AN INVESTIGATION INTO THE PERFORMANCE AND FEEDBACK MONITORING ABILITIES OF SALESMEN USING SELECTED INTERACTION VARIABLES

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This is to certify that the

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ABSTRACT

AN INVESTIGATION INTO THE PERFORMANCE AND FEEDBACK MONITORING ABILITIES OF SALESMEN USING SELECTED INTERACTION VARIABLES

By

Donald William Jackson, Jr.

Marketing scholars have been concerned with finding traits of the successful salesman for nearly six decades. Traditional studies concentrated on the salesman in isolation. They searched for quantifiable differences in background, personality, or motivation which would effectively differentiate between high and low performing salesmen.

A more modern viewpoint examines selling from an interaction or communications standpoint. Therefore, the salesman is viewed as only one part of a dyad. To interact, he must send and receive messages from the prospect. The problem, then, is to isolate those traits possessed by high performing salesman and salesmen who are able to effectively monitor feedback. Interaction or communications-linked variables were chosen to accomplish this task. These variables are "empathy," other-directedness, self-acceptance and Machiavellianism.

The data were obtained through a series of three questionnaires. First, several accounting machine salesmen from throughout the United States were subjected to an audio visual selling simulation developed by Cary Grikscheit. Responses to this simulation were later content analyzed to determine the number of verbal and nonverbal cues which the salesman reported.

Next, the supervisor of each salesman involved was contacted and asked to complete a questionnaire. Finally, each salesman was asked to complete a similar questionnaire.

Several significant findings from the research may be noted. The coding method used in the Grikscheit study to content analyze the open-ended responses proved reliable. However, the replication of the significant Grikscheit hypotheses, while almost uniformly in the predicted direction, did not possess the same statistical significance attached to the original research.

The present study was able to differentiate between effective cue monitoring salesmen and less effective monitors in several ways. Bivariate analysis indicated that the number of verbal cues reported was related positively to "empathy," while the number of nonverbal cues reported was positively correlated with self-acceptance.

The study also showed that high and low performers

could be differentiated in several ways. Performance ranking correlated positively with "empathy" while dollar sales were positively related to other-directedness. Although many of the other relationships were in the predicted direction, none was of a statistically significant magnitude.

Factor analyses of the data indicated that "empathy," Machiavellianism and performance ranking were positively related to one factor. Another factor had high negative loadings on performance and self-acceptance and a high positive loading on other-directedness.

These findings indicate that "empathy" is important for successful selling, but must be tempered by a task orientation or the salesman may overidentify with the prospect and lose sight of his goals. They also point out the fact that the salesman who is looking to others for his orientation and is unsure of himself, will not be a high performer, since he will not be able to concentrate on the prospect and satisfy his needs.

Canonical analysis was used to determine the maximum correlation between the cue monitoring variables and predictor variables and between the performance variables and predictor sets. It was shown that the canonical r was not significant in either case.

Because of the many correlations used in this study, care should be taken when interpreting the results.

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Spurious correlations may exist which could be indigenous only to these data. Furthermore, this study was conducted on a sub-sample of one company's salesmen at a particular point in time. Therefore, generalizing to other populations should be done only with great care. Replication of this study is essential to determine its reliability.

FOOTNOTES

- Gary M. Grikscheit. "An Investigation into the Ability of Salesmen to Monitor Feedback." (Unpublished Ph.D. dissertation, Michigan State University, East Lansing, 1971).
- 2. Ibid., pp. 203-205.
- 3. Ibid., pp. 18-22.

AN INVESTIGATION INTO THE PERFORMANCE AND FEEDBACK MONITORING ABILITIES OF SALESMEN USING SELECTED INTERACTION VARIABLES

Ву

Donald William Jackson, Jr.

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CHAPTER I

INTRODUCTION

Social scientists, marketing scholars and practitioners have long been concerned with isolating those characteristics which would allow them to effectively discriminate between high and low performing salesmen. Armed with this information, they could do a much better job of selecting and training salesmen, thereby increasing sales efficiency and lowering turnover. However, solutions to this problem have not been easy. In 1948, one author said that personnel research specialists found the prediction of success in selling to be especially difficult. He concluded that, "the difficulty encountered in devising improved selection techniques for saleswork is probably not equaled in any other group of occupations." It seems as though this conclusion could safely be extended to the present with little or no fear of criticism.

learl A. Cleveland, "Sales Personnel Research 1935-1945, A Review," <u>Personnel Psychology</u>, Volume 1 (Summer 1948), p. 247.



while this is a difficult problem, its solution is one with large payoffs since, "a small increase in selectivity of salesmen can lead to a large decrease in control costs." Most marketers know that the costs of inefficient hiring processes are high. One study showed that it may cost as much as \$8200 direct out-of-pocket costs to place a trained salesman in the field.

Historically, many studies have searched for those traits possessed by the successful salesman. The majority of these studies have concentrated on the salesman in isolation. They have searched for quantifiable differences in background, personality, or interests which would effectively differentiate between high and low performing salesmen. Webster and Davis say, for example, that, "until recently, personal selling was almost exclusively analyzed from the point of view of the salesman. This 'salesmanship' approach assumed, at least implicity, that the outcome of the sales interview was a function of the the specific actions and abilities of the salesman. . .

This traditional emphasis on the salesman's influence

²Amitai Etzioni, <u>Modern Organization</u> (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1964), p. 64.

³Wall Street Journal, November 19, 1964, p. 1.

also led to a major concern with isolating the 'traits' of a successful salesman." However, these studies have been largely inconclusive and difficult to generalize from. Reasons for this include variations in sales jobs and variations in the personalities of successful salesmen. As one writer states, "Sales work is indeterminant. Who knows the right way to sell? Some men sell by inflating the product; some by kidding it; some sell by being humorous; some by being earnest; some by being aggressive; some by being yes-men. Whatever works is the right way."

A more modern viewpoint of selling views the selling situation from either a social interaction perspective 7 or from a communications standpoint. 8 Recent studies

⁴Kenneth R. Davis and Frederick E. Webster, Jr., <u>Sales Force Management</u> (New York: The Ronald Press Company, 1968), p. 152.

⁵Raymond W. Mack, "Who Is the Salesman?", <u>The Marketing Revolution</u> (Proceedings of the 37th National Conference of the American Marketing Association, December 27-29, 1955), pp. 8-14.

^{6&}lt;u>Ibid.</u>, p. 12.

⁷Franklin B. Evans, "Selling as a Dyadic Relationship; A New Approach," <u>American Behavioral Scientist</u>, Vol. 6, No. 9 (May 1963), pp. 76-79.

⁸Theodore Levitt, "Communications and Industrial Selling," <u>Journal of Marketing</u>, Vol. 31 (April 1967), pp. 15-21.

have recognized that the buying situation is, in fact, a social situation and must be looked at as such. This modern viewpoint puts emphasis on prospect-salesman interaction. One writer characterizes interpersonal interaction as behavior influenced by, "how one person thinks and feels about another person, how he perceives him and what he expects him to do or think, how he reacts to the actions of the other."

Therefore, viewing the salesman in isolation is often not enough. The salesman must be viewed as only one part of an interacting dyad. 10 Because of this thrust toward viewing selling as an interpersonal interaction, much emphasis has also been placed upon communications theory. Communication includes not only the effective sending of messages which are deemed credible and memorable, 11 but also the receiving of feedback in an effective manner so that strategies may be altered to fit the needs of the prospect. In 1970, Gary Grikscheit developed a video taped selling encounter which depicted

⁹Fritz Heider, The Psychology of Interpersonal Relations (New York: John Wiley and Sons, Inc., 1958), p. 1.

¹⁰ Evans, op. cit., p. 76.

¹¹Harold C. Cash and W. J. E. Crissy, The Psychology of Selling, Vol. 12 (1965), p. 62.

interaction between salesman and prospect in the accounting machine industry. 12 In an experimental environment, Dr. Grikscheit exposed selected salesmen to this simulation and investigated their ability to monitor feedback along with their sales performance characteristics. Dr. Grikscheit and the sponsoring company have made this audio visual selling simulation available for this research. Thus, this study will attempt to expand upon the initial Grikscheit research by investigating selected human interaction and communications-linked variables and their relationship to both sales performance and the ability to monitor feedback.

Statement of the Problem

The problem, then, is twofold; first, trying to find human interaction or communications-linked variables which are possessed by the high performing salesman and, second, trying to find variables possessed by the salesman who is able to effectively monitor feedback. The findings of this research may have a dual impact. First, they may serve as a link between the old, trait-searching

¹² Gary Michael Grikscheit, "An Investigation of the Ability of Salesmen to Monitor Feedback," (unpublished Ph.D Dissertation, Michigan State University, East Lansing, 1971), pp. 39-46.

approach which focused solely on the salesman and the more modern interactive approach by isolating interpersonal traits which correlate with sales success. Second, they may enrich the modern literature by adding new dimensions to the interaction dyad and establishing some exploratory parameters for further investigation.

Specifically three major questions are asked:

- I. Do high effect salesmen differ from low effect salesmen in their:
 - a. Empathic ability?
 - b. Other-Directedness?
 - c. Self-acceptance?
 - d. Machiavellianism?
- II. Do those salesmen who are able to more effectively monitor feedback differ from the less effective monitors with respect to their:
 - a. Empathic ability?
 - b. Other-Directedness?
 - c. Self-acceptance?
 - d. Machiavellianism?
- III. Do sales managers differ from salesmen with respect to their:
 - a. Empathic ability?
 - b. Other-Directedness?
 - c. Self-acceptance?
 - d. Machiavellianism?

Purposes of the Study

The purposes of this research are as follows:

I. To attempt to validate the coding method used to content analyze the responses to the audio visual selling simulation used in the Grikscheit study.¹³

^{13 &}lt;u>Ibid</u>., pp. 83-86.

- II. To replicate the original Grikscheit research and thus act as a reliability check on the results obtained.
- III. To refine and expand upon the performance criterion used to differentiate between "high effect" and "low effect" salesmen.
 - IV. To attempt to isolate certain interaction or communications-linked attributes possessed by the "high effect" salesman.
 - V. To attempt to isolate certain interaction or communications-linked attributes possessed by the salesman who is able to do a superior job of monitoring feedback.
 - VI. To attempt to isolate certain interaction or communications-linked attributes possessed by the sales managers of the selected salesmen.

Basic Premises of the Research

Several premises were used to develop the following hypotheses:

First, the effectiveness of a salesman's communications in the face to face situation is dependent upon his ability to monitor feedback.

Second, the "high effect" salesman possesses more of certain social or communications-linked traits than the "low effect" salesman.

Third, the salesman who is able to effectively monitor feedback possesses more of certain social or communications-linked traits than the salesman who is less able to monitor feedback.

Null and Alternative Hypotheses

The following are the null and alternative hypotheses being tested in this study. They are broken down into four subgroups:

- I. Empathy
- II. Other-Directedness
- III. Self-Acceptance
 - IV. Machiavellianism

I. Empathy

- There is no relationship between the salesman's empathy and the number of verbal cues he will record in the communications simulation.
- IA₁ Salesmen who identify more <u>verbal cues</u> in the communications simulation will possess more empathy.
- There is no relationship between the salesman's empathy and the number of <u>nonverbal cues</u> he will record in the communications simulation.
- IB₁ Salesmen who identify more <u>nonverbal cues</u> in the communications simulation will possess more empathy.
- There is no relationship between the salesman's empathy and the total number of cues he will record in the communications simulation.
- IC₁ Salesmen who identify more total cues in the communications simulation will possess more empathy.
- ID₀ There is no relationship between the salesman's empathy and his performance ranking.
- ID₁ High performing salesmen will possess more empathy than low performing salesmen.
- IE₀ There will be no difference between the amount of empathy shown by the supervisors and the salesmen.

IE₁ Supervisors will show more empathy than salesmen.

II. Other-Directedness

- There is no relationship between the salesman's other-directedness and the number of verbal cues he will record in the communications simulation.
- IIA₁ Salesmen who identify more <u>verbal cues</u> in the communications simulation will be more other-directed.
- There is no relationship between the salesman's other-directedness and the number of nonverbal cues he will record in the communications simulation.
- Salesmen who identify more <u>nonverbal cues</u> in the communications simulation will be more other-directed.
- There is no relationship between the salesmen's other-directedness and the total number of cues he will record in the communications simulation.
- Salesmen who identify more total cues in the communications simulation will be more other-directed.
- IID₀ There is no relationship between the salesman's other-directedness and his performance ranking.
- High performing salesmen will be more other-directed than low performing salesmen.
- There is no difference between the amount of other-directedness shown by supervisors and salesmen.
- IIE₁ Supervisors will show more other-directedness than salesmen.

III. Self-Acceptance

IIIA₀ There is no relationship between the salesman's self-acceptance and the number of verbal cues

- he will record in the communications simulation.
- Salesmen who identify more <u>verbal cues</u> in the communications simulation will possess more self-acceptance.
- There is no relationship between the salesman's self-acceptance and the number of nonverbal cues he will record in the communications simulation.
- Salesmen who identify more <u>nonverbal cues</u> in the communications simulation will possess more self-acceptance.
- There is no relationship between the salesman's self-acceptance and the total number of cues he will record in the communications simulation.
- Salesmen who identify more total cues in the communications simulation will possess more self-acceptance.
- There is no relationship between the salesman's self-acceptance and his performance ranking.
- IIID₁ High performing salesmen will possess more self-acceptance than low performing salesmen.
- IIIE₀ There is no difference between the amount of self-acceptance shown by supervisors and salesmen.
- IIIE₁ Supervisors will show more self-acceptance than salesmen.

IV. Machiavellianism

- There is no relationship between the salesman's Machiavellianism and the number of verbal cues he will record in the communications simulation.
- IVA₁ Salesmen who identify more <u>verbal cues</u> in the communications simulation will be less Machiavellian.
- There is no relationship between the salesman's Machiavellianism and the number of nonverbal

- cues he will record in the communications
 simulation.
- IVB₁ Salesmen who identify more <u>nonverbal cues</u> in the communications simulation will be less Machiavellian.
- There is no relationship between the salesman's Machiavellianism and the total number of cues he will record in the communications simulation.
- IVC₁ Salesmen who identify more total cues in the communications simulation will be less Machiavellian.
- IVD₀ There is no relationship between the salesman's Machiavellianism and his performance ranking.
- TVD₁ High performing salesmen will possess more Machiavellianism than low performing salesmen.
- There is no difference between the amount of Machiavellianism shown by supervisors and salesmen.
- IVE Supervisors will show more Machiavellianism than salesmen.

Methodology

The data were obtained through a series of three questionnaires. First, several different groups of salesmen from throughout the United States were subjected to the audio-visual stimulus, "A Sales Call on the Holt Company". This filmed recording was a simulated sales encounter and was developed by Dr. Gary Grikscheit of the

¹⁴ Ibid., pp. 66-71 (may be consulted for a description of this).

University of Utah. Each salesman viewed a series of sales encounters and after each segment recorded his thoughts and perceptions in a test booklet (see Appendix A).

Next, the supervisor of each salesman involved in this research was contacted and asked to complete a questionnaire in which he was to evaluate his salesman, size up his personality, and also record some of his own feelings toward several questions (see Appendix C).

Finally, each salesman was asked to complete a similar questionnaire. He was to size up his sales manager's personality and also to record his feelings toward the same set of questions (see Appendix B).

The final two questionnaires were divided into four sections. Each section was designed to measure a specific attribute. The first section was designed to measure the empathy between salesman and supervisor. The second section was to find the amount of inner or other-directedness each possessed. The third section dealt with the self-acceptance of the subjects while the final section examined their Machiavellianism.

The data obtained from the questionnaire were analyzed using several techniques. First, the hypotheses were tested utilizing several nonparametric tests.

Second, the data were factor analyzed to determine what

common factors, if any, might underly the manifest data.

Finally, canonical analysis was used to relate the many dependent variables to a combination of the independent variables.

