training programs. These three were questioned by reviewers. Their comments basically were - do the employees have control over complexity of job? The negative answer caused the researcher to analyze the data to see how ratings would change if this item was removed. The result is shown in Table IV. Since it only resulted in

TABLE IV

Chart showing the difference in ranking if the complexity of the job is left out of the employee rating

Employee Number	Total Score	Complexity of Job	Score - Complexity of Job	New Rank	Change
1	49	3	46	2	.5
2	108	12	96	3	0
3	115	5	110	5	0
4	49	4	45	1	.5
5	157	10	147	7	0
6	197	8	189	9	0
7	126	15	111	6	0
8	112	15	97	4	0
9	181	19	162	8	0
10	229	19	210	10	0

breaking the tie for first place, it was not deemed of value to change the design of the project to allow for removal of this item from the evaluation. Such changes should be considered if this form is used in the future.

The second item questioned was participation in training program. A reviewer questioned if all had equal access to these programs. Since there were some who possibly would have better access to training opportunities than others, an analysis was done without this item - Table V. The removal of this item again broke the tie for first place in the employee rating, but resulted in a tie for third. This again was not deemed a change that should be made for this study.

The third item was the ability to impart knowledge to others. The rationale for doubting this item concerned whether this was required equally of everyone in the sample. Since this was a skill some used often and thus had necessity to develop, this item was deleted and the evaluation was figured with this item not included. This analysis appears in Table VI. This again broke the tie for first, but made no other change in ranking.

Since the change in total ranking would have been minimal, the original form and the ranking was left as calculated.

A major unexpected result of this study was the inability of the PAI test to give a positive correlation to either of the other two instruments.

TABLE V

Difference in ranking if the participation in training programs is left
out of the employee rating

Employee Number	Total Score	Participation in Training	Score - Participation Training	New Rank	Change
1	49	10	39	1	.5
2	108	10	98	3	.5
3	115	13	102	5	0
4	49	2	47	2	.5
5	157	6	151	7	0
6	197	10	187	9	0
7	126	6	120	6	0
8	112	14	98	3	.5
9	181	19	162	8	0
10	229	19	210	10	0

TABLE VI

Difference in ranking if the ability to impart knowledge is left out of
the employee rating

Employee Number	Total Score	Ability to Impart Knowledge	Score Input - Ability to impart knowledge	New Rank	Change
1	49	3	46	2	.5
2	108	11	97	3	0
3	115	5	110	5	0
4	49	5	44	1	.5
5	157	11	146	7	0
6	197	14	183	9	0
7	126	11	115	6	0
8	112	12	100	4	0
9	181	19	162	8	0
10	229	19	210	10	0

Respondents were not told how the PAI test was to be scored. It was very easy for a person taking the test to quickly decide a good score could be obtained by choosing only positive adjectives. The low respondents were all good workers who follow instructions closely. This may explain their closely following the instruction to say exactly how they felt concerning themselves on the PAI test. Some of the respondents who scored so low on the other evaluations but chose none of the negative adjectives on the PAI test are the ones who have justified concern about ratings and job evaluation. All the participants were assured that in no way was this study to be used in present or future evaluations. Despite this assurance, the possibility of a respondent wanting to make himself look better than he really is may have been present.

This analysis of the AHC test presents the reasoning for including those items selected. These items were the ones deemed most worthy by the referees. The original 50 items are included in this report as Appendix A. The 30-item test that emerged after the distillation process and key appears on pages 44, 45 and 46.

As stated in the materials and methods chapter, only the first three items were numbered the same in the two sets of items. The remaining 27 items, since they were placed due to a drawing, will not have corresponding numbers.

The following statements all complete the sentence,
As an employee of a Veterinary Hospital I expect that...

Circle the letters before each statement that best expresses
how you feel about the statement.

SA - strongly agree
A - agree
U - undecided
D - disagree
SD - strongly disagree

As an employee of a Veterinary Hospital I expect that...

- | | |
|-------------|---|
| SA A U D SD | 1. each job will have a written description, listing responsibilities and duties. |
| SA A U D SD | 2. suggestions for improvement of work will be carefully considered. |
| SA A U D SD | 3. compliment will be given on an exceptionally well-performed job. |
| SA A U D SD | 4. the employee should not be concerned with problems not pertinent to his/her area of responsibility. |
| SA A U D SD | 5. employee effectiveness is related to personal appearance. |
| SA A U D SD | 6. all employees should be considerate of other employees' requirements for time off. |
| SA A U D SD | 7. an employee should be able to give progress reports to clients about their animals. |
| SA A U D SD | 8. employees' animals should be treated and fed at no cost to that employee. |
| SA A U D SD | 9. it seems fair that bills would be rendered only if the animal is cured. |
| SA A U D SD | 10. an employee should not have to assist with euthanasia of horses. |
| SA A U D SD | 11. employees in the animal health care delivery system should expect to be kind to animals as that is what they are being paid for while on the job. |
| SA A U D SD | 12. employees of the child-bearing age should not be involved with radiologic procedures. |
| SA A U D SD | 13. the dress and appearance of an employee is a personal right. It is wrong to expect an employee to conform to a dress code, either written or implied. |

SA - strongly agree
A - agree
U - undecided
D - disagree
SD - strongly disagree

- | | | |
|-------------|-----|---|
| SA A U D SD | 14. | the employee should be made aware of his/her supervisor's evaluation of work performance immediately. |
| SA A U D SD | 15. | employees should be informed of the overall mission of the hospital. |
| SA A U D SD | 16. | animal health technicians should be able to diagnose disease. |
| SA A U D SD | 17. | an employee should not be expected to risk his/her health and safety in situations where the employer is afraid to. |
| SA A U D SD | 18. | employees should be informed promptly of updated personnel policies. |
| SA A U D SD | 19. | clean, complete uniforms should be available every morning. |
| SA A U D SD | 20. | a paraprofessional can perform sterile injections better than the veterinarian. |
| SA A U D SD | 21. | staff should get the afternoon off if the client traffic is nonexistent. |
| SA A U D SD | 22. | the employee be protected from contact with superiors except when very necessary. |
| SA A U D SD | 23. | duties of the employee may include reading tuberculin tests. |
| SA A U D SD | 24. | cats should be sedated before working with them in the hospital. |
| SA A U D SD | 25. | since I am not paid for management, I, as an employee, should not have to give an opinion on new procedures. |
| SA A U D SD | 26. | an animal health care employee shall teach clients' animals discipline as well as assist in their care. |
| SA A U D SD | 27. | employees should be given authority to complete jobs as assigned. |
| SA A U D SD | 28. | the Veterinary Hospital should be operated as a business. |
| SA A U D SD | 29. | an employee can be required to assist with euthanasia of cats. |
| SA A U D SD | 30. | a job not be tied totally to a job description. |

The key to the final Animal Health Care Test is as follows:

- | | |
|-----------------|-------|
| 1. Positive (P) | 16. N |
| 2. P | 17. P |
| 3. P | 18. P |
| 4. Negative (N) | 19. P |
| 5. P | 20. N |
| 6. P | 21. N |
| 7. N | 22. N |
| 8. N | 23. N |
| 9. N | 24. N |
| 10. N | 25. N |
| 11. P | 26. N |
| 12. N | 27. P |
| 13. N | 28. P |
| 14. P | 29. P |
| 15. P | 30. P |

The first 50 items were written with the investigator expecting a certain response. The key as to the expected response is given as Appendix B.

The feedback from the item-by-item evaluation by the final year veterinary students resulted in several typographical and grammatical changes made in the two tests. No substantive changes in items were made.