Limitations of the Study

The limitations of this study, as with any experimental research, center mainly around the sampling and data collecting procedures. The sample chosen for this research was not randomly selected. To test the hypotheses under consideration, it was necessary to subject each of the respondents to an experimental environment. Salesmen were subjected to the audio-visual stimulus in a controlled environment during their stay at a company-sponsored sales school. Each sales school class consisted of salesmen from throughout the United States and Canada. Cost considerations and the need for a controlled environment prohibited this type of research from being done on a more decentralized basis in the field. Since the test could not be given in the field, all company salesmen could not be considered. Therefore, because those included were, by and large, rather new salesmen to the company sponsoring this research, it is possible that certain more experienced and proficient salesmen were excluded

from the sample. This is the primary reason for including sales managers as a separate subgrouping of high performing salesmen. Without the cost and environmental constraints it might have been preferable to sample entire sales districts. This would have provided two benefits. The performance criterion could have been improved since one supervisor could have evaluated an entire subsample of salesmen, thus eliminating inter-rater variability in evaluations. Also, the sample might have included a greater range of sales ability by including both the "seasoned pro" and the "raw recruit".

However, in spite of the non-randomness of selection, a very heterogeneous group of salesmen was included in the research. Salesmen selected for inclusion came from forty-two states and four provinces of Canada, ranging from Hawaii and Alaska to Maine.

Another problem with the sample drawn is that it represents only one industry and only one company's salesmen. Therefore, care should be taken when generalizing the research findings to other types of selling.

One other type of limitation is inherent in this type of data collection. Because there is a high rate of turnover in this particular type of sales position, and because mail questionnaires were utilized, there were

quite a few non-respondents to the questionnaire following the selling simulation. Even though each of the departed salesmen was sent a questionnaire, the response rate from this segment of the sample was rather low. This segment could have included both very high and very low performing salesmen.

Finally, because of the time element involved between the audio visual simulation and the return of the followup questionnaire, there is a possibility that a learning process occurred. That is, a salesman could have learned empathy or self-acceptance, etc., between the time he was subjected to the simulation and the time he returned the followup questionnaire.

Potential Contributions of the Study to Marketing Theory

There are several potential contributions of this research to marketing theory. This study represents a link between the more traditional studies of personal selling, which sought traits possessed by highly effective salesmen, and the more modern studies, which view selling from a social interaction or communications perspective. 15

¹⁵ Evans, op. cit., pp. 76-79. Levitt, op. cit., pp. 15-21.

More specifically, this study has several possible contributions:

- I. Since interaction and communications-linked variables are related to effectiveness of personal selling, this research may provide added dimensions to the study of social interaction and communications as they affect personal selling.
- II. Part of this study also will serve as a replication of the Grikscheit research. 16 Therefore, it acts as a measure of the reliability of that study. The reliability of the content analysis method is especially important: Content analysis is used as the basic method of retrieving data concerning the ability of salesmen to monitor feedback from the audio visual selling simulation. If this method is not reliable, in other words, if it is not able to yield the same results when repeated under the same conditions, then this potentially valuable method for investigating personal selling is fruitless. Therefore, this part of the research

¹⁶ Grikscheit, op. cit.

is of special importance. The entire Grikscheit study will also be checked for reliability, using another sample from the same population.

III. Another potentially valuable contribution of the study will be to relate a predictive measure of empathy to the ability of salesmen to monitor feedback. Many marketers agree that empathy is an important quality for the salesman to possess, 17 yet the measurement of empathy has been evasive. 18 Therefore, this study, by relating empathy to objective measures of feedback and performance, will hopefully provide marketing theory with an added dimension into the relationship between empathy and sales success.

Potential Contributions of the Study to Marketing Practice

There are also several potential contributions of this research to marketing practice. Marketing

¹⁷For example see David Mayer and Herbert M. Greenberg, "What Makes a Good Salesman," Harvard Business Review, Vol. 42, No. 4 (July-August 1964), pp. 119-125.

¹⁸ For example see Albert H. Hastorf and Irving E. Bender, "A Caution Respecting the Measurement of Empathic Ability," <u>Journal of Abnormal and Social</u>
Psychology, XLVII, No. 2 (April, 1952), pp. 574-576.

practitioners may be provided with several more dimensions to narrow the subjectivity inherent in the selection and training of salesmen. The following represent several possible contributions.

- One of the major purposes of this study is to link certain variables to selling performance and feedback monitoring ability. Since several of the interpersonal variables are potentially learnable, e.g., empathy and self-acceptance, it may be useful for the sales trainer to have a measure of these variables to use as a benchmark of learning. If these variables do, in fact, correlate with performance and cue monitoring ability, then the benefits of role playing, trait analysis and other behavioral training methods can be measured by using pre-and post-tests.
- II. Selection techniques may also be beneficiaries

¹⁹ For example see Robert L. Katz, Empathy: Its Nature and Uses (New York: The Free Press of Glencoe, 1963), p. 61.

²⁰For example see James T. Mangan, <u>How to Win Self</u> Confidence for Selling (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1957).

of this research. If correlates are found for the high performing salesmen, the payoffs are large in improved performance and reduced turnover rates. Due to the high turnover in the particular industry under consideration, effective screening of candidates is especially important. Since the testing procedures used in this research are easily administered and scored, field utilization of these instruments is a distinct possibility. One problem which would immediately present itself would be the interactive nature of the traits under study. Therefore, multi-variate procedures might be necessary for discrimination between potentially high and low performing salesmen. This problem could be overcome through the use of a central scoring office or a "canned" computer program at the local level accompanied by decision criteria.

III. Another potential benefit from this research is further study into the nature of performance evaluation. Although this area has been researched quite heavily²¹, the conclusions are

²¹ For example see Richard S. Barrett, <u>Performance</u>
Ratings (Chicago: Science Research Associates, Inc.,
1966).

rather tentative. Further study is therefore Since a number of performance criteria valuable. are available, the interrelationships between the various measures may be determined. In practice, performance evaluation is often overlooked as a source of error in sales management. However, it is very difficult to improve performance without a thorough knowledge of the nature of performance evaluation. 22 Further knowledge into the various inter-relationships and tradeoffs involved in the different performance measures should help the marketing practitioner more effectively evaluate and select salesmen. Since many of the criteria are not correlated, almost any hypothesis concerning sales success can be proved if the right performance criterion is chosen. 23 If the marketing practitioner is to make effective decisions, he must know which criterion to use in a particular situation. This research will allow the reader to see which of the variables under consideration is related to each of the performance criteria available.

²²pavis and Webster, op. cit., p. 407.

²³J. Weitz, "Criteria for Criteria," American Psychologist, Vol. 16, (1961), pp. 228-231.

CHAPTER II

LITERATURE REVIEW

The primary objective of this chapter is to establish a theoretical base for the research by reviewing some relevant literature, thus placing this study into the framework created by past studies. To accomplish this, the following structure will be used. First, the "traditional" trait-oriented approach will be examined. This will be followed by the more modern interaction or communications-oriented viewpoint. Third, literature associated with each of the independent variables will be cited which pertains to the hypotheses being studied. Finally, literature pertaining to performance evaluation will be reviewed.

"Traditional" Studies

Marketing scholars have been concerned with finding traits of the successful salesman for nearly six decades.

Probably the first serious scholarly attempt to differentiate good from poor salesmen on the basis of psychological

traits was the work of Walter Dill Scott. Considering the quality of psychological measurement available and the complexity of the task he undertook, it comes as no surprise that no significant results were achieved. Marketers are still searching for qualities which will differentiate the high performing from the low performing salesman. For example, Tillman and Kirkpatrick have noted several social, mental, emotional, and human qualities needed to succeed in selling. Their list of desirable characteristics for salesmen include:

FIGURE 2-1

A List of Desirable Qualities in Salesmen

Aggressiveness	Ambition	Appearance	Confidence				
Courage	Courtesy	Decisiveness	Dependability				
Determination	Empathy	Energy	Enthusiasm				
Ethics	Friendliness	Health	Honesty				
Imagination	Initiative	Intelligence	Interest				
Intuition	Judgment	Knowledge	Leadership				
Loyalty	Maturity	Optimism	Perserverance				
Personality	Persuasiveness	Poise	Rapport				
Reliability	Resourcefulness	Responsibility	Sincerity				
·	Tact	Understanding					

¹Samuel N. Stevens, "The Application of Social Science Findings to Selling and the Salesman." <u>Aspects of Modern Marketing</u>, AMA Management Report #15 (New York: American Management Association, Inc., 1958), p. 86.

²Rollie Tillman and C. A. Kirkpatrick, <u>Promotion:</u>
<u>Persuasive Communication in Marketing</u>, Revised Edition
(Homewood, Illinois: Richard D. Irwin, Inc., 1972),
p. 117.

Although there are numerous examples of these lists of qualities which the good salesman should possess, they are, by and large, intuitive and often lack empirical findings to support them.³

On the other hand, there are a great number of empirically based research studies showing the physical, psychological, or personality attributes possessed by the good salesman. Webster and Davis state that, "traditional emphasis on the salesman's influence upon the sale led to a major concern with isolating the 'traits' of a successful salesman. This concern was primarily with personality traits rather than situational factors."

Although these studies have met with limited success, their authors usually warn against generalizing the research findings beyond the salesmen studied. There are several reasons for the failure or limitations of these studies.

I. Lack of a consistent or meaningful definition of performance

There are nearly as many definitions of performance as there are studies undertaken. Dollar value of sales, sales managers' evaluations or percent of quota are only

³For example, see the comments of Davis and Webster, op. cit., p. 389.

⁴<u>Ibid.</u>, p. 152.

a few of the many criteria used to measure performance.

Since many of these measures of selling performance do

not have high inter-correlations, great differences in

results may appear depending upon which performance

criterion is chosen. For instance, a certain trait may

correlate very highly with one measure of performance and

only slightly with another performance measure of the

same selling job.

II. Differences in selling jobs.

Different selling jobs may require different types of salesmen. For instance, there may be differences between the qualities desired in a topnotch retail salesman and those required of an equally well qualified industrial salesman. Different retail selling jobs themselves may also require different types of salesman. Selling automobiles and selling ladies handbags may require different types of individuals. And, there may very well be differences between new automobile salesmen and used car salesmen. Because of the differences in selling jobs, a

⁵For instance, Dunnette and Kirchner found an ability measure predicted success among industrial salesmen but not among retail salesmen. See M. D. Dunnette and W. K. Kirchner, "Psychological Test Differences Between Industrial Salesmen and Retail Salesmen," <u>Journal of Applied Psychology</u>, Vol. 44, No. 2 (1960), pp. 121-135.

factor which may prove a useful predictor of selling success in one area may be irrelevant for another type of sales position. For example, Kerr and Tabolski found that empathy was a fairly high correlate of performance for new car salesmen but not of used car salesmen's performance.

III. Differences in prospective buyers.

Not only do selling jobs vary but buyers also vary in different selling situations. If the buying process is viewed as an interaction between seller and purchaser, then salesmen may have to possess very different types of skills or traits to make a sale, depending upon the buyer involved. Franklin Evans has stated that, "A sale is a social situation involving two persons. The interaction of the two persons depends upon the economic, social, physical and personality characteristics of each of them. To understand the process it is necessary to look at both parties to a sale as a dyad, not individually." With this in mind, it is easy to see how differences in buyers would necessitate different qualities in

⁶Francais P. Tobolski and Willard A. Kerr, "Predictive Value of The Empathy Test in Automobile Salesmanship," <u>Journal of Applied Psychology</u>, Vol. 36, No. 5 (October 19, 1952), p. 311.

⁷Evans, <u>op. cit.</u>, p. 76.

salesmen.

IV. <u>Interaction of traits which cause univariate</u> analysis to fail when used alone.

Since many of the variables used in these studies are interrelated and, since many other variables influence the selling situation, there may be a confounding of results. Unless these interactions are studied directly and an attempt is made to identify moderating variables, many meaningful relationships may go unnoticed.

V. <u>Lack of consensus on an operational</u> definition of certain traits.

There are various definitions for many of the traits used in these studies. There is also a great deal of debate as to which of the many instruments available really measures the trait in question. Since these debates continue, it is difficult to compare various studies. Therefore, reliable measurement of the presence or absence of a given trait in an individual is difficult.

Keeping these limitations in mind, several relevant studies may be examined. Since there are so many studies

⁸As an example see the controversy over the measurement of empathy in Norman Kagan and David R. Krathwohl, Studies in Human Interaction: Interpersonal Process Recall Stimulated by Videotape (East Lansing: Michigan State University, Educational Publication Services, 1967), pp. 460-463.

which attempt to isolate desirable qualities in salesmen, the studies cited were merely deemed representative. Inclusion of relevant studies was made on the basis of breadth of areas covered rather than trying to include all studies concerned with a particular area.

Clarke and Merenda studied 522 life insurance agents and found that Activity Vector Analyses (AVA), an instrument used to find temperament attributes of respondents, was able to effectively discriminate between successful and non-successful life insurance salesmen. They found that applicants for life insurance sales were not likely to be successful if their self-perceptions were as passive and submissive individuals rather than as socially confident persons. They also found that certain combinations of personal-social data could be used as effective discriminators of success or failure as a life insurance agent. Interestingly, they found that the two measures were also statistically independent and, therefore, could be used in combination to increase predictive efficiency.

⁹Peter F. Merenda and Walter V. Clarke, "The Predictive Efficiency of Temperament Characteristics and Personal History Variables in Determining Success of Life Insurance Agents," <u>Journal of Applied Psychology</u>, Vol. 43, No. 6 (December, 1959), pp. 360-366.

In 1960, Harrell¹⁰ studied 21 petroleum salesmen to determine the relationship between certain test scores and three criteria of proficiency in selling. These criterion measures of sales success were; sales manager's evaluations, percent of quota and administrative appraisals of success. He found that production records were the most predictable of the three. Several test scores showed significant differences between high and low-producing salesmen. The tests which effectively discriminated were:

- 1. The Otis Test of Mental Ability
- Four scales of the Bernreuter Personality Inventory; Stability, Dominance, Self-Confidence, Aggressiveness
- 3. Tact and Diplomacy of the Moss-Hunt Social Intelligence Test
- 4. The Sales Manager Scale of the Strong Vocational Interest Blank.

His results also showed that the Self-Sufficiency, Objective Mindedness and Sociability scales of the Bernreuter Inventory did not discriminate nor did the sizing up people or the judging behavior elements of the Moss-Hunt Test, nor did other elements of the Strong Vocational Interest Blank. In addition, the Washburne S. A.

¹⁰T. W. Harrell, "The Relation of Test Scores to Sales Criterion," <u>Personnel Psychology</u>, Vol. 13 (Spring, 1960), pp. 65-69.

Inventory did not differentiate between either the production or other ratings given the salesmen. 11

In 1962, John Miner, ¹² using a group of sixty-five dealer salesmen employed by a major petroleum company, found that two tests were significant predictors of sales success. The Wechsler Adult Intelligence Scale, Arithmetic Subtest yielded correlations with performance measures in the low .30's. Also, the Thompkins-Horn Picture Arrangement Test ¹³ yielded correlations in the high .50's. In this second test several measures were found to be associated with successful performance. These were:

- Dependence—any indication that support in the form of praise, attention, instruction or assistance is a condition for activity or positive affect.
- 2. Sociophilia--any indication of a wish to be with other people or a tendency to maintain close personal relationships with others.
- 3. Self-Confidence--any indications that success or approval is expected as a function of one's own efforts.

¹¹Ibid., p. 69.

¹² John B. Miner, "Personality and Ability Factors in Sales Performance," <u>Journal of Applied Psychology</u>, Vol. 46, No. 1 (1962), pp. 6-13.

¹³S. S. Thompkins and J. B. Miner, <u>The Thompkins-Horn Picture Arrangement Test</u> (New York: Springer, 1957).

4. Happiness—any indications of a characteristic happy mood.

On the other hand, low aggression, low sociophilia and strong superego were found to be associated with lesser performers. Miner states that the successful salesmen all showed an ability to express emotion, especially positive emotion, freely, while the lesser performers were inhibited. He further notes that these dimensions of emotional freedom should be significant in many types of sales work. In a separate study, Miner also shows some evidence indicating that salesmen should be in the top 30th percentile of the general population in verbal ability in order to be successful.

James Mosel analyzed 170 women department store sales clerks. He found that twelve personal data items significantly distinguished between high and low selling cost employees. He describes the "ideal" low selling cost saleswoman, in order of discrimination as, "between 35 and 54 years of age, 13 to 16 years of formal education,

¹⁴ Miner, op. cit., p. 12.

¹⁵ Ibid., p. 13.

¹⁶John B. Miner and John E. Culver, "Some Aspects of the Executive Personality," Journal of Applied Psychology, Vol. 39 (October, 1955), pp. 348-353 at p. 352.

over five years previous selling experience, over 160 pounds, five years or less in next to last job, lives in boarding house, over five years on last job, minor executive as principal previous experience, between 59 and 62 inches in height, one to three dependents, widowed and no lost time in the last two years." Clearly, generalizing from this type of study is dangerous. Yet, the author states that these results, when combined with other findings on department store sales personnel, are useful predictors of job success. The problem is that many of these variables would be impractical for managerial use in selecting applicants. For example, using weight as a criterion for hiring sales clerks does not have much face validity.

In 1960, Cecil French¹⁸ conducted a study in which he attempted to find correlates of successful salesmanship. He studied retail salesmen in a large midwestern city and found that there were no statistically significant differences between high and low producers with respect to

¹⁷ James N. Mosel, "Prediction of Department Store Sales Performance from Personal Data," <u>Journal of Applied Psychology</u>, Vol. 36, No. 1 (February, 1952), p. 9.

¹⁸ Cecil L. French, "Correlates of Success in Retail Selling," American Journal of Sociology, Vol. LXVI, No. 2 (September, 1960), pp. 128-134.

age, time on the job or formal education. His findings did show, however, that high producers did not intend to stay on the present job until retirement. High performance was thus, correlated with upward occupational mobility and a higher reference group than lower performance.

Samuel N. Stevens has summarized the contributions of the behavioral sciences to selling. He noted that the following were the major conclusions which social scientists had reached in regard to the social and psychological characteristics of salesmen. 19

- 1. There is no significant relationship between intelligence-test scores and sales success.
- 2. No significant relationship has been found between independent measures of personality traits and sales success.
- 3. No correlation exists between age and sales success.
- 4. There is no correlation between measurable character traits and sales success.
- 5. There is no significant correlation between level of education and sales success.
- 6. No significant correlation exists between level of sales activity and sales success among individual salesmen.
- 7. Each of the above factors has significance when studied in relation to all others in individual salesmen.

¹⁹ Stevens, op. cit., pp. 86-88.

- 8. Such study as that indicated in point 7 above can provide a useful tool for selection and development.
- 9. Salesmen are more likely to succeed when chosen with regard to the kinds of customers they will deal with rather than in terms of the types of products sold.
- 10. Salesmen differ from non-salesmen in four important ways:
 - a. Salesmen are persuasive rather than critical.
 - b. Salesmen are intuitive rather than analytical.
 - c. Salesmen have higher average energy levels (expressed in activity).
 - d. Salesmen are more strongly motivated by the desire for prestige, power, and material gain than by a service ideal or the need for security.
- 11. Salesmen's interests cluster around a dominantly persuasive common core.

Although many of these studies are, by their very nature, quite restricted in scope, there are results that indicate that some tests for salesmen may go across occupational or product boundaries. James E. Kennedy used a group of personal, personality, interest and attitudinal variables to see if a general device was as efficient for selecting automobile salesmen as a more specific instrument. The more specific instrument was based upon the type of product which the car salesman sold, i.e., luxury car salesman vs. economy car salesman. He found that the more elaborate procedure of developing specific keys for specific subvarieties of car salesmen did not result in

any significant improvement in validity. 20 That is, it did no better job of selection than the less elaborate procedure of developing a single key for car salesmen, in general, without regard for the various subvarieties of salesmen. It appears that for this restricted subsample and for those subvarieties chosen, product was not an important variable as a criterion of success. Generalizing to other populations or to other products, however, would seem very dangerous.

Mayer and Greenberg also found that their measures of 'empathy and ego drive" were able to differentiate between high and low performing salesmen in a number of industries. They found these tests to be effective in the retail automobile industry, the insurance industry and the mutual fund industry. This would seem to indicate that perhaps there are some universals of salesmanship that go beyond product and industry.

Communications and Interaction Studies

Having explored some of the traditional studies of the salesman, it can be noted that "these approaches are

²⁰James E. Kennedy, "A General Device vs. More Specific Devises for Selecting Car Salesmen," <u>Journal of Applied Psychology</u>, Vol. 42 (June, 1958), pp. 206-209.

²¹Mayer and Greenberg, op. cit., pp. 119-125.

unidirectional; that is, they look only to the salesman, not to the two person interaction that makes the cale...

As opposed to selling, most studies of interviewing in social research have dealt with the interaction problems of interviewer and respondent."²²

Borrowing from the other social sciences, the basic thrust of the more modern interaction viewpoint towards selling is that the salesman can only be viewed as one part of an interacting dyad. Because the salesman is in a position where he must interact with the prospect, it is necessary to view both the prospect and the salesman. This interpersonal interaction has been characterized by one writer as behavior influenced by "how one person thinks and feels about another person, how he perceives him and what he does to him, what he expects him to do or think and how he reacts to the actions of the other..."²³

Another author says that the "interaction between the salesman and the prospect can be described as a dual learning situation. While the salesman is learning about

²²Franklin B. Evans, "The Sociological Analysis of the Selling Situation: Some Preliminary Findings,"

<u>Emerging Concepts in Marketing</u>, William S. Decker (Ed.)

Chicago: American Marketing Association (December, 1962), p. 476.

²³Heider, op. cit., p. 1.

the needs of the prospect, the prospect also must become conscious of the present state of his needs. He must then evaluate his current means for meeting these needs and weigh the merits of the products being offered."²⁴ In addition, the interactional demands of the salesman are numerous. "First, the job demands a person with a wide range of behaviors and flexibility in adapting his behaviors...In short, his role requires him to adapt to a large number of differing personalities with a wide range of possible behaviors. Second, the intensity of social contact fluctuates widely."²⁵

This means that the effectiveness of a salesman depends upon the kinds and personalities of his company's customers. Therefore, studying the salesman in isolation may not be sufficient. What may be necessary for sales success is the ability to effectively interact with a prospect. This ability to interact may be partially dependent upon the backgrounds of the members of the dyad.

²⁴G. David Hughes, "A New Tool For Sales Managers,"

Journal of Marketing Research, Vol. 1 (May, 1964), p. 32.

²⁵James A. Belasco, "The Salesman's Role Revisited," <u>Journal of Marketing</u>, Vol. 30 (April, 1966), p. 7.

²⁶E. J. McCarthy, <u>Basic Marketing: A Managerial</u>
<u>Approach</u>, Third edition (Homewood, Illinois: Richard D.
Irwin, Inc., 1969), p. 518.

Homans notes that, "because people with similar back-grounds tend to hold similar values, they are apt to behave in ways that each will find rewarding, especially when they first meet—and what gets done then seldom gets undone later...When people behave in ways that they find mutually rewarding, they are apt, as we know, to like one another and continue the interaction." 27

This type of thinking has led Franklin Evans to hypothesize that, "The sale is a product of the particular interaction situation of a given salesman and prospect rather than the result of the specific qualities of either alone." He further states that some early results of his study, "indicate differences in the way sold and unsold prospects view the particular salesman who called upon them, how the salesman views his role, and differences in pair similarity between sold and unsold dyads. Similarity of attributes within the dyad appears to increase the likelihood of a sale." Successful dyads are more alike

Forms (New York: Harcourt, Brace and World, 1961), p. 218.

²⁸Franklin B. Evans, "Selling As A Dyadic Relationship: A New Approach," <u>American Behavioral Scientist</u>, Vol. VI, No. 9 (May, 1963), p. 76.

²⁹<u>Ibid</u>., p. 79.

internally than unsuccessful ones in terms of "age, height, income, religious affiliations, education, politics and even smoking." 30

Several other studies have been completed which look at the interaction between buyer and seller. Lombard studied twenty saleswomen in the children's clothing department of a large department store and found that salesgirls perceive customers who reject the merchandise as rejecting them and vice versa, that customers in a hurry perceive salesgirls as not being interested in them. However, the salesgirl who feels secure in beliefs about herself perceives the customer as someone who needs help. 31

William F. Whyte also pointed out the importance of the interaction between the restaurant waitress and her customers.³² He found that the behavior of the waitress varies with the social status of the customer she serves.³³ That is, the higher the social status of the

³⁰ Ibid., pp. 78-79.

³¹ George F. Lombard, <u>Behavior in a Selling Group</u> (Boston: Harvard, 1955), pp. 187-217.

³²William F. Whyte, <u>Human Relations in the Restau-</u>
rant Industry (New York: McGraw Hill Book Company, 1948).

³³<u>Ibid</u>., p. 92.

restaurant's clientele, the less friendly and personal the waitress must act. The well-adjusted waitress did not react to her customers' "moods." She, instead, controlled her behavior. 34 Whyte also noted that "if the cook and waitress have a fight or if the waitress clashes with her supervisor, then the waitress is likely to take out her aroused feelings on the customer through poor service or discourtesy... 35

Gadel, in a study of life insurance agents, also found that salesmen tend to concentrate on particular kinds of prospects. He notes that younger life insurance agents tend to concentrate on prospects in the same age group as themselves but as the salesman matures he sells to a more heterogeneous group of prospects. 36

Charles King and John Summers after reviewing the literature on the interaction dyad conclude that -

"Although the dimensions of analyses and the methodologies used have varied between studies, the research findings across studies are remarkably consistent:

1. The interaction dyad appears to be relatively homogeneous across many interaction contexts.

³⁴ Ibid., p. 119.

³⁵Ibid., p. 18.

³⁶M. S. Gadel, "Concentration By Salesmen on Congenial Prospects," <u>Journal of Marketing</u>, Vol. 28 (April, 1964), pp. 64-66.

- Studies comparing the social status and age of participants in an interaction dyad indicate that people tend to exchange information with other age and social status peers.
- 2. Perceived credibility and/or expertise of the referent as an informant on a topic is an important dimension in information-seeking behavior. Seekers search for referents "more qualified" than themselves on a topic. In context where expertise is not perceived available within the seekers' peer level, sources higher or lower in age and social status may be consulted.
- 3. The family plays an important role in interpersonal communication in the socialization of children and in interaction within the extended family. The specific functions of family versus nonfamily interactions may be different but this area has not been explored.
- 4. Proximity is important in facilitating interaction. Proximity, as a variable, is two-dimensional including physical proximity and social proximity. Obviously, physical proximity, e.g., living in the same neighborhood makes possible physical contact and the settings for interpersonal exchange. Physical proximity also suggests a minimum social proximity in terms of some overlap of social status, interests, life style, etc." 37

This evidence tends to verify what might be called the characteristic similarity hypothesis. That is, the more a salesman possesses the same characteristics as his customers, the greater the probability of his success." 38

³⁷Charles W. King and John O. Summers. "Dynamics of Interpersonal Communication: The Interaction Dyad," in Donald F. Cox Ed. Risk Taking and Information Handling in Consumer Behavior (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1967), p. 261.

³⁸David Kollat, Roger D. Blackwell and James F. Robeson, Strategic Marketing (New York: Holt, Rinehart and Winston, Inc., 1972), p. 380.

It should be noted, however, that it is not necessary for the salesman to possess exactly the same feeling set as the prospect to sell effectively. Perceived similarity on the part of the prospect is what is really important. Evans notes that "the perceived similarity of religion and politics is much higher and of greater importance to the sale than the true similarity." 39

Therefore, it is necessary for the salesman to read the prospect well in order to effectively "size him up" and then to communicate feelings which are similar to the prospects. It is also evident that, "Receivers of messages vary in their ability to perceive the attitudes, intentions, feelings, needs, and wishes of others. In our interpersonal communication most people make reasonably accurate judgments of one another; yet this slight misjudgment may cause considerable difficulties."

This points out the second great thrust in the more modern approach to selling; that is, the communications viewpoint. Stidsen notes that "the fundamental characteristic and function of personal selling is

³⁹Evans, op. cit., p. 79.

⁴⁰Kim Griffin and Bobby R. Patton. <u>Fundamentals of Interpersonal Communication</u> (New York: Harper & Row Publishers, 1971), p. 71.

intercommunication... And the essential strength to be sought for and encouraged in individual salesmen is their ability to take into account and communicate to the individualized and specific aspects of a buying situation and to evolve with that situation over time."

Interpersonal communication may be viewed as a process with the following structure:

FIGURE 2-2

The Process Model of Communication

X	X	X	X	X	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	S	שנ	RCI	3	x	×	E	NCC	DE	ER	$x \rightarrow$	X	M	ESS	SAC	GE	$x \rightarrow$	x	DI	ECO	DDI	ER	$x \rightarrow$	x	RI	ECI	ZI	VEI	R	x
X	X	x	x	x	x	x	X	x	x	x	x	x	C	HA	IN	EL	x	x	X	x	x	x	x	x	x	x	x	x	x	x
	•	ſ												x															1	•
		<u>_</u>										- 1	FE)	EDI	BAC	CK	4													

The elements of this process are: 42

- 1. Source A person with a reason to communicate his ideas, needs, information, and so on.
- 2. Encoder

 The sending system which takes the ideas of the source and expresses them in the form of a message, or which translates the source's purpose into a message.

⁴¹Bent Stidsen, "Interpersonal Communication and Personal Selling," Marketing For Tomorrow-Today, American Marketing Association (June, 1967), p. 113.

⁴²David Berlo, <u>The Process of Communication</u> (New York: Holt, Rinehart, & Winston, 1960), pp. 32-37 and pp. 111-112.

- 3. Message Behavior in physical form the translation of ideas, purposes, and intentions into a code or systematic set of symbols.
- 4. Channel A medium, a carrier of messages.
- 5. <u>Decoder</u> A system which retranslates or decodes the message, putting it in a form that the receiver can use.
- 6. Receiver The target of the communication.
- 7. Feedback The reaction of the receiver which the source can use to determine his own success in accomplishing his objective.

Communications research studies provide a wealth of information for the salesman concerning this process. The most recent literature deals with each of the above elements and provides the salesman with a great deal of information which he may use to increase his effectiveness.

The following represent examples of some relevant questions explored in the literature dealing with several areas of the process:

⁴³ Carl I. Hovland, Irving L. Janis and Harold H. Kelley, Communication and Persuasion: Psychological Studies of Opinion Change (New Haven: Yale University Press, 1953), pp. 19-55.

⁴⁴ Ibid., pp. 105-112.

be ordered to provide maximum effectiveness?⁴⁵

<u>Channel</u> - What are the communications characteristics and advantages of personal selling and advertising?⁴⁶

Receiver - What personality types are most susceptable to persuasion?⁴⁷

It should be noted that the elements of this process are interdependent. That is, the best channel will depend upon the message, sender and receiver etc. Although the specific focus of this discussion will be feedback monitoring, each of the elements are relevant to the sales literature. Their specificity and concern with aspects of the process other than feedback place them beyond the scope of this review.

Feedback may be divided into two components: verbal and nonverbal. In interpersonal communication, verbal feedback is provided for the salesman when the prospect speaks; that is, when he asks or answers questions or makes statements. On the other hand nonverbal feedback is provided when he makes gestures or actions to which meanings may be attached. Monitoring verbal feedback is

⁴⁵Arthur R. Cohen, Attitude Change and Social Influence (New York: Basic Books, Inc., 1964), pp. 8-16.

⁴⁶ Crissy and Cash, op. cit., Vol. 7, pp. 24-31.

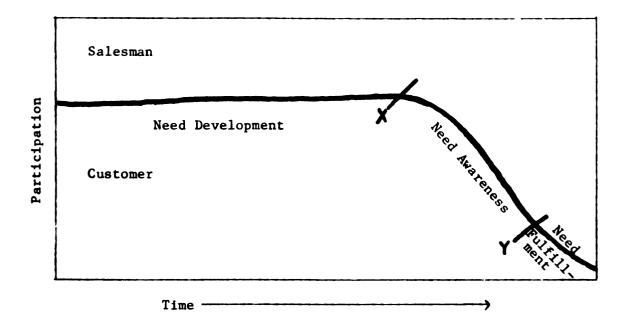
⁴⁷ Hovland, Janis, Kelley, op. cit., pp. 174-214.

an obvious, although all too often neglected, aspect of selling. If the salesman is to really communicate, he must not only send messages but also be able and willing to receive feedback from the prospect. If the salesman is to be an effective communicator, he must, therefore, listen as well as talk. As one writer states; "A constructive communicative relationship is likely when there is a desire and a capacity to listen. . .It involves a sensitive, total concentration on what is explicitly stated as well as what is implied by nuances of inflection, phrasing and movement." 48

This two way flow of communication is necessary for several reasons. First, if a need satisfaction approach to selling is appropriate, the salesman should listen to the prospect to find out his needs. As the following diagram points out, during the initial stages of the interview, the salesman must let the prospect do the talking and must intently listen to find out his specific needs.