The scoring system demanded by the complexity of the AHC examination tended to be relatively time consuming and cumbersome. Despite the confusing nature of scoring caused by stating items in both positive and negative terms, this method enhanced the ability of the test to evaluate respondents' attitudes. A fault of tests where all items are stated positive or all negative is clear. The person taking such a test soon learns that "strongly agree" or "strongly disagree" is what is expected and tends to answer that way. By mixing items and not giving clues that would indicate what the expected answer is, the person taking the exam is required to make a definite decision on each item.

The placing of the abbreviation at the top of each page was done to avoid any confusion. This keeps the respondent from having to turn back to the first sheet if he forgets what the root of the sentence is.

In the interest of clarity, the abbreviation and organization SA, A, U, D, and SD to indicate strongly agree, agree, undecided, disagree, and strongly disagree, respectively, were used. The major problem with writing out "strongly agree", etc., and drawing the line for the Likert scale as is commonly done in most tests is that it makes the test longer and harder to take.

The 30-item Animal Health Care Test is a group of sentences all starting with the following words, "As an employee of a Veterinary Hospital I expect that..." The 30 listed items then complete that sentence. As stated before, the investigator feels any test should start with an easy question or, as in this case, an item that is positive. This is done to avoid early discouragement or the establishment of negative thought patterns.

The first three items selected were:

1. each job will have a written description, listing responsibilities and duties.
2. suggestions for improvement of work will be carefully considered.
3. compliments will be given on an exceptionally well-performed job.

The logic for asking these would be that they are normal reactions for an employee who is interested in a hospital or business. Any person having feelings or attitudes contrary to these would indicate either a lack of understanding of the working world or disinterest in his surroundings. In many cases it may indicate both.

Items 14, 15, 18 and 30 are positive items.

- 14. the employee should be made aware of his/her supervisor's evaluation of work performance immediately.
- 15. employees should be informed of the overall mission of the hospital.
- 18. employees should be informed promptly of updated personnel policies.
- 30. a job not be tied totally to a job description.

There are positive feelings that show an understanding of employee-employer relations and a desire to know what is expected. A person with negative attitudes would not care what is expected of him for he may not expect to fulfill the duties required. The feeling that not everything is in the job description would leave room for the good employee to extend himself into more productive work.

Items 4, 22 and 25 are negative items.

- 4. the employee should not be concerned with problems not pertinent to his/her area of responsibility.
- 22. the employee be protected from contact with superiors except when very necessary.
- 25. since I am not paid for management, I, as an employee, should not have to give an opinion on new procedures.

Thus, if an employee felt, for instance, that he was not to be concerned with the other areas of the practice or business, it would indicate a lack of appreciation for the mission as a whole. Being a "standoff" or not caring for fellow employees may well lead to strife and hard feelings among employees.

Similar in nature to the items concerning how one thinks about the establishment in general would be one's concern for fellow employees. Items 6, 21, and 27 are an attempt to determine feelings toward other employees:

- 6. all employees should be considerate of other employees' requirements for time off.
- 21. staff should get the afternoon off if the client traffic is nonexistent.
- 27. employees should be given authority to complete jobs as assigned.

The negative statement deals with giving the employees time off when business is very slow or nonexistent. This was judged negative for the reason it would not be feasible in a service organization that deals largely with emergency care to close a facility during normal working hours. Items 6 and 27 are positive statements asked to determine if they are considerate and willing to accept the necessary authority to complete tasks assigned.

Personal appearance does have a bearing on the public's reaction to an individual and in the extreme may interfere with effectiveness. This is measured by reactions to items 5, 13 and 19.

- 5. employee effectiveness is related to personal appearance.
- 13. the dress and appearance of an employee is a personal right. It is wrong to expect an employee to conform to a dress code, either written or implied.
- 19. clean, complete uniforms should be available every morning.

If a person happens to have strong feelings about his individual rights as far as nonconformist personal appearance, this can lead to conflict. Serious conflicts with the owner or management may occur if a strong opposite view is held.