⁴⁸ Wayne C. Minnick, <u>Interpersonal Communications:</u>
<u>Survey and Studies</u> (Boston: Houghton Mifflin Company, 1968), p. 639.

FIGURE 2-3
Need-Satisfaction Theory⁴⁹



A second reason for listening is to find out the other person's interests, background and personality so that the salesman can adapt his behavior to that of the prospect. This is necessary, as was pointed out earlier, if effective interaction is to be achieved by the dyad. It has been said that "if we can successfully identify the goals for which an actor is striving in the interaction situation, we can begin to say something about the cues to which he will attend, and the meaning he is most

⁴⁹ Cash and Crissy, op. cit., Vol. 1, p. 15.

likely to assign to them."50

Mathough listening is important, it is not by any means the only way of monitoring feedback. As Griffin points out, "many of the inferences we make concerning a persons personality are triggered by visual cues." ⁵¹

He describes several of these cues as expressions on a person's face, movements by the person, and his voice pattern. ⁵² The nonverbal component is very important when studying feedback. It has been estimated that, in face to face communication, nonverbal behavior accounts for approximately sixty-five percent of the social meaning conveyed between the parties involved. ⁵³ Another author suggests that nonverbal behavior serves the following functions: ⁵⁴

⁵⁰ Edward E. Jones and John W. Thibart, "Interaction Goals as Bases of Inference in Interpersonal Perception," Person, Perception and Interpersonal Behavior (Stanford, California: Stanford University Press, 1958), p. 152.

⁵¹ Griffin and Patton, op. cit., p. 66.

⁵²<u>Ibid.</u>, pp. 68-69.

⁵³Randall Harrison, "Non-verbal Communication: Explorations Into Time, Space, Action and Object," Dimensions in Communications, James H. Campbell and Hal W. Hepler, Eds. (Belmont, California: Wadsworth Publishing Company, Inc., 1965), pp. 161-166.

⁵⁴ Kagen and Krathwohl, op. cit., p. 580.

- Emphasizing or accenting the content of a verbal message
- Amplifying part of the content of a verbal message
- 3. Explaining a verbal silence
- 4. Providing information related to the content of the verbal message
- 5. Adding new information not in the content of the verbal message by:
 - a. Substituting for verbalization
 - b. Contradicting the verbal message, or
 - c. Providing a context to aid in the interpretation of the verbal message.

Therefore, nonverbal feedback may modify and expand the meaning attached to verbal feedback. This means that to effectively study the feedback process, both verbal and nonverbal components must be examined.

Gary M. Grikscheit has researched the ability of salesmen to monitor feedback. His findings suggest that several aspects of this ability are significant. He subjected salesmen to an audio visual selling simulation and analyzed their ability to monitor the feedback provided by the simulation. His findings suggest that, "success in selling is not tied to a superior ability to interpret verbal feedback alone, rather that the successful salesman is able to "decode" more of the information

⁵⁵Grikscheit, <u>op. cit</u>., pp. 129-133.

in the non-verbal component of feedback than the less successful man. In addition, the high effect salesman is also able to take the information available at each point in the sale and determine how favorable or unfavorable it is to the whole." His findings also, "provide support for the proposition that the high effect salesman, in adjusting his approach to the prospect, explores more alternatives early in the sales call than does his low effect counterpart. Once settled on an approach, however, he does not continue to adjust tactically as does the low effect salesman." He also concludes that "the responses high effect salesman pick are more closely matched to their understanding of the sales call than are the responses of the low effect man. It appears that the high effect salesmen understand more of the feedback to which they are exposed, especially the non-verbal component; are better able to summarize it consistently; and pick responses more appropriate for the prospect than do the low effect men."

Keeping these factors in mind it seems that the effectiveness of the salesman is at least partially determined by his ability to interact with the prospect and effectively monitor the feedback which is provided him. Based upon these notions, several aspects of the

salesman's interacting ability were chosen for study in this research. These can be divided into four categories:

- I. Empathy
- II. Other-Directedness
- III. Self-Acceptance
 - IV. Machiavellianism

Each of these constructs will now be examined.

Independent Variables

This section looks at each of the independent variables. Prior research is reviewed with a dual purpose. First, each variable is explained, and second, evidence is provided for the inclusion of the variable in the present study.

Empathy

Many authors feel that empathy is an important asset for the salesman. For example, Thompson, ⁵⁶ Crissy and Cash, ⁵⁷ and Tillman and Kirkpatrick ⁵⁸ have each stated that empathy is an important element for sales success. Hattwick also calls empathy "a most important factor in

⁵⁶ Joseph W. Thompson, Selling: A Behavioral Science Approach (New York: McGraw Hill Book Company, 1966), p. 104.

⁵⁷Cash and Crissy, op. cit., Vol. 4, p. 12.

⁵⁸Tillman and Kirkpatrick, op. cit., p. 117.

successful selling. It should be predicted consciously at all times. The result? A better control of your ego, greater success in selling your own ideas as well as goods and greater day-in day-out happiness." 59

In spite of this feeling that empathy is an important ingredient for sales success, several immediate problems become evident when trying to operationalize empathy.

First, there are a myriad of definitions for the concept.

Second, the measurement of empathy has proved difficult.

Many different definitions of empathy appear in the literature of personal selling. For example, empathy has been defined as:⁶⁰

- 1. "The ability to perceive and react to the expectations, goals, attitudes, and behavior of the others in the interaction. That is, the ability to sense and react to verbal and nonverbal feedback." 61
- 2. "The important central ability to feel as the other fellow does in order to be able to sell him a product or service." 62

⁵⁹Melvin S. Hattwick, <u>The New Psychology of Selling</u> (New York: McGraw Hill Book Company, 1960), p. 118.

⁶⁰ For an excellent review of the empathy literature see Kagen and Krathwohl, op. cit., pp. 459-478.

⁶¹ Davis and Webster, Jr., op. cit., p. 163.

⁶² Mayer and Greenberg, op. cit., pp. 119-125.

- 3. "The ability to relate to another individual."63
- 4. "Feeling in the other person's place (sensing how he feels)." 64
- 5. "The ability to assimilate and anticipate the feelings of others." 65

For the purposes of the present research, empathy is defined as, "the imaginative transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does." The value of this particular type of definition will become more apparent after the problems of measuring empathy have been examined.

When measuring empathy, several different problems become apparent. First, there are measures of individual empathy and measures of mass empathy. Ronald Taft makes this important distinction between individual and mass empathy. He states that, "if a particular test attempts to predict the combined responses of a group of people or of people in general, it is considered a mass empathy

⁶³Patrick J. Robinson and Bent Stidsen, <u>Personal</u>
<u>Selling In A Modern Perspective</u> (Boston: Allyn and Bacon, Inc., 1967), p. 274.

⁶⁴ Cash and Crissy, op. cit., Vol. 4, p. 11.

⁶⁵ Tobolski and Kerr, op. cit., p. 310.

⁶⁶Rosalind F. Dymond, "A Preliminary Investigation of the Relation of Insight and Empathy," <u>Journal of Consulting Psychology</u>, Vol. 12 (1948), p. 228.

measure."67 On the other hand, when an individual tries to predict the response of an acquaintance or of someone upon whom he has data, he is measuring individual empathy. Kerr and Tobolski⁶⁸ used The Empathy Test to try to predict the performance of thirty-two new and used car salesmen in Chicago. The Empathy Test is, however, a measure of mass empathy. 69 Respondents were asked to rank magazines and other measures as to their acceptability to society, in general. These researchers found that The Empathy Test was a significant predictor of sales success in some situations. They used two criteria of selling success. The first was sales records, which were predicted by The Empathy Test with an r of .44. This test was also a significant predictor of success when salesmen were ranked by sales managers (r = .71). However, their findings showed that this test was not able to effectively discriminate between high and low performing used car salesmen (r = .12 and r = .17 for the two

⁶⁷Ronald Taft, "The Ability to Judge People,"

<u>Psychological Bulletin</u> #52 (January, 1955), pp. 20-21.

⁶⁸ Tobolski and Kerr, op. cit., pp. 310-311.

⁶⁹Raymond H. Van Zelst, "Empathy Test Scores of Union Leaders," <u>Journal of Applied Psychology</u>, Vol. 36 (1952), pp. 293-295.

performance criteria). Therefore, The Empathy Test was a successful predictor of selling performance in one situation but not in another. The researchers hypothesized that this might be due to the differential effects of television advertising upon the selling operation for new and used cars. They further hypothesized a frustrationaggression situation in the latter situation which kept people on guard against the used car salesman. 70

empathy has proved successful in discriminating between high and low performing salesmen, it was not deemed appropriate for the present study. There are several reasons for this. First, this test was developed in 1951 and asked people to rank a group of magazines and other activities as to their popularity with people, in general. Since this test has not been updated it was felt that, due to changing tastes, it might have lost its validity. Also, this test attempts to measure mass empathy. Since the salesman is generally concerned with influencing or predicting the behavior or feelings of one or a very few people at most, it was felt that a measure of individual empathy, rather than mass empathy, would be more

⁷⁰ Tobolski and Kerr, op. cit., p. 311.

appropriate. The face validity of using a measure of individual empathy rather than mass empathy is also much greater.

Another problem which presents itself is the difference between empathic prediction and empathic inter-These are two different dimensions of empathy. It is important for the salesman to be able to effectively size up the prospect and understand how he feels but it is also important for him to communicate to the prospect that he understands him. Whitney, stresses that "empathy not only brings people closer together in their emotions and feelings, it also has a tendency to bring people closer together in their opinions and ideas. For it is only when the other person perceives that you do have some we feeling for him and that you do have some respect, understanding, and appreciation of his position, that his closed mind becomes open minded, and he is then willing to reconsider and re-evaluate his original opinions."71

Buchheimer states that empathic prediction and empathic interaction should be studied separately. 72

⁷¹Robert A. Whitney, Thomas Hubin, John D. Murphy, The New Psychology of Persuasion and Motivation in Selling (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1965), p. 167.

⁷²Arnold Buchheimer, "The Development of Ideas About Empathy," <u>Journal of Counselling Psychology</u>, Vol. 10, No. 1 (1963), p. 68.

Therefore, two different measures may be needed to effectively describe the full dimension of empathy. For the purpose of the current research, only predictive empathy or the ability of the subject to identify the feelings of the other person is used.

A modified Dymond measure of empathy is used in this study. 73 Using this technique requires the formation of a dyad. Each subject then rates himself and his partner on a number of personality traits. This measurement was used because it focuses on the ability of the subject to effectively size up another individual's feelings about the subject and about himself. It would seem, at face value, as if this ability to size up a person's feelings and to correctly identify how he feels about you is an important quality for the salesman to possess. Crissy and Cash say that the salesman is "vitally concerned with accurately judging the personality of each customer or prospect with whom he does business. People vary widely in this ability to size up others."74 These same authors also state that analyzing personality traits is preferable to analyzing types of personality. They explain

 $^{^{73}}$ Chapter three contains a more detailed description of the measurement of "empathy".

⁷⁴Cash and Crissy, op. cit., Vol. 4, p. 18.

that "there is justification for using type descriptions in advertising where the objective is to influence large numbers of people at one time, but in personal selling a more precise description, a trait description, is needed to plan a sales presentation." Another author says of interpersonal communications that "your ability to understand him, that is to interpret his orientation toward you and your orientation toward him, will determine the effectiveness of your mutual communication."

There are problems apparent in this or any other predictive test of empathy. Several authors have questioned whether this technique is actually measuring empathy or some other variable such as projection or identification. These criticisms are not entirely relevant here, since this study is only trying to uncover variables which are related to performance and the ability to monitor feedback. Intuitively it seems that the ability to size up a person as he himself feels and to determine how he feels about the salesman, no matter what it is called, is an important quality for the salesman to possess.

^{75&}lt;u>Ibid.</u>, p. 31.

⁷⁶Griffin and Patton, op. cit., p. 80.

⁷⁷Kagen and Krathwohl, op. cit., p. 467.

However, because there is a question of exactly what this variable is measuring, it will be referred to as "empathy" in this study.

Kagen and Krathwohl question the reliability and validity of this and other paper and pencil tests. 78 They suggest an audio visual stimulus system for measuring empathy. The selling simulation "A Sales Call on the Holt Company" is just such an audio visual stimulus. One objective of this study will be to see the relationship between this projective test and the informational content retrieved from the simulation. Lindzey and Borgatta in discussing empathy state that, "in communication terms it can be seen as the ability to sense and react to verbal and nonverbal feedback...empathy has been defined as social sensitivity...the accuracy with which an individual can identify the reaction he arouses in others."⁷⁹ Therefore, since the audio visual stimuli attempt to measure verbal and nonverbal feedback monitoring ability and since the projective instrument tries to

^{78&}lt;sub>Ibid.</sub>, p. 467.

⁷⁹Gardner Lindzey and Edgar F. Borgatta, "Sociometric Measurement," Handbook of Social Psychology, Gardner Lindzey (Ed.). (Reading Mass: Addison Wesley Inc., 1954), Vol. I, pp. 405-448, at p. 427.

measure the individual's ability to size up others, the relationship between the two measures could prove interesting.

Another problem with a predictive measure of empathy is that there may be a difference between a person's ability to empathize with different individuals. Davis and Webster note that there is "evidence that an individual can be highly empathic with some persons and not at all empathic with others." An individual's ability to empathize may change or differ depending upon with whom he is interacting. This poses a problem for any type of empathy measurement.

"Empathy" should be related to the performance of the salesman. It may enable a salesman to know when to shift tactics or when to close a sale. For instance, Buchheimer states that "from a social-psychological point of view if a man can understand, assume or infer the role another man plays at a particular moment in time and space, and if man can identify with that role then he can predict what man will do and how man will or can act."81

This would be very helpful for the salesman. If he can

⁸⁰ Davis and Webster, op. cit., pp. 163-64.

⁸¹ Buchheimer, op. cit., p. 61.

easier to identify his needs and, therefore, know when and how to change tactics or close a sale.

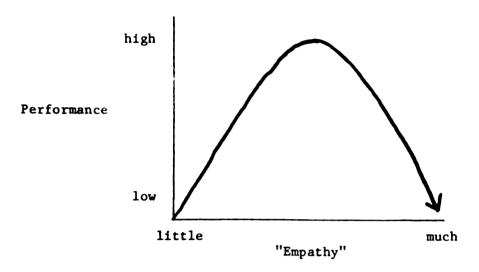
Mayer and Greenberg have shown that "empathy and ego drive" can be used to predict sales performance. They found that "empathy and ego-drive" were able to effectively discriminate between successful and non-successful selling applicants in the insurance, mutual fund and automobile industries. Their results in all cases were significant at the .01 level. B2 It is unclear, however, from their published results just how they measured "empathy" and "ego drive".

A problem may present itself in relating "empathy" to performance, since there is some indication that a curvelinear relationship may exist between these two constructs. Figure 2-4 depicts this relationship.

⁸²Herbert Greenberg and David Mayer, "A New Approach to the Selection of Successful Salesmen," The Journal of Psychology, Vol. 57 (1964), pp. 113-123.

FIGURE 2-4

A Possible Relationship Between "Empathy" and Performance



Thus, too little or too much "empathy" could both be associated with poor performance. Herbert Hyman, in speaking of an interviewer's effectiveness in psychotherapy states that, "excessive social orientation of the interviewer is not condusive to superior performance. In other words, too much rapport with the respondent is as bad as too little." Poor performance could be the result of either the insensitivity of the salesman to the prospect or of over-identification with the prospect so that the salesman becomes sympathetic and loses sight of his goals.

⁸³Herbert Hyman, et al., <u>Interviewing In Social</u>
Research (Chicago: University of Chicago, 1954), p. 282.

Intuitively, it would seem that "empathy" would be most useful to the salesman in those types of situations where a need satisfaction theory of selling is most appropriate. In these cases, "empathic" ability could help the salesman to identify the prospect's needs and also help him to be aware of changes in the prospect's recognition of these needs. On the other hand, in those situations where the salesman uses a canned sales presentation which doesn't vary with the needs or feelings of the prospect, "empathic" ability would appear to be of lesser importance. Even in these instances, however, the effective "empathiser" would have a better idea of how his communications were being received and possibly of when or whether to attempt a close of the sale.

"Empathy" should also be positively related to the ability to monitor feedback since picking up cues is an important element in determining the mood of another.

One author points out that "Intense focusing on the client is, of course, essential to the perceptive aspect of deep empathic understanding because it makes one aware of subtle nonverbal communications - the minute facial, postural, and gestural clues that often contradict or multiply the meaning of the client's verbal

communication. "84

The capable "empathizer" is one who is able to effectively monitor both the manner and matter cues of the prospect and integrate these into a correct picture of the prospect. The predictive aspect of this "empathy" measure gives an added dimension to the selling simulation. In the simulation, the ability of the salesman to monitor feedback is measured quantitatively but not qualitatively. The number of cues reported is measured but the significance of the cues and the salesman's overall ability to integrate these cues and size up the propsect are not evaluated. Therefore, by using a measure of the salesman's ability to size up prospects, an added dimension to interaction will be gained.

Other-Directedness

Inner or other-directedness is a measure of one's orientation to life. Riesman says, in defining inner and other-directed individuals, that, "inner-directed people have a social character whose conformity is issued by their tendency to define early in life an internalized

⁸⁴ Charles B. Truax and Robert R. Carkhuff, <u>Toward</u> <u>Effective Counseling and Psychotherapy: Training and Practice</u> (Chicago: Aldine Publishing Company, 1967), p. 288.

set of goals."⁸⁵ He further notes that, "the source of direction for the individual is 'inner' in the sense that it is implanted early in life by the elders and directed toward generalized but nonetheless inescapably destined goals."⁸⁶

On the other hand, he pictures the other-directed person as one who has "a social character whose conformity is insured by his tendency to be sensitive to the expectations and preferences of others." He also says that "the other-directed child is trained to be sensitive to interpersonal relations and often he understands these with a sophistication few adults had in the era of inner-direction." 88

Riesman speaks of whole societies as passing through three stages; tradition-oriented, inner-directed, and other-directed. However, he continues, a cross section of society at any given time should reveal all three types of individuals, even though there is pressure applied on

⁸⁵David Riesman, The Lonely Crowd (New Haven; The Yale University Press, 1950), p. 9.

⁸⁶ Ibid., p. 15.

⁸⁷ Ibid., p. 9.

⁸⁸ Ibid., p. 31.

individuals in the first two stages to conform to the other-directed orientation. Therefore, although our society is classified by Riesman as being other-directed, he would expect to find inner-directed types in a sampling of society.

Because the other-directed person is trained from birth to be responsive to the feelings and wants of others and because he finds satisfaction from conforming to group expectations, he could be expected to pick up more cues than the inner-directed man. Speaking of this ability, Reisman says that, "the other-directed person must be able to receive signals from far and near; the sounds are many, the changes rapid." This being the case, the salesman who is more other-directed should pick up a significantly greater number of cues than the inner-directed salesman. As further evidence of this relationship, Crissy and Cash state that the more socially sensitive an individual is, the more likely he is to catch cues in the prospect's behavior. 91

Other-directedness could also be hypothesized to be

^{89&}lt;u>Ibid.</u>, p. 31.

⁹⁰ Ibid., p. 26.

⁹¹cash and Crissy, op. cit., Vol. 5, p. 59.

associated with higher performance. If the need-satisfaction type of selling is the most applicable method for creative selling, then the other-directed salesman, by being more sensitive to the needs of the prospect and his reactions, should be able to do a much better job of marrying the prospect's needs with the offerings of his company and, thus, making a sale. To further illustrate this, Harrell, in a study of petroleum salesmen, found a significant positive relationship between social intelligence and sales production figures. These findings indicate that the social sensitivity which a salesman possesses may be very important in determining just how productive he is.

Self-Acceptance

Self-acceptance is defined "in terms of relying on one's own standards and values; having faith in one's capacity to cope with life; assuming responsibility for one's own behavior; accepting criticism and praise objectively; not denying or distorting feelings, motives, abilities and limitations, but accepting them; considering oneself a person of worth equal to others; not expecting rejection by others without reason; not regarding oneself

⁹²Harrell, op. cit., pp. 65-69.

as different from others, i.e., 'queer'; and not being shy or self-conscious." 93

Initially, it would seem as though this variable is in direct conflict with the other-directed variable. hypothesis there was that other-directed salesmen, due to their concern with other people's reactions, would pick up more cues and thus, be better performers. hypothesis here is that the self-accepting salesman, who has a sense of relying on his own values, will pick up more cues and thus, be a better performer. The focus of the first hypothesis was the other-directedness of the salesman while this hypothesis is concerned with this inner security. However, these two viewpoints need not be in conflict. Although the salesman must be otherdirected and intently focus on the other person, he must also possess the inner security to allow him to concentrate on the other-person rather than worrying about himself and his own needs. Rogers has said that before a person enters into a helping relationship with another he must ask himself, "Is my inner self hardy enough to realize that I am not destroyed by his anger, taken over

⁹³Emanuel M. Berger, "Relationships Among Acceptance of Self, Acceptance of Others and MMPI Scores," <u>Journal of Counseling Psychology</u>, Vol. 2, No. 4 (1955), p. 279.

by his need for dependence, nor enslaved by his love, but that I exist separate from him with feelings and rights of my own? Then I can freely feel this strength of being a separate person, then I find that I can let myself go much more deeply in understanding and accepting him because I am not fearful of losing myself." 94

Crissy, likewise, states that "if the salesman is attending himself rather than to the person on whom he is calling, he will take in even fewer stimuli." Therefore, it is hypothesized that if the salesman is to effectively monitor feedback and interact with the prospect, he must have that inner confidence which allows him to concentrate upon the needs and actions of the prospect rather than upon his own protection. Several studies have pointed out this relationship. Eugene J. Benge, in a study of 564 salesmen in widely differing types of industry, found that sales managers ranked their high performing salesmen as, first, having a strong measure of self-confidence and, second, having a high rating in persuasiveness. 96

⁹⁴Carl R. Rogers, "The Characteristics of A Helping Relationship," <u>Interpersonal Communications Survey and Studies</u> (Boston: Houghton Mifflin Co., 1968), p. 656.

⁹⁵Cash and Crissy, op. cit., p. 19.

⁹⁶ Eugene J. Benge, "What Traits and Work Habits Characterize Successful Salesmen," Sales Management, Vol. 76 (June 15, 1956), p. 54.

Another writer, while studying the insurance industry, found that salesmen saw three major obstacles to success. These were poor territories, poor work habits, and fear of making contacts. 97 This third obstacle is important. One of the major fears which may keep a salesman from making contacts is this lack of self-confidence. As James T. Mangan has said, "When you're sure of yourself, you're sure of selling...buyers are most confident in confident salesmen. They rely most on self-reliant salesmen." 98

Machiavellianism

This variable attempts to define a person's general strategy for dealing with people. It has several dimensions. The person who scores high in Machiavellianism will:

"Manipulate more, win more, be persuaded less, persuade others more, and otherwise differ significantly from 'low Machs,' as predicted in situations in which subjects interact face to face with others."

⁹⁷Herbert E. Krugman, "Salesmen In Conflict: A Challenge to Marketing," <u>Journal of Marketing</u>, Vol. 23 (July, 1958), p. 60.

⁹⁸ Mangan, op. cit., pp. III-IV.

⁹⁹Richard Christie and Florence L. Geis, <u>Studies in</u>
<u>Machiavellianism</u> (New York: Academic Press, 1970), p. 312.

- 2. Be more emotionally detached than the "low Mach" person. As Christie states "the primary difference between individuals who score higher and lower on the Mach scales is the high scorer's greater emotional detachment." 100
- 3. Be more capable verbally and more skilled in devising and performing nonverbal distractions than the "low Mach" person. 101
- 4. Be able to more accurately perceive others than the "low Mach" person. 102
- 5. Be regarded by the "low Mach" person as less
 Machiavellian than he actually is. 103

This measure was included for several reasons. First, it was felt that the emotional detachment possessed by the "high Mach" would be important since it could keep him from having excess amounts of sympathy. While the salesman must possess empathy, it is very important that he does not over-identify with the prospect to the point where he loses sight of his mission. Christie's research

^{100 &}lt;u>Ibid</u>., p. 312.

¹⁰¹ Ibid., p. 313.

^{102&}lt;u>Ibid.</u>, p. 234.

^{103&}lt;u>Ibid.</u>, p. 313.

shows that "low Machs" were distracted from effective bargaining by emotional involvement irrelevant to winning. 104

He further says of the "high Mach" that, "although their coolness may not be more than skin deep, they appear to be thick-skinned enough to withstand the enticements or dangers of interpersonal involvements which might interfere with task achievement. "105

This brings up an interesting point; namely, what will be the interaction between Machiavellianism and "empathy"? There are four possible combinations of Machiavellianism and "empathy". The following symbols will be used to define these combinations:

M = "high Mach"

m = "low Mach"

E = high "empathy"

e = low "empathy"

ME (high Mach, high "empathy"). This salesman should be the best performer. He can read the prospect well, but remains emotionally detached enough to be task oriented.

¹⁰⁴ Ibid., p. 295.

¹⁰⁵ Ibid., p. 295.

¹⁰⁶ These formats and concepts are very similar to the concepts of empathy and ego drive used by Greenberg and Mayer, op. cit., pp. 113-123.

Me (high Mach, low "empathy"). This salesman may use high pressure tactics and may not be able or willing to read the prospects feelings. He will try to overpower the prospect with his fast talking in a Willie Loman manner.

mE (low Mach, high "empathy"). This salesman is not task oriented and not able to emotionally detach himself from the prospect. Therefore, he may over-identify and, thus, show more sympathy than empathy.

me (low Mach, low "empathy"). This person should not be a salesman. He has little confidence in his abilities to be persuasive and is not able to read people well.

Another reason for including the Machiavellian trait was that it correlates highly with cue sending ability which hasn't been measured in this study. It is important for the salesman to be a good sender as well as a good receiver of cues.

An interesting point to consider about the Machiavellian salesman is his interaction with the buyer. If the buyer thinks the salesman is trying to manipulate him, he may feel pressured and, thus, resist the selling effort. As Webster notes, "communication theory indicates that the perception of manipulation in the communicator leads to certain resistance."¹⁰⁷ Current research indicates that "low Machs" consistently underestimate their target's Machiavellianism.¹⁰⁸ Therefore, a "low Mach" buyer would tend to underestimate the Machiavellianism of a "high Mach" salesman. This should tend to minimize the amount of manipulation which the buyer perceives, making the "high Mach" more effective than he otherwise might have been.

A word of caution should be injected here. Christie has stated that "high Machs" need not be regarded in a negative manner. He concludes that, "evidence to date suggests that they are not hostile, vicious, or vindictive compared to lows." Thus, there need be no negative connotation associated with Machiavellianism.

Christie states that the "low Machs" are more personal than the "high Machs" and their orientation makes them less effective as strategists in the course of interaction, but more sensitive to others as individual persons." This is the reason for hypothesizing that

¹⁰⁷Webster, op. cit., pp. 9-10.

¹⁰⁸ Christie and Geis, op. cit., p. 234.

¹⁰⁹ Ibid., p. 213.

¹¹⁰ Ibid., p. 312.

"low Machs" would be better cue readers, and yet, less effective performers than "high Mach" salesmen. One of the basic premises of modern sales research is that more effective communication and interaction between salesman and prospect should lead to better performance. Yet "low Machs" are associated with low performance and high feedback monitoring abilities. Machiavellianism may, therefore, be a moderating variable which confounds the relationship between interaction abilities and selling success.

Performance

Evaluating the performance of salesmen is a very difficult procedure. One problem which must be faced is choosing between the many performance criteria available. The first such choice is between objective criteria or subjective criteria.

Subjective ratings have the advantage of incorporating many different attributes into a single or multiple measure. However, because the span of control for sales managers is so narrow, particularly in the industry under consideration, it is not always possible to draw a sample which is statistically appealing and still have only one person making performance evaluations. Therefore, there is a problem of inter-rater variability.

That is, supervisors may rank the same array of salesmen quite differently depending upon their own biases.

Barrett notes that raters may not only have different concepts of job elements but they may also have different ideas about what constitutes successful performance of these elements. The apparent inclusiveness of the overall rating is deceptive, since some raters omit vital elements or include them sporadically. They may also include elements not related to job success or place improper emphasis on job elements. However, Barrett says that "for some purposes, a single number accurately summing up a supervisor's evaluation of ratings is all that is necessary, since management is concerned with either a yes-no decision or a single point on a scale."

Objective measures of sales performance may also be used. There are many such criteria; for example, Hartley shows a number of measures. 113 (See Figure 2-5, next page) It seems obvious that level of sales relative to potential would be an appealing objective measure, since it would

¹¹¹Barrett, <u>op. cit</u>., pp. 15-16.

^{112 &}lt;u>Ibid</u>., pp. 20-21.

¹¹³ Robert F. Hartley, <u>Marketing: Management and Social Change</u> (Scranton, Pennsylvania: Intext Educational Publishers, 1972), p. 489.

FIGURE 2-5
Criteria For Measuring Performance of Salesmen

Criteria	Expanation
Sales volume alone, or in relation to quota	Most commonly used measure, and often the only one used; tells nothing about profitability of business generated.
Gross margin of goods sold	Measures profitability.
Call ratenumber of calls made per day	Generally the more calls made, the more sales; a measure of hustle, but not necessarily of effectiveness.
Batting averageorder- call ratio	A measure of effectiveness, especially in dealing with certain customer groups.
Average number of orders per man day	Tells nothing about size of orders.
Average order size	Best used in conjunction with the average number of orders per man day.
Salesmen's expenses and expense ratios	Can determine cost per call, per order, and direct selling expense ratio to net sales.
New accounts	A measure of customer generation, which may be a salesman's most important contribution.

allow for differences in territory, competition, etc. However, it is very difficult to determine potential. If done on a centralized company-wide basis, using objective criteria such as population, income, business activity, etc., it seems certain that the nuances of a particular territory will be ignored. On the other hand, if done at the local level, it seems certain that subjectivity and differences in rater judgement will enter into the evaluation.

Rush found that there were multiple criteria for

sales success. He also found that there was a relatively low correlation between varied performance measures and that there was a lack of relationship between objective sales measures and ratings of sales ability. 114

Ronan, in reviewing the literature on sales performance rankings, cites several studies of sales criteria. He notes that "two studies with objective measures of selling performance by Kirchner (1960) and Miner (1962) present tables of intercorrelations of various performance measures showing relatively high, positive correlations among them." 115 These would seem to indicate the possibility of a single "selling ability" factor. However, another study by Baier and Dugan (1957) using 13 objective measures of sales achievement by insurance agents presents a table of intercorrelations that obviously contains more than one factor and indicates that selling ability, in at least one field, is not the unitary ability that might be supposed, but is more accurately described by Rush's study. 116 To dramatize this problem in the

¹¹⁴C. H. Rush, Jr., "A Factorial Study of Sales Criteria," Personnal Psychology, Vol. 6 (1953), pp. 9-24.

¹¹⁵William W. Ronan and Erich P. Prien, Toward a Criterion Theory: A Review and Analyses of Research and Opinion (New York: The Cretivity Research Institute of the Richardson-Foundation, Inc., 1966), p. 47.