Unrealistic views of the nature of a health care employee can lead to frustration and lost productivity. Items 7, 16, 20, 23 and 26 are all designed as negative attitude statements:

7. an employee should be able to give progress reports to clients about their animals.
16. animal health care technicians should be able to diagnose disease.
20. a paraprofessional can perform sterile injections better than the veterinarian.
23. duties of the employee may include reading tuberculin tests.
26. an animal health care employee shall teach clients' animals discipline as well as assist in their care.

Duties such as reporting the condition of patients to their owners would be reserved for the Doctor of Veterinary Medicine. Should an employee be expecting to learn the complex art of diagnosis as part of on-the-job training, he would be disappointed. Another detrimental attitude would be an employee's feeling that he/she can perform professional tasks better than the trained professional. Here we use the example of a sterile injection.

Items 8, 9, and 28 are used to test the prospective employee's attitude toward the business aspects of animal health care. If an employee is suffering from the misconception that the animal health care delivery system can be conducted as a charity, he may also have other unrealistic opinions. There are certain groups that feel animal care is such a high calling that the work itself is ample reward. Experience has shown that employees with this attitude are difficult, if not impossible, to change.

Two items, 10 and 29, are included to determine how the respondent views euthanasia:

10. an employee should not have to assist with euthanasia of horses.

29. an employee can be required to assist with euthanasia of cats.

One item, 10, is asking in the negative and the other in the positive.

A recommendation for change here may be that the same species be used each time. A horse enthusiast may not be able to assist with the destruction of a horse, but may be very willing to assist with euthanasia of felines. The reverse may also be true.

Item 11 was placed in the original pool of 50 questions by the investigator who fully expected the professionals and students refereeing the test to judge it a negative item. This was not the case.

11. employees in the animal health care delivery system should expect to be kind to animals as that is what they are being paid for while on the job.

The negative aspect was intended for they are being paid to do a job. It was judged positive by the two panels and included in the final exam as a positive attitude check. This was an item explored in the discussion with the pretest group. They were asked if they understood the intent behind the item. They all answered in the affirmative. The item was included in keeping with the decision to select the top 30 questions. However, this item concerns the investigator the most about its ability to give a definitive indication of one's positive or negative attitude. Review by another panel would be required to class it as a negative item.

Items 12, 17 and 24 deal with respondent's real or imagined fear of animals and procedures conducted in the animal health care delivery system.

12. employees of the child-bearing age should not be involved with radiologic procedures.
17. an employee should not be expected to risk his/her health and safety in situations where the employer is afraid to.
24. cats should be sedated before working with them in the hospital.

Item 12 represents a negative attitude. Had it been asked specifically about pregnant females, this may well have placed it in the positive category.

With proper protection, which is required with all radiologic procedures, no one need fear use of x-ray machines under normal conditions. Item 17 may well be more of an intelligence query than an attitude question. It is designed as a positive item. Dealing with cats and overcoming fear of cats is something that is nearly impossible to teach employees. If, as stated in item 24, the employee expected cats to be sedated prior to doing even the simplest of procedures, an employer could expect severe problems with that employee.

This 30-item test may not cover all areas of concern an employer may have. The areas explored are not equal in the 30-item final test due to the scores received by the various items when reviewed by the referees. The original 50 items contained items distributed more equally in the areas discussed above. The referees were not informed that they were selecting items dealing with a test blueprint. A possible point for improvement would be to have the referees select the best negative and the best positive items for each area. This would require identification of groups of items as to their intent. An attitude test of more than 30 items was deemed as possibly too long. All items were given equal weight. It would add to the complexity of designing and scoring if different weightings were assigned. The rating of questions on a scale of one to ten could be accomplished using several groups of referees. Development of weighted scores for different items might be expected in future studies.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The positive correlation shown between the AHC test and the employee rating supports the premise that a screening instrument for animal health care employees can be prepared and used to support more subjective employee ratings. This is an encouraging development.

While additional changes may be necessary, the format of the attitude (AHC) test worked well in this situation. Changes can be made in the scoring system to aid in grading. A very strong positive aspect of the test is that it can be taken easily and quickly. Longer and more complex tests may be more of an indication of one's ability to cope with evaluation instruments than an accurate assessment of what one is being tested for.