¹¹⁶ Ibid., p. 47.

company under consideration, three evaluations of sales school participants were chosen from those participating in this study. These were:

- 1. Sales managers' evaluations
- 2. Self evaluations
- 3. Sales school rankings

Spearman rank correlations 117 were performed on one sales school class of seventeen participants which was chosen at random from the many available. The results were as follows:

- rs (rank correlation for school rank and sales manager's rank) = .007 (NS) (not significant)
- rs (rank correlation for school rank and self rank) = .33 (NS)
- rs (rank correlation for sales manager's rank and self rank) = -.06 (NS)

None of these were significant at the .05 level as the critical value was rs = .412. These low intercorrelations between the three rating scales should not be thought of as abnormal. J. W. Parker, et al., also found that intercorrelations between self ratings and supervisor ratings were low. They note that "an analysis of the intercorrelations among the scales for the several categories

¹¹⁷William L. Hays, Statistics for Psychologists
(New York: Holt Rinehart and Winston, 1963), pp. 643-647.

revealed rather striking differences between the ways in which supervisors and workers viewed the relationship between personal and job traits." 118

Weitz further complicates the problem by showing that conclusions in experiments are dependent upon the criteria employed. Therefore, depending upon the criteria chosen, a variety of hypotheses could be substantiated. The important point is to choose criteria which measure the proper relationship for a particular study.

Since the objective of this study is to separate high from low performing salesmen, a subjective evaluation by the sales manager in the field was chosen as one measure of sales success. It was felt that this method could best incorporate the many dimensions of the selling job into one measure. Also, since the company in question is set up on a very decentralized profit centering basis, it is very important for the salesman to receive the approval of his sales manager.

There is precedence in the literature for using only

¹¹⁸ J. W. Parker, E. K. Taylor, R. S. Barrett and L. Martens, "Rating Scale Content: III. Relationship Between Supervisory-and Self-Ratings," Personnel Psychology, Vol. 12, No. 1 (Spring, 1959), p. 49.

¹¹⁹Weitz, op. cit., pp. 228-231.

a single subjective measure of performance. One author states that "since there is a marked tendency to rate men at about the same level on various traits - whatever those traits may be - a great deal of time and effort can be saved by having the ratings made on only one trait at the outset." A unidimensional measure of performance could be justifiable because of this "halo" effect.

Ewart, Seashore, and Tiffin, in an analysis of a large number of ratings, found that there was one trait that correlated with the ratings on others to the extent of about .70 on the average. 121

In addition to the above performance rating, several other ratings were also used. Since nearly all of the salesmen under evaluation were on some kind of commission basis, their past year's earnings were used as an indication of performance. Finally, dollar sales were used as a measure of performance. This measure has the advantage of being readily available and widely used. The problem

¹²⁰ Joseph Tiffin, "Merit Rating: Its Validity and Techniques," Rating Employee and Supervisory Performance, edited by M. Joseph Dooher and Vivenne Marques (New York: American Management Association, 1951), p. 17.

¹²¹ Edwin Ewart, S. E. Seashore and Joseph Tiffen, "A Factor Analysis of an Industrial Merit Rating Scale," Journal of Applied Psychology, Vol. 25 (1941), pp. 481-486.

with this or other objective measures of sales performance is that they ignore the environment in which the sale takes place. That is, the territory, customers and competitive structure facing a particular salesman are not directly considered by these objective measures. Hartley supports this contention. When speaking of sales volume as an objective measure, he says that:

The most common objective measure is also the most simple: sales volume produced. salesman who consistently makes the most sales is thereby the best one. However, the use of this yardstick alone is seldom a sufficient measure except for certain sales jobs where the salesman is expected to find his own customers without territorial restraints, such as is often the case with insurance, mutual funds, and real estate In the more common selling situation, in which territories are assigned, the lack of complete equity in territorial assignation often makes gross sales comparisons unfair. One man's territory may have more potential--perhaps more population, more stores, larger accounts. metropolitan New York City, for example, a man might produce in a day as much business as another salesman, perhaps in the North and South Dakota territory, could do in a month. 122

This is the reason why multiple criteria were sought to measure sales effectiveness and why the interrelationship between the various measures was sought.

^{122&}lt;sub>Hartley</sub>, op. cit., p. 490.

CHAPTER III

RESEARCH DESIGN

This chapter contains both the framework and the methodology employed in this thesis. The initial section of Chapter III will identify both the dependent and independent variables used in this study. This will be followed by a discussion of the sample design, the data collection procedures, and the techniques used to analyze the data. A copy of one part of the questionnaire used in conjunction with the audio visual selling simulation is found in Appendix A, while a copy of the followup questionnaire sent to salesmen is found in Appendix B. Appendix C contains the questionnaire which was sent to the supervisors of the salesmen involved in this research.

Independent Variables

The followup questionnaire examined four independent variables. These variables are:

- I. "Empathy"
- II. Other-directedness

III. Self-acceptance

IV. Machiavellianism

Each of these constructs was taken from another research project, although, to the knowledge of the researcher, none of these measures has ever been applied directly to salesmen or used in conjunction with an audio visual stimulus. Each of these measures will be discussed below.

I. "Empathy"

A modified Dymond measure of "empathy" was included on page three of the salesman's questionnaire in Appendix B and in the supervisor's questionnaire on page four of Appendix C. A dyad consisting of each sampled salesman and his supervisor was formed. Each subject then rated himself and his partner on a number of personality or attitudinal variables. If the dyad consisted, for instance, of individual X and individual Y, the procedure would be as follows:

- A. X rates himself on each of the variables
- B. Y rates himself
- C. X rates Y
- D. Y rates X
- E. X rates Y as he thinks Y rates himself
- F. Y rates X as he thinks X rates himself
- G. X rates X as he thinks Y would have rated him
- H. Y rates Y as he thinks X would have rated him.

Each of these variables was rated on a scale of 1 to 5.

The measurement of X's "empathy" was found by comparing observations B and E and also observations G and D: likewise Y's "empathy" was found by comparing observations A and F and also observations H and C. The closer these pairs of observations were, the more "empathy" the respondent had. The scale, initially developed by Rosalind Dymond was modified slightly for the present research. The modification was in the format for collecting information since a mail questionnaire was used.

More information concerning the use and limitations of this type of "empathy" measure can be found in the "empathy" section of Chapter II, pages 50-64.

II. Other-Directedness

The "Bowers-Bryant-Brown ID-OD Scale" is found on pages four through five of the salesman's questionnaire

¹Dymond, op. cit., pp. 228-233.

²The original format did not lend itself to the mail questionnaire used in this study since it required too much explanation to be easily administered to subjects.

^{3&}quot;This 'Inner and Other Directedness Scale' was developed on grants from the Behavioral Sciences Division of the Air Force Office of Scientific Research (AF 49 (638)-804 and AF-AFOSR-91-64) by Raymond V. Bowers, Principal Investigator, with the collaboration of Robert G. Brown and Clifton D. Bryant. Credit is given to Herbert W. Gross whose unpublished dissertation provided a prototype for this scale. Permission is granted to use it in this study."

in Appendix B and in the supervisor's questionnaire on pages five and six in Appendix C.

To develop this scale, items were chosen from David Riesman's, The Lonely Crowd, as being representative of the two orientations. This instrument consists of seventeen forced choice pairs. Subjects were asked to choose one statement from each pair which they personally agree with most or dislike least. Scoring requires the summation of the item scores. The inner or other-directed components were randomly positioned to avoid an ordering bias. Scores may range from 0, or complete inner-directedness to 17, or complete other-directedness. This instrument has previously been administered to middle management personnel in industry and government.

III. Self-Acceptance

Berger's "Self-Acceptance Scale" is included on pages six through eight of the salesman's questionnaire in Appendix B and in the supervisor's questionnaire on pages seven through nine of Appendix C. This scale consists of thirty-six questions using Likert type format. The answers run from "not at all true of myself" to "true of myself". This scale was initially reported in the Journal of Abnormal and Social Psychology, in

1952.⁴ It has been administered to adult education classes, students, counselors, and others and has shown both reliability and validity in repeated use. The scale was developed to identify the relationship between expressed acceptance of self and expressed acceptance of others. Berger found that there was a positive correlation between acceptance of self and acceptance of others.⁵

IV. Machiavellianism

Christie's scale of Machiavellianism is included on pages nine and ten of the salesman's questionnaire in Appendix B and in the supervisor's questionnaire on pages ten and eleven of Appendix C. Subjects were asked a series of twenty questions arranged in standard six category Likert format. "Strongly agree" is one extreme while "strongly disagree" anchors the other end of the continuum. The items are randomly transposed so that one end of the continuum is not always the "high Mach" response. Scores may range from 1, or "low Mach" to 7, or "high Mach".

A constant score of twenty is added to each score so that

⁴Emanuel M. Berger, "The Relation Between Expressed Acceptance of Self and Expressed Acceptance of Others", <u>Journal of Abnormal and Social Psychology</u>, Vol. 47 (1952), pp. 778-782.

⁵Ibid., p. 782.

a neutral score is 100. Mach scores, thus, may range from 40 to 160. This measure has been used on many different subsamples. Results and further applications may be found in Christie's, Studies in Machiavellianism.

Dependent Variables

There are six dependent variables examined in this study. These variables are:

- I. Number of verbal cues
- II. Number of nonverbal cues
- III. Total number of cues
 - IV. Sales manager's evaluation
 - V. Dollar sales volume
- VI. Compensation

Each of these measures will be discussed below.

I. Number of Verbal Cues

Each salesman selected for this research was asked to view the audio visual sales simulation, "A Sales Call on the Holt Company". 7 At the conclusion of every segment of the simulation each respondent was asked (Question 1), "What did you see, hear or feel that was: very positive?,

⁶Christie and Geis, op. cit.

⁷Grikscheit, op. cit.

slightly positive?, very negative?, slightly negative?."

The responses to this question were content analyzed according to the Rules for Coding in Appendix D. The purpose of this content analysis was to determine whether the subject's responses were triggered by a verbal or a nonverbal stimuli. Each subject's "Idea Scores" were classified as either being verbal or nonverbal. The variable, number of verbal cues, is the sum of an individual's verbal "Idea Scores" to Question 1 on each of the sixteen parts to the simulation.

II. Number of Nonverbal Cues

This variable is determined in much the same manner as number of verbal cues except it is the summation of an individual's nonverbal "Idea Scores" to Question I on each of the sixteen parts to the simulation.

III. Total Number of Cues

This variable is the summation of the individual's verbal and nonverbal "Idea Scores" or the summation of parts I and II above.

IV. Sales Manager's Evaluation

On page one of each supervisor's questionnaire, sales managers were asked to evaluate certain of their salesmen

using the following criterion: "Compared to all other company salesmen I have known, at this career stage, I would rank him in the ___th percentile based upon his overall performance while he was with our organization. A ranking of 35th percentile, for instance, would mean that 65 percent of the salesmen ranked higher than this salesman and 34 percent ranked lower than him in overall performance." The sales manager's evaluation of each salesman consisted of his percentile score on this scale.

V. Dollar Sales Volume

Dollar sales volume was compiled between January 1, 1972 and September 1, 1972. This was reported for each salesman on page two of the supervisor's questionnaire.

(Appendix C)

VI. Earnings

Since it was felt that the salesman's performance should be correlated with the amount of earnings he received, each salesman's earnings between January 1, 1972 and September 1, 1972, were also r corded on page two of the supervisor's questionnaire (Appendix C).

Sample Selection

The accounting machine salesmen of a large business machine manufacturer were chosen for this study. The salesmen chosen were participants in a company sponsored two week sales school. Nine such sales school classes were chosen for inclusion in this study. Salesmen from forty-two states were represented in the sample. At the time of the initial sampling, salesmen varied in experience from several months to several years. However, it cannot be claimed that the sample is representative of the total sales force of the company.

The actual sample consisted of one hundred and fifty dyads of salesmen and supervisors. There were 74 completed dyadic responses among those salesmen who were still with the company and six responding dyads from those salesmen who had terminated employment. This disproportionately small number of departed salesmen should not be thought of as abnormal, although it was lower than expected.

Data Collection

Each member of the sample was subjected to an audio visual stimulus, "A Sales Call on the Holt Company." He

^{8&}lt;sub>Tbid</sub>.

viewed a series of sales encounters and after each segment
recorded his thoughts and feelings in a test booklet,
(Appendix A).

Following the collection of this data on each of the salesmen at the school, the supervisor of each of these subjects was contacted and asked to complete a mail questionnaire. This questionnaire asked the supervisor to evaluate the selected salesmen involved using both subjective and objective criteria. It also required him to reflect his attitudes toward several questions (see Appendix C).

Upon the return of each individual supervisor's questionnaire, a similar mail questionnaire was sent to the salesman involved (see Appendix B). Questionnaires were sent out in this manner for several reasons. First, since interaction and comparative measures of personality were involved, it was felt that placing both mail questionnaires in the field simultaneously would seriously bias the results. Contamination and joint cooperation in filling out the questionnaire would have made the results much less meaningful. Also, the company involved felt the response rate would be better if the sales manager knew of the study before his salesman received a booklet.

Using a separate mailing, any subject who had

terminated employment with the participating organization was also contacted. The questionnaire used for these subjects was identical to the others being used except that all references to the company involved were deleted and cover letters were sent on Arizona State University letterheads under the guise of a study of industrial turnover. It was felt that to send a company sponsored study to these departed salesmen would possibly bias the results and lower the inevitably low response rate even further.

Analysis of the Data

The first step in the data analysis was to find the reliability of the content analysis method used in the Grikscheit research. Content analysis was used to determine the number of verbal and nonverbal cues picked up by salesmen from the audio visual selling simulation. Thus, it was important to determine if the technique could yield the same results when repeated under the same conditions. To test the reliability of this technique, a sales school class of 25 salesmen was chosen at random from the several contained in the original Grikscheit study. Each test booklet was independently content analyzed to determine the number of verbal and nonverbal "Idea Scores" associated with each test point for each subject using the Rules for

Coding found in Appendix D. There were twenty-five subjects, sixteen testpoints and four possible answers for each testpoint (see page 1 of Appendix A). Therefore, a possibility of sixteen hundred responses existed.

Each of the replicated "Idea Scores" was compared to the original "Idea Scores" using the method of paired observations. Because of the number of observations (300+) the test statistic Z was used.

 $Z = \underbrace{Md - 0}_{Estomd}$

Where Md = the mean of the paired differences in observation Estond = the estimated standard deviation of the difference

n = number of pairs

The number of verbal and nonverbal "Idea Scores" for each item, of each testpoint, for each subject were compared to those same results in the Grikscheit study using this method. This test is used when observations are not independent but may be paired in some logical manner. Clearly, the analysis of the original findings and the replication should be paired for comparison rather than merely using "grand means." Each observation from the first study was compared to the results of the replication

⁹Hays, op. cit., p. 333.

and differences in the two findings were examined to see if they deviated significantly from zero. If the two findings are indeed the same, that is, if the method is reliable, there should be no significant differences in the results.

Next, the significant findings of the research were retested using the same format as the original study except for the performance criteria. Because the sales managers possessed more information with which to evaluate salesmen, the performance criteria available at the time of this research were deemed superior to sales school rankings and other performance measures utilized in the original research. Therefore, for the purposes of this research, sales performance was measured using the ranking variable obtained from page 1 of Appendix C. "High effect" salesmen were those scoring above the median ranking for all salesmen and "low effect" salesmen were those scoring below the median.

The approach to analyzing the data from this research consisted of three steps. First, the major hypotheses were tested with nonparametric statistical techniques.

Nonparametric techniques were utilized because, in a strict sense, the problem did not meet the conditions of the more powerful parametric techniques. Several criteria

must be met before the more powerful parametric tests may be used. The observations must be independent and normally distributed, the populations must have the same variance and the variables involved must be measured on at least interval scales. 10

Each of the variables under consideration was measured on at least an ordinal scale. 11 Ordinally measured variables are assumed to possess a relationship to each other. That is, when comparing two objects, one has more of some characteristic than another. In such cases, it is possible to rank order these objects, although it is not possible to decide how much more of the characteristic one object has than another. Since all of the independent variables met this order constraint for ordinal measure but did not really meet the constraint for interval data, (one object is not only larger than another but the interval between the objects is also known) 12 nonparametric techniques were deemed appropriate. When ordinal rankings are present, correlation coefficients based on these rankings are

¹⁰ Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw Hill Book Company, 1956), p. 19.

¹¹ Ibid., pp. 23-26.

¹² Ibid., pp. 26-28.

appropriate. 13 There are two such tests, Spearman's rho and Kendal's tau. Both of these tests have the same power efficiency, (91), when compared with the most powerful parametric correlation, the Pearson r. 14 The Spearman Rank Correlation Coefficient (rho) was chosen for this research. The computer program SPEARMAN'S R was used. 15 This method was used to test each of the hypotheses concerned with the independent variables and performance measurements or the ability to monitor feedback.

visors, the Kolmogorov-Smirnov two sample test was utilized. Responses of salesmen and supervisors were compared to see if they differed significantly from one another. This test is concerned with determining whether two independent samples have been drawn from the same population. Siegel states that the power efficiency of the Kolmogorov-Smirnov test is .96 when compared to the parametric "t" test. The computer program utilized to perform this test was developed by Michigan State

¹³Ibid., p. 25.

¹⁴Ibid., p. 223.

¹⁵ Spearman's R (Arizona State University, Statistical Library, Computer Center of the Arizona State University).

¹⁶Siegel, op. cit., pp. 127-136.

University's CISSR group and is called "KOL." This program was run on the IBM 3600 at Michigan State University.

The next step in the analysis of data was to perform several multivariate data analyses. Each of the multivariate techniques utilized require that the data be measured on at least an interval scale. Since the dependent variables of dollar sales and compensation each clearly exhibit the properties required for interval measurement e.g., one object is not only larger than another but the interval between the objects also known, these measures pose no problem. However, as was noted earlier, performance ranking and the independent variables, in a strict sense, are measured on an ordinal scale. This problem may be dealt with since, according to Kerlinger:

It is probable that most psychological and educational scales approximate interval equality fairly well... The best procedure would seem to be to treat ordinal measurements as though they were interval measurements, but to be constantly alert to the possibility of gross inequality of intervals. 18

Therefore, for the purposes of this research it will be assumed that each of these measures does approximate

¹⁷ Michigan State University, Computer Institute for Social Science Research (CISSR), Technical Report No. 44.

¹⁸ Fred N. Kerlinger, <u>Foundations of Behavioral Research</u>, second edition (New York: Holt, Rinehart and Winston, Inc., 1973), pp. 440-441.

an interval measurement scale. If one is willing to accept these assumptions, then the data generated by this type of scale can be analyzed using multivariate techniques.

First, factor analysis ¹⁹ was used to determine what common factors, if any, might underly the manifest data.

"The primary purpose of factor analysis is the resolution of a set of observed variables in terms of new categories called factors." ²⁰ Factor analysis is a method of

¹⁹For the reader who may not be familiar with factor analysis several terms are defined below. It is also suggested that the interested reader consult a text such as Modern Factor Analysis by H. H. Harmon and published by the University of Chicago Press for further explanation. (1) Factor -- a vector or variable underlying one or more of the manifest variables on which data have been corre-(2) Factor Loading--the correlation of a manifest variable with a factor. (3) Communality--the total amount of unit variance in a particular variable explained by each of the factors on which it has a loading. Thus, a variable's total communality is the summation of the variable's squared factor loadings. (4) Uniqueness--the amount of unit variance of a particular variable which is not accounted for by communality. This uniqueness is a combination of specificity and error. (5) Specificity-the amount of unit variance of a particular variable that is unrelated to any of the factors. (6) Error--the amount of unit variance of a particular variable is attributable to the fallibility of measurement.

²⁰William D. Wells and Jagdish N. Sheth, "Factor Analysis in Marketing Research," in David A. Aaker ed., Multivariate Analysis in Marketing: Theory and Application (Belmont, California: Wadsworth Publishing Company, Inc., 1971), p. 213.

determining the number and nature of the underlying factors among a larger number of variables. In mathematical notation, factor analysis is "a method for determining K underlying variables (factors) from n sets of measures, K being less than n. It may also be called a method for extracting common factor variances from sets of measures."21 Factor analysis, therefore, tells the researcher which variables can be studied together and which cannot. It also helps to locate and identify dimensions underlying the manifest variables. mathematical complexity of factor analysis places a discussion of its intricacies beyond the scope of this dissertation. However, there are a number of excellent sources that describe the theory and mathematics underlying factor analysis.²²

Most factor analytic methods supply raw data in a form that is difficult, if not impossible, to interpret.

Thurstone argued that it was necessary to rotate factor

²¹Kerlinger, op. cit., p. 630.

²² See for example: R. J. Rummell, Applied Factor Analysis (Evanston, Illinois: Northwestern University Press, 1970); B. Fruchter, Introduction to Factor Analysis (Princeton, N.J.: D. Van Nostrand Company, Inc., 1954); and Jum C. Nunnally, Psychometric Theory (New York: McGraw-Hill Book Company, 1967).

matrices if one wanted to interpret them properly. 23

There are several different methods of rotation available to the researcher. Axes may be rotated orthogonally (at right angles to the original axes) or obliquely (not at right angles). "The orthogonality restriction ensures that factors will delineate statistically independent variation." Since the objective of this study is to derive independent measures of performance, cue monitoring ability and interaction, only those methods which rotate axes orthogonally are considered.

Two such orthogonal rotations are quartimax rotation analysis and varimax rotation analysis. The quartimax technique focuses on simplifying the rows of the factor matrix by rotating the orthogonal vectors so that the variables have high loadings on as few factors as possible. 25 The varimax approach involves simplification of the columns rather than rows. For each factor, the varimax

^{23&}lt;sub>L</sub>. Thurstone, <u>Multiple Factor Analysis</u> (Chicago: University of Chicago Press, 1947), pp. 508-509.

²⁴Rummell, <u>op. cit.</u>, p. 385.

²⁵William W. Cooley and Paul R. Lohnes, <u>Multivariate</u> <u>Procedures for the Behavioral Sciences</u> (New York: John Wiley and Sons, Inc., 1962), p. 162.

rotation yields a few high loadings while the remaining loadings in the factor are relatively low.²⁶

Although there is some debate in the literature as to which of the methods gives the best results, the varimax criterion was chosen for the present research.

Rummell reports that, "The varimax criterion for orthogonal rotation comes closest to the graphical simple structure solution or, in other words, Thurstone's simple structure goal. Varimax is now generally accepted as the best analytic orthogonal rotation technique." 27

Four different factor analysis problems were explored. First, the cue monitoring variables were factored, then the performance criteria were factored. This was followed by a separate analysis of the independent variables. Finally, a factor analysis was performed on all the variables in the study. It was felt that the dependent and independent variables should be looked at separately to determine the relationships behind each group of measures. This analysis was performed with a program called FACTOR. ²⁸ FACTOR provides the researcher

²⁶ Tbid.

²⁷Rummell, <u>op. cit.</u>, p. 385.

²⁸FACTOR is part of the Arizona State University STAT PACK and was adapted from D. J. Veldman, <u>Fortran Programming for the Behavioral Sciences</u> (New York: Holt, Rinehart and Winston, 1967), pp. 190-236.

with a principal components solution to each factor problem and allows for a varimax rotation of axes.

The final analysis to be performed on the data was canonical analysis. "In canonical analysis, the analyst is not concerned with a single criterion, multiple predictor relationship (as in ordinary multiple linear correlation) but, rather with relationships among sets of criterion variables and predictor variables." His objectives are to:

- Determine the maximum correlation between a set (of more than one element) of criterion variables and predictor variables.
- 2. Derive "weights" for each set of criterion and predictor variables, such that the weighted sums are maximally correlated.
- 3. Derive additional linear functions which maximize the remaining correlation, subject to being independent of the preceding set(s) of linear compounds.
- 4. Test statistical significance of the correlation measures. 30

This technique was used because there were multiple dependent variables for both performance and cue monitoring ability. Use of this technique does not force the

²⁹Paul E. Green, Michael H. Halbert, and Patrick J. Robinson, "Canonical Analysis: An Exposition and Illustrative Application," in David A. Aaker, ed., <u>Multivariate Analysis in Marketing: Theory and Application</u>, (Belmont, California: Wadsworth Publishing Company, Inc., 1970, p. 156.

³⁰ Tbid., pp. 156-157.

investigator to use a single dependent variable or to compile a set of correlations for each criterion variable taken separately.

The objective of canonical analysis is to find two sets of coefficients which maximize the correlation between linear functions of two sets of variables.³¹

Two problems were examined using this technique.

First, the multiple performance measures were related to

the independent variables. This may be viewed as follows:

$$C_1Y_1 + C_2Y_2 + C_3Y_3 = C_4X_1 + C_5X_2 + C_6X_3 + C_7X_4$$

where:

 Y_1 = performance ranking

 $Y_2 = compensation$

 $Y_3 = dollar sales$

 $X_1 = "empathy"$

 X_2 = other-directedness

 $X_3 = self-acceptance$

 $X_4 = Machiavellianism$

C₁ to C₇ are canonical coefficients

Then, the cue monitoring variables were related to the independent variables in the following manner:

$$c_1 Y_1 + c_2 Y_2 = c_3 X_1 + c_4 X_2 + c_5 X_3 + c_6 X_4$$

where:

 Y_1 = verbal cues

 Y_2 = nonverbal cues

 $X_1 = "empathy"$

 X_2 = other-directedness

 $X_3 = self-acceptance$

 $X_4 = Machiavellianism$

C₁ to C₆ are canonical coefficients

³¹ Cooley and Lohnes, op. cit., p. 36.

The program used to perform the analysis is called CANON and is part of the Arizona State University Computer Center Sta+ istical Package called, STAT-PAC. 32

³² CANON, Arizona State University, Computer Center, Statistical Package: STAT-PAC.

CHAPTER IV

PRESENTATION OF FINDINGS

The objective of Chapter IV is to present the findings of the thesis. The chapter is divided into four sections. The first section examines the reliability of the content analysis method used to code the responses to the audio visual selling simulation. It is followed by the results of the replication of the significant Grikscheit findings. Next, the major hypotheses of this study are examined using nonparametric techniques. The final section analyzes the multivariate nature of the relationships involved in this research.

The Reliability of the Content Analysis Method

The purpose of this section is to test the reliability of the coding method used to derive verbal and nonverbal "Idea Scores" from the Grikscheit and present research.

As can be seen in Table 4-1, there are no significant

¹The coding method is defined and explained in Appendix D.

TABLE 4-1

The Reliability of the Grikscheit Coding Method

	Mean differences Between codings	Standard Deviation	N	Signifi- cance
Verbal cues	.0056	.51	534	N.S.
Nonverbal cues	0596	.63	302	N.S.

differences between the Grikscheit coding and the independent coding performed for the reliability check.

Therefore, it can be said that, in this case, the coding method proved reliable; that is, it produced the same results in repeated use. This finding is very important for it means that subsequent research may be able to use this or similar techniques to analyze open-ended responses from sales encounters.

Testing of the Significant Findings of the Grikscheit Research

This section deals with replication of the significant hypotheses tested in the Grikscheit research. The methodology utilized to test these hypotheses was identical to the one used in the original research except for the performance criterion. Because the present research included an improved instrument for performance ranking, this method was utilized to divide the salesmen into high and low effect groups.

Hypothesis 1-1 Findings

Hypothesis 1-1 states that high effect salesmen will report more cues than will low effect salesmen.² To test this hypothesis, differences in mean "Idea Scores" between the two groups were examined over all test points.

TABLE 4-2

Comparison of Mean Total "Idea Scores"

	Mean number of cues reported	N	Direction	Statistical Significance
High effect	42.72	18		N. O
Low effect	39.94	18	P	N.S.

The Grikscheit findings supported this hypothesis.

However, as the data in Table 4-2 indicate, even though

the findings are in the predicted direction, the magnitude

of the difference is not statistically significant.

Hypothesis 1-3 Findings

Hypothesis 1-3 states that high effect salesmen will report more nonverbal cues than will low effect salesmen.

²For a complete listing of the Grikscheit hypotheses see Grikscheit, op. cit., pp. 18-22.

TABLE 4-3
Comparison of Mean Nonverbal "Idea Scores"

	Mean number of nonverbal cues reported	_N 3	Direction	Statistical Significance
High effect	15.94	18		
Low effect	13.06	18	P	.1

The Grikscheit findings supported this hypothesis.

Table 4-2 indicates that the findings of this hypothesis

were in the predicted direction and significant at the .l

level. Thus, the hypothesis is supported in these find
ings, although not as strongly as in the original study.

Hypothesis 1-4 Findings

Hypothesis 1-4 states that high effect salesmen will report more consistent encounter ratings than low effect salesmen. To test this, responses were assumed independent and high and low responses were aggregated and compared.

TABLE 4-4

Comparison of Encounter Variances

	Aggregated Variance	N ³	Direction	Significance
High effect	7.10	288	D	N. C.
Low effect	7.50	288	P	N.S.

N stands for the number of observations in a given sample. In this case, N equals the number of subjects providing usable responses times the number of test points.

As can be seen from Table 4-4, the variance of the high effect responses is lower than the variance of the low effect responses. Therefore, the findings are in the predicted direction. However, the magnitude of the difference in response is not significant.

Hypothesis 1-7 Findings

Hypothesis 1-7 states that high effect salesmen will report more tactical changes than low effect salesmen during the sales call.

TABLE 4-5
Comparison of Mean Number of Tactical Changes

	Mean number of tactical changes	N	s ²	Direction	Significance
High effect	5.78	18	6.30	D	N.S.
Low effect	5.39	18	10.13	r	и. 5.

The results in Table 4-5 indicate that, although the high effect salesmen do report more tactical changes than the low effect salesmen, the magnitude of the difference between the two is not statistically significant.

Hypothesis 1-10 Findings

Hypothesis 1-10 states that high effect salesmen will demonstrate greater agreement between their encounter ratings and their response ratings than will low effect

salesmen. To measure agreement between encounter ratings and response ratings, a correlation coefficient was calculated between responses to questions number two and five (see Appendix A) for every salesman over all test points. These coefficients were then averaged within high and low effect groups. Then, the significance of the differences in the two r's was tested using a Fisher's transformation.

TABLE 4-6

Correlation Between Salesmen's Responses to Question No. 2 and No. 5

	r between Q.2 and Q.5	Direction	Significance
High effect	. 4832	D	N.S.
Low effect	.4346	F.	и.5.

As Table 4-6 illustrates high effect salesmen did show greater agreement than did low effect salesmen, thus supporting the predicted direction of this hypothesis. However, the magnitude of this difference was not statistically significant.

Hypothesis 2-1 Findings

Hypothesis 2-1 states that high effect salesmen will report more cues as the sales call unfolds than will low

⁴Grikscheit, op. cit., pp. 112-113.

effect salesmen. In absolute terms, this hypothesis was not supported in the Grikscheit study nor in this study, since the total number of cues for both high and low effect groups declines between the first eight and the last eight testpoints.

TABLE 4-7

Decline in Mean "Idea Scores"

	Mean "Idea Scores" First 8 Testpoints	Mean "Idea Scores" Second 8 Testpoints
High effect	23.61	19.11
Low effect	20.39	19.61

On a relative basis, this hypothesis is also not supported, since the rate of decline for high effect salesmen is greater than for low effect salesmen. This finding differs from the results of the Grikscheit study where the high effect salesmen's "Idea Scores" dropped less rapidly than those of the low effect salesmen's.

Hypothesis 2-3 Findings

Hypothesis 2-3 states that high effect salesmen will report more nonverbal cues as the encounter unfolds.

TABLE 4-8

Mean Non-Verbal "Idea Scores" Over Time

	For First 8 Testpoints	For Last 8 Testpoints	Significance of Increase
High effect	8.00	8.06	N.S.
Low effect	5.22	7.83	N.S.

Table 4-8 shows that, as in the Grikscheit study, the high effect salesmen report more non-verbal cues in both the first and second halves of the sales call than the low effect salesmen. Although, in absolute terms, the number of non-verbal cues is larger for high effect than low effect, the magnitude of the difference is not statistically significant.

The Grikscheit study found that, in relative terms, the high effect salesmen's increase was more significant than the increase over time for low effect salesmen. The results depicted above support just the opposite contention. The increase in non-verbal cues reported by high performing salesmen is not significant and, although the increase reported for low effect salesmen is still not significant, it is much more pronounced.

Hypothesis 2-4 Findings

Hypothesis 2-4 states that high effect salesmen will report more increasingly consistent classifications of individual scenes than will low effect salesmen.