The employee assessment form developed by the researcher proved useful due to the fact that values were placed on multiple attributes. Since most instruments can be faulted in some manner, a multitude of assessments allows the strong and weak points of each to compensate. Having a form that requires specific numbering and ranking eliminated the guessing of who was a good employee and who was not.

This investigator has shown that, due to the specialized nature of the field in question, specialized instruments must be developed.

The standardized test did not supply the level of evaluation necessary for sound predictive purposes.

Recommendations for Future Study

Possible areas for future study in this complex field of predicting employee attitudes and usefulness should include:

1. Repeat the study with a larger sample.
2. Repeat the study with another standardized test or tests, or a battery of tests.
3. Repeat the same study with employees in the private sector.
4. Repeat the study in combination with a test for factual knowledge.

Appendix A

Letter of Instruction to Referees and Pretest Group

The following are 50 statements to be used to measure attitudes of employees in the animal health care delivery system. Would you please express your opinion of the following statements. Each of the 50 statements completes the sentence: As an employee of a veterinary hospital I expect that...

If you feel it is a positive statement, place an A in the blank before the number. If you feel the statement is irrelevant as far as an employee is concerned, place a B in the space. If you think the statement is a negative attitude, place a C before the number.

Thank you.

Byron E. Denholm, D.V.M.
Surgery & Medicine

A - positive

B - irrelevant

C - negative

As an employee of a Veterinary Hospital I expect that...

- ☐ 1. each job will have a written description, listing responsibilities and duties.
- ☐ 2. suggestions for improvement of work will be carefully considered.
- ☐ 3. compliment will be given on an exceptionally well-performed job.
- ☐ 4. the hospital's needs take precedence over expressed personal needs.
- ☐ 5. prompt disciplinary action will be taken when a job is performed poorly.
- ☐ 6. employees should be informed promptly of updated personnel policies.
- ☐ 7. employees should be informed of the overall mission of the hospital.
- ☐ 8. the opinion of all employees will be solicited prior to major policy changes.
- ☐ 9. the employee should not be concerned with problems not pertinent to his/her area of responsibility.
- ☐ 10. the employee should be made aware of his/her supervisor's evaluation of work performance immediately.
- ☐ 11. the employee be protected from contact with superiors except when very necessary.
- ☐ 12. a union steward or someone other than the supervisor or employer should be available for hearing of my grievances.
- ☐ 13. employees should be given authority to complete jobs as assigned.
- ☐ 14. an employee should be capable of doing the work if someone else takes the responsibility for the job performed.
- ☐ 15. a supervisor should talk to an employee about his/her personal problems.
- ☐ 16. a job not be tied totally to a job description.
- ☐ 17. employees' work improvement suggestions should be remunerated with extra pay.
- ☐ 18. since I am not paid for management, I, as an employee, should not have to give an opinion on new procedures.

- ___ 19. employees should handle only those species of animals they are comfortable with.
- ___ 20. employees in the animal health care delivery system should expect to be kind to animals as that is what they are being paid for while on the job.
- ___ 21. vacation time be made available for the first two days of hunting season.
- ___ 22. staff should get the afternoon off if the client traffic is non-existent.
- ___ 23. cats should be sedated before working with them in the hospital.
- ___ 24. clean, complete uniforms should be available every morning.
- ___ 25. employee effectiveness is related to personal appearance.
- ___ 26. an employee should not have to assist with euthanasia of horses.
- ___ 27. an employee can be required to assist with euthanasia of cats.
- ___ 28. an employee should be able to give progress reports to clients about their animals.
- ___ 29. an employee can be required to administer tablets to cats.
- ___ 30. an employee's animals should be treated and fed at no cost to that employee.
- ___ 31. employees should be trained to give information on routine care of animals.
- ___ 32. the keeping of records should be left to the supervisor or employees hired for that purpose.
- ___ 33. procedures such as breeding and artificial insemination would be done in the presence of the employees.
- ___ 34. a paraprofessional can perform sterile injections better than the veterinarian.
- ___ 35. an employee should not be expected to risk his/her health and safety in situations where the employer is afraid to.
- ___ 36. animal health technicians should be able to diagnose disease.
- ___ 37. an employee should have authorization to purchase for the hospital items deemed necessary for performance of his/her job.
- ___ 38. repair of equipment and instruments should be done regularly by repair persons.