TABLE 4-9

Comparison of Encounter Rating Variances
Across all Testpoints in Time I and Time II

	Varian ces of First 8 Testpoints	Variances of Second 8 Testpoints
High effect	2.43	4.67
Low effect	2.53	4.98
Significance of difference	N.S.	N.S.

Table 4-9 indicates that, as in the Grikscheit research, this hypothesis is not supported in absolute terms, since variances increased over time rather than decreased. On a relative basis, even though the relationships were in the predicted direction, that is, high effect variances were lower than low effect variances, the hypothesis is not supported. The variances in the two cases were not significantly different in either time period, as they were in the Grikscheit research.

Hypothesis 2-6 Findings

Hypothesis 2-6 states that high effect salesmen will report fewer tactical changes than low effect salesmen as the encounter unfolds.

TABLE 4-10

Comparison of Mean Number of Tactical Changes in Time I and Time II

Mean Number of Tactical

Significance

	Char	Changes	
	Time I	Time II	
High effect	3.33	2.44	N.S.
Low effect	3.00	2.39	N.S.

Table 4-10 indicates that all subjects reported a decline in tactical changes as the sales call progressed. However, even though the changes are not significant, the standardized magnitude of the change is much larger for high effect than for low effect salesmen. The Grikscheit study supported this hypothesis in relative terms since high effect salesmen reported fewer tactical changes as the sales call developed. The results above, however, do not support the contention in relative terms, since high performing salesmen report more tactical changes than the low performing salesmen in the second half.

Summary of Findings in the Replication

Table 4-11 indicates that seven of the nine hypotheses tested conformed to the predicted direction, although only one of the hypotheses was supported in statistically significant terms. Several reasons could be put forth for this. First, the sample size used in the present replication was smaller than in the original study. Therefore, stronger evidence would be required for the relationships to show the same statistical significance. Second, a different performance measure was used which could have introduced more variability into the findings. Finally, the truncated sample discussed in Chapter 5 may have hidden some of the variability in the data.

TABLE 4-11
Summary of Findings on Grikscheit Replication

Hypotheses	Cue Words	Direction	Level of Significance
1-1	"cues"	P	N.S.
1-3	"non-verbal cues"	P	.1
1-4	"consistent ratings"	P	N.S.
1-7	"tactical changes"	P	N.S.
1-10	"between ratings"	P	N.S.
2-1	"cues"	NP	N.S.
2-3	"non-verbal cues"	P	N.S.
2-4	"consistent ratings"	P	N.S.
2-6	"tactical changes"	NP	N.S.

Nonparametric Analysis

This section will test the major hypotheses of this research using nonparametric techniques.

Findings Concerning Empathy

"Empathy" or the ability to size up another person is not significantly correlated with any of the other independent variables. In addition, there is no significant relationship between "empathy" and age of the salesman or the number of years which he has been employed in his present job. 5

TABLE 4-12

Hypotheses Concerning "Empathy"

Hypothes1s	Variables	Spearman's Rank r _s	t	Level of Signifi- cance
IA	"Empathy" and Verbal Cues	.21	1.85	.05
IB	"Empathy" and Nonverbal Cues	.03	.26	n.s.
IC	"Empathy" and Total Cues	.16	1.40	N.S.
ID	"Empathy" and Performance Ranking	.23	2.13	.03
ID	"Empathy" and Dollar Sales	.10	.81	N.S.
ID	"Empathy" and Compensation	.01	.06	N.S.

⁵Table lE in Appendix E shows the Spearman's Intercorrelations between the independent variables and also age and the salesman's number of years with the participating company.

Hypotheses IA, IB, and IC predict a positive relationship between "empathy" and the ability of salesmen to monitor feedback from the communications simulation. One way to test these hypotheses is to utilize a Spearman's rank correlation (rho) to determine whether the rankings on two variables are correlated. Table 4-12 indicates that there is a positive correlation between "empathy" and the number of verbal cues reported and that this relationship is significant at the .05 level. The hypotheses concerning nonverbal cues and total number of cues are not statistically significant although the relationships are in the predicted direction.

Hypothesis ID states that high performing salesmen will possess more "empathy" than low performing salesmen. This hypothesis is also tested by calculating Spearman's rank correlations comparing "empathy", performance ranking, dollar sales and compensation. Table 4-12 indicates that "empathy" score does bear a positive relationship to performance ranking. This is significant at the .03 level. However, "empathy" is not significantly related to dollar sales or compensation.

Hypothesis IE states that supervisors will show more "empathy" than salesmen. Due to the truncated sample, it was felt that sales managers should be used as a substitute

for high performing salesmen. It is common in the sales management literature to find mention of the fact that high performing salesmen are often the ones promoted into management. Therefore, the assumption is made in this hypothesis that sales managers are higher performers than their salesmen.

This hypothesis is tested using a Kolmogorov-Smirnov two sample test. The finding was not in the predicted direction and, therefore, the null hypothesis of no difference between salesman's and sales manager's "empathy" must be accepted.

Summary of Findings on "Empathy"

The findings concerning "empathy" and cue monitoring ability show that "empathy" is significantly related to the ability to monitor verbal cues. Thus, it may be that the factors which are used to size up the other individual, e.g., self-confidence, superiority, selfishness, friendliness, leadership and sense of humor, were determined from

⁶John J. McCarthy, "Sales Managers: Managers of Sales or Managers of Salesmen?" <u>Sales Management</u>, Vol. 98 (April 15, 1967), p. 69.

⁷Table 2E in Appendix E gives the results of all the hypotheses tested using the Kolmogorov-Smirnov two sample test comparing salesmen and sales managers.

the other person's verbal behavior.

The data also support the hypothesis that high performing salesmen possessed more "empathy" than low performing salesmen, although this finding was not supported when examining salesmen and sales managers.

Together, these findings might tend to support the strategic framework underlying the need-satisfaction theory of selling. By letting the prospect talk during the initial stages of the sales interview, the salesman is better able to size him up and therefore perform more effectively. Crissy makes just such a statement when he points out that "at the beginning of the sales interview the salesman asks questions which elicit conversation on the part of the customer or prospect.... The goal of the salesman is to get the customer to talk about his needs."

Findings Concerning Other-Directedness

Other-directedness is not significantly correlated with any of the other independent variables except self-acceptance. There is a significant inverse relationship between self-acceptance and other-directedness at the .025 level. This might be expected, since the inner-directed

⁸Cash and Crissy, op. cit., Vol. 1, p. 17.

⁹From Table 1E in Appendix E.

person gains his security from within rather than having to depend on others for his security. Interestingly, there is no relationship between other-directedness and age or number of years in the present position. These findings conform to other findings using this same instrument but conflict with the Riesman hypothesis which states that our society is moving towards other-directedness. 10

TABLE 4-13
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Hypotheses Concerning Other-Directedness

Hypothes1s	Variables	Spearman's Rank r _s	t	Level of Signifi- cance
IIA	Other-directedness and verbal cues	03	22	N.S.
IIB	Other-directedness and non- verbal cues	.02	.20	N.S.
IIC	Other-directedness and total cues	.01	.07	N.S.
IID	Other-directedness and performance ranking	11	-1.01	N.S.
IID	Other-directedness and dollar sales	.21	1.82	.05
IID	Other-directedness and compensation	.12	1.04	N.S.

¹⁰ Riesman, op. cit., p. 20.

Hypotheses IIA, IIB and IIC predict a positive relationship between other-directedness and the ability of salesmen to monitor feedback from the communications simulation. Table 4-13 indicates that none of these relationships was statistically significant. Nonverbal and total cues were in the predicted direction while verbal cues was not in the predicted direction.

Hypothesis IID states that high performing salesmen will be more other-directed than low performing salesmen. Table 4-13 also indicates that other-directedness
does bear a positive relationship to dollar sales at the
.05 level but not to performance ranking or compensation.

Hypothesis IIE states that salesmanagers will show more other-directedness than salesmen. This hypothesis is also tested using a Kolmogorov-Smirnov two sample test. Table 2E indicates that this hypothesis is not supported either in direction or significance by the data. 11

Summary of Findings on Other-Directedness

The hypotheses concerning other-directedness and cue monitoring ability were not supported by the data in this research. Of those hypotheses dealing with the relationship

¹¹ From Table 2E from Appendix E.

between other-directedness and performance, only dollar sales was related to other-directedness. This points out the variable nature of the performance criteria. Other-directedness correlates significantly with one of the variables but not with the other two.

Findings Concerning Self-Acceptance

Self-acceptance is not significantly correlated with any of the independent variables except other-directedness as mentioned previously. There is also no significant relationship between self-acceptance and age or number of years with the sponsoring company. 12

Hypotheses IIIA, and IIIB, and IIIC predict a positive relationship between self-acceptance and the ability to monitor feedback from the communications simulation.

Table 4-14 indicates that there is a positive correlation between self-acceptance and the ability to monitor non-verbal cues which is significant at the .05 level. The relationships between self-acceptance and verbal or total cues recorded were in the predicted direction but not statistically significant.

Hypothesis IIID predicts a positive relationship

¹² From Table 1E in Appendix E.

between self-acceptance and performance. However, none of these hypothesized-findings were statistically significant. The relationships between self-acceptance and performance ranking or dollar sales were in the predicted direction while the relationship with compensation was not in the predicted direction.

Hypothesis IIIE states that supervisors will show more self-acceptance than salesmen. This hypothesis is supported by a Kolmogorov-Smirnov two sample test at the .0013 level, indicating that supervisors do possess more

TABLE 4-14

Hypotheses Concerning Self-Acceptance

Hypothesis	Variables	Spearman's Rank r	t	Level of Signifi- cance
AIII	Self-acceptance and verbal cues	.02	.16	N.S.
IIIB	Self-acceptance and nonverbal cues	.20	1.77	.05
IIIC	Self-acceptance and total cues	.16	1.40	N.S.
IIID	Self-acceptance and perform- ance ranking	.14	1.20	N.S.
IIID	Self-acceptance and dollar sales	.05	.46	N.S.
IIID	Self-acceptance and com- pensation	03	21	N.S.

self-acceptance than salesmen. 13 Remembering that supervisors were used as a proxy-grouping for high performing salesmen, these findings tend to support the hypothesis that high performers will possess more self-acceptance than low performing salesmen.

Summary of Findings on Self-Acceptance

Self-acceptance is significantly related to the ability to monitor nonverbal cues. This would tend to indicate empirical support for the statement by Crissy that the salesman must be inwardly secure to effectively focus on the prospect and pick up manner cues. 14 The hypotheses concerning self-acceptance and performance were in the predicted direction but not statistically significant, except for the relationship between salesmanagers and salesmen. This might indicate the need for further research.

Findings Concerning Machiavellianism

There were no significant correlations between

Machiavellianism and the other independent variables or

number of years with the sponsoring company. There was,

¹³From Table 2E in Appendix E.

¹⁴Crissy and Cash, op. cit., Vol. 4, p. 19.

however, an inverse relationship between Machiavellianism and age significant at the .05 level. 15 Younger salesmen seemed to possess more of this trait than older salesmen.

None of the hypotheses concerning Machiavellianism and cue monitoring ability or performance proved statistically significant using rank correlations. All but one of the relationships, however, were in the predicted direction.

That is "High Machs" picked up fewer cues but were higher performers, as measured by all but the compensation variable.

TABLE 4-15
Hypotheses Concerning Machiavellianism

Hypothesis	Variables	Spearman's Rank r	t	Level of Signifi- cance
IV A	Machiavellianism and verbal cues	06	06	N.S.
IV B	Machiavellianism and non- verbal cues	09	81	N.S.
IV C	Machiavellianism and total cues	08	68	N.S.
IV D	Machiavellianism and per- formance ranking	.04	.37	N.S.
IV D	Machiavellianism and dollar sales	.01	.07	N.S.
IV D	Machiavellianism and com- pensation	09	75	N.S.

¹⁵From Table 1E in Appendix E.

The Kolmogorov-Smirnov two sample test performed on sales managers and salesmen also showed that salesmen were more Machiavellian than sales managers ¹⁶ This would be supported by the age differences in salesmen and managers. This was not the predicted relationship but was significant at the .0004 level using a two-tailed test.

Summary of Findings on Machiavellianism

None of the predicted relationships between Machiavellianism and cue monitoring ability or performance was
supported. A very powerful inverse relationship, however,
was shown between age and Machiavellianism. Thus, the
younger salesmen seemed to be more manipulative and seemed
to have greater devotion to task than the older salesmenor
sales managers. Although this was not the predicted
relationship, it does seem interesting. Do the sales
managers lose this tendency when they become managers or
is a new type of salesman being bred? Another possibility
would be that only those salesmen who lose this Machiavellian tendency are promoted. A longitudional study on a
single group of salesmen would prove interesting.

¹⁶From Table 2E in Appendix E.

Summary of Nonparametric Findings

Table 3E in Appendix E summarized the nonparametric results of this study. Twenty one of the twenty eight hypothesized results of this research were in the predicted direction. When this is considered along with the truncated sample mentioned in chapter five the need for replication of these findings becomes evident. Even with the lack of variability in the data it seems that more of the relationships are in the predicted direction than if chance alone were operating.

Multivariate Relationships

The ten variables of concern in this study were factor analyzed to determine what relationships, if any, might underly the manifest data. By utilizing a varimax rotation, axes were rotated maintaining orthogonality.

Columns of the factor solution were reduced to simple structure so that each factor yielded a few high loadings while the remaining loadings in the factor were relatively low. To isolate only meaningful factors, a cutoff of eigen-values greater than one was utilized. This means that only those factors which have an eigen-value of greater than one are examined. Factoring all ten

¹⁷Wells and Sheth, op. cit., p. 219.

variables resulted in four such significant factors. These can be viewed in Table 4-16.

TABLE 4-16
Highest Loadings of Ten Variables on Four Orthogonal Factors

		Varimax Loadings*			
		<u>F</u> 1	<u>F</u> 2	<u>F</u> 3	<u>F</u> 4
1.	"Empathy"			.80	
2.	Other-Directedness				.74
3.	Self-Acceptance				75
4.	Machiavellianism			.64	
5.	Performance ranking		.67	.31	33
6.	Dollar Sales		.87		
7.	Income		.85		
8.	Verbal cues	.83			
9.	Nonverbal cues	.74			
10.	Total cues	.99			

*NOTE: Only those factor loadings greater than |.30| are reported here. For a complete listing of factor loadings see Table 4E in Appendix E.

Factor one has high loadings on each of the three cue monitoring variables. It seems as if this factor could be identified with cue monitoring ability. Factor two has high loadings on each of the performance variables. Thus it seems as though this factor could be associated with the salesman's performance.

Factor three has high loadings on the "empathy" variable, the Machiavellian variable and the performance ranking variable. Thus, "empathy", Machiavellianism and performance have a positive relationship with this factor. This would be very similar to the findings of Mayer and Greenberg who discovered a similar relationship between empathy, ego drive and performance. 18

The final factor has a high positive loading on other-directedness with high negative loadings on self-acceptance and performance ranking. This factor seems to be made up of individuals who are dependent upon what others think of them but unsure of themselves and thus not good performers. These individuals would constantly be looking to others for support and would not have enough inner-confidence to be effective performers.

The next step in the analysis was to factor analyze the four independent variables to see what underlying relationships might exist among them. Only those factors were considered which had eigen-values greater than one.

Table 4-17 indicates that two such factors are present when the independent variables are factored.

¹⁸Greenberg and Mayer, op. cit., pp. 113-123.

TABLE 4-17
Factors For Independent Variables

	Varimax Loading	
	F ₁	F ₂
1. "Empathy"	.77	.13
2. Other-Directedness	. 80	05
3. Self-Acceptance	14	.81
4. Machiavellianism	.23	.71
Percent Variance	32.49	29.28
Cum. Percent Variance	32.49	61.77
Communality	.60	.65

Factor one has high loadings on the "empathy" and other-directed variables. This factor might be viewed as a person's sensitivity to others.

Factor two, on the other hand, has high loadings on the self-acceptance and Machiavellian variables. This factor, then, may be viewed as a person's self confidence in persuasive relationships.

Factor analysis was also performed on the five dependent variables. Two factors emerge. Inspection of the data in Table 4-18 shows factor