- ___ 39. owners are under stressful situations when presenting animals for treatment, and, as a consequence, irrational behavior may be expected.
- ___ 40. an animal health care employee shall teach clients' animals discipline as well as assist in their care.
- ___ 41. duties of the employee may include reading tuberculin tests.
- ___ 42. working overtime will be at the discretion of the veterinarian.
- ___ 43. all employees should be considerate of other employees' requirements for time off.
- ___ 44. employees of the child-bearing age should not be involved with radiologic procedures.
- ___ 45. the veterinary hospital should be operated as a business.
- ___ 46. it seems fair that bills would be rendered only if the animal is cured.
- ___ 47. people who are poor or cannot afford to have their animals treated should be given special consideration.
- ___ 48. credit cards should be accepted since they enhance the professional image.
- ___ 49. form letters for such things as past-due bills and condolences lack personal warmth and should not be used.
- ___ 50. the dress and appearance of an employee is a personal right. It is wrong to expect an employee to conform to a dress code, either written or implied.

Appendix B
Expected Response Key

The original 50 questions were written with the following responses expected from the referees or the group taking the pretest.

Positive

1, 2, 3, 6,
7, 8, 10, 13,
15, 24, 27, 4,
31, 35, 42, 48,
25, 43, 39, 33,
29, 16

Neutral

Negative

5, 9, 11, 12, 14,
17, 18, 19, 20, 21,
22, 23, 26, 28, 30,
32, 34, 36, 37, 38,
40, 41, 44, 45, 46,
47, 49, 50

Appendix C

Personal Attribute Inventory

Read through this list and select exactly 30 words which seem to be typical of yourself. Indicate your selection by placing an X in the appropriate space next to each word.

<input type="checkbox"/> active	<input type="checkbox"/> natural
<input type="checkbox"/> affectionate	<input type="checkbox"/> obnoxious
<input type="checkbox"/> alert	<input type="checkbox"/> organized
<input type="checkbox"/> appreciative	<input type="checkbox"/> original
<input type="checkbox"/> awkward	<input type="checkbox"/> patient
<input type="checkbox"/> bitter	<input type="checkbox"/> pleasant
<input type="checkbox"/> calm	<input type="checkbox"/> poised
<input type="checkbox"/> careless	<input type="checkbox"/> prejudiced
<input type="checkbox"/> cheerful	<input type="checkbox"/> progressive
<input type="checkbox"/> clear-thinking	<input type="checkbox"/> quarrelsome
<input type="checkbox"/> complaining	<input type="checkbox"/> queer
<input type="checkbox"/> conceited	<input type="checkbox"/> quitting
<input type="checkbox"/> confident	<input type="checkbox"/> rational
<input type="checkbox"/> confused	<input type="checkbox"/> rattlebrained
<input type="checkbox"/> conscientious	<input type="checkbox"/> relaxed
<input type="checkbox"/> cooperative	<input type="checkbox"/> resentful
<input type="checkbox"/> cowardly	<input type="checkbox"/> resourceful
<input type="checkbox"/> cruel	<input type="checkbox"/> rude
<input type="checkbox"/> deceitful	<input type="checkbox"/> self-centered
<input type="checkbox"/> dependable	<input type="checkbox"/> self-confident
<input type="checkbox"/> despondent	<input type="checkbox"/> self-controlled
<input type="checkbox"/> determined	<input type="checkbox"/> self-pitying
<input type="checkbox"/> energetic	<input type="checkbox"/> selfish
<input type="checkbox"/> fairminded	<input type="checkbox"/> shallow
<input type="checkbox"/> fickle	<input type="checkbox"/> shiftless
<input type="checkbox"/> foolish	<input type="checkbox"/> show-off
<input type="checkbox"/> foresighted	<input type="checkbox"/> sincere
<input type="checkbox"/> forgetful	<input type="checkbox"/> slipshod
<input type="checkbox"/> gloomy	<input type="checkbox"/> snobbish
<input type="checkbox"/> good-natured	<input type="checkbox"/> spineless
<input type="checkbox"/> greedy	<input type="checkbox"/> stable
<input type="checkbox"/> handsome	<input type="checkbox"/> steady
<input type="checkbox"/> hasty	<input type="checkbox"/> stingy
<input type="checkbox"/> healthy	<input type="checkbox"/> strong
<input type="checkbox"/> helpful	<input type="checkbox"/> sulky
<input type="checkbox"/> hostile	<input type="checkbox"/> sympathetic
<input type="checkbox"/> humorous	<input type="checkbox"/> tactful
<input type="checkbox"/> imaginative	<input type="checkbox"/> tactless
<input type="checkbox"/> impatient	<input type="checkbox"/> thankless
<input type="checkbox"/> industrious	<input type="checkbox"/> tolerant
<input type="checkbox"/> initiative	<input type="checkbox"/> touchy
<input type="checkbox"/> intolerant	<input type="checkbox"/> trusting
<input type="checkbox"/> inventive	<input type="checkbox"/> undependable
<input type="checkbox"/> irresponsible	<input type="checkbox"/> understanding
<input type="checkbox"/> irritable	<input type="checkbox"/> unfriendly
<input type="checkbox"/> jolly	<input type="checkbox"/> unintelligent
<input type="checkbox"/> kind	<input type="checkbox"/> unkind
<input type="checkbox"/> mannerly	<input type="checkbox"/> warm
<input type="checkbox"/> masculine	<input type="checkbox"/> weak
<input type="checkbox"/> nagging	<input type="checkbox"/> whiny

Appendix D

Personal Attribute Inventory Key

Read through this list and select exactly 30 words which seem to be typical of yourself. Indicate your selection by placing an X in the appropriate space next to each word.

<input type="checkbox"/> active	<input type="checkbox"/> natural
<input type="checkbox"/> affectionate	<input checked="" type="checkbox"/> obnoxious
<input type="checkbox"/> alert	<input type="checkbox"/> organized
<input type="checkbox"/> appreciative	<input type="checkbox"/> original
<input checked="" type="checkbox"/> awkward	<input type="checkbox"/> patient
<input checked="" type="checkbox"/> bitter	<input type="checkbox"/> pleasant
<input type="checkbox"/> calm	<input type="checkbox"/> poised
<input checked="" type="checkbox"/> careless	<input checked="" type="checkbox"/> prejudiced
<input type="checkbox"/> cheerful	<input type="checkbox"/> progressive
<input type="checkbox"/> clear-thinking	<input checked="" type="checkbox"/> quarrelsome
<input checked="" type="checkbox"/> complaining	<input checked="" type="checkbox"/> queer
<input checked="" type="checkbox"/> conceited	<input checked="" type="checkbox"/> quitting
<input type="checkbox"/> confident	<input type="checkbox"/> rational
<input checked="" type="checkbox"/> confused	<input checked="" type="checkbox"/> rattlebrained
<input type="checkbox"/> conscientious	<input type="checkbox"/> relaxed
<input type="checkbox"/> cooperative	<input checked="" type="checkbox"/> resentful
<input checked="" type="checkbox"/> cowardly	<input type="checkbox"/> resourceful
<input checked="" type="checkbox"/> cruel	<input checked="" type="checkbox"/> rude
<input checked="" type="checkbox"/> deceitful	<input checked="" type="checkbox"/> self-centered
<input type="checkbox"/> dependable	<input type="checkbox"/> self-confident
<input checked="" type="checkbox"/> despondent	<input type="checkbox"/> self-controlled
<input type="checkbox"/> determined	<input checked="" type="checkbox"/> self-pitying
<input type="checkbox"/> energetic	<input checked="" type="checkbox"/> selfish
<input type="checkbox"/> fairminded	<input checked="" type="checkbox"/> shallow
<input checked="" type="checkbox"/> fickle	<input checked="" type="checkbox"/> shiftless
<input checked="" type="checkbox"/> foolish	<input checked="" type="checkbox"/> show-off
<input type="checkbox"/> foresighted	<input type="checkbox"/> sincere
<input checked="" type="checkbox"/> forgetful	<input checked="" type="checkbox"/> slipshod
<input checked="" type="checkbox"/> gloomy	<input checked="" type="checkbox"/> snobbish
<input type="checkbox"/> good-natured	<input checked="" type="checkbox"/> spineless
<input checked="" type="checkbox"/> greedy	<input type="checkbox"/> stable
<input type="checkbox"/> handsome	<input type="checkbox"/> steady
<input checked="" type="checkbox"/> hasty	<input checked="" type="checkbox"/> stingy
<input type="checkbox"/> healthy	<input type="checkbox"/> strong
<input type="checkbox"/> helpful	<input checked="" type="checkbox"/> sulky
<input checked="" type="checkbox"/> hostile	<input type="checkbox"/> sympathetic
<input type="checkbox"/> humorous	<input type="checkbox"/> tactful
<input type="checkbox"/> imaginative	<input checked="" type="checkbox"/> tactless
<input checked="" type="checkbox"/> impatient	<input checked="" type="checkbox"/> thankless
<input type="checkbox"/> industrious	<input type="checkbox"/> tolerant
<input type="checkbox"/> initiative	<input checked="" type="checkbox"/> touchy
<input checked="" type="checkbox"/> intolerant	<input type="checkbox"/> trusting
<input type="checkbox"/> inventive	<input checked="" type="checkbox"/> undependable
<input checked="" type="checkbox"/> irresponsible	<input type="checkbox"/> understanding
<input checked="" type="checkbox"/> irritable	<input checked="" type="checkbox"/> unfriendly
<input type="checkbox"/> jolly	<input checked="" type="checkbox"/> unintelligent
<input type="checkbox"/> kind	<input checked="" type="checkbox"/> unkind
<input type="checkbox"/> mannerly	<input type="checkbox"/> warm
<input type="checkbox"/> masculine	<input checked="" type="checkbox"/> weak
<input checked="" type="checkbox"/> nagging	<input checked="" type="checkbox"/> whiny

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THE DEVELOPMENT AND TESTING OF AN INSTRUMENT
FOR PREDICTION OF EMPLOYEE POTENTIAL IN THE
ANIMAL HEALTH CARE DELIVERY SYSTEM

by

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ABSTRACT

This study was designed to examine the problem of predicting employee potential in the field of animal health care. This would be deemed an important undertaking as the need for better screening of prospective employees is increasing but has received almost no attention.

Many tests were examined and studied to see if they could be used for screening potential employees. None were found. The procedure used in this research was to select a standardized test, develop and administer an attitude test, and devise an employee rating instrument. Results from these three instruments were then compared.

Summary of Results

The Personal Attributes Test, the standardized test selected for trial, was found to have no positive correlation with the other two evaluations. The constructed test, referred to as the Animal Health Care (AHC) Test, and the employee rating showed a positive correlation of 0.69.

Conclusions

Results obtained indicate that the standardized test used did not perform adequately as an instrument in screening employees for the animal health care system. More extensive investigation may reveal such a test exists, but this is not likely because of the nature of the specialty field under investigation.

The positive correlation of the Animal Health Care test and the employee evaluation does indicate potential value for this type of instrument. A refinement of both instruments should raise the level of correlation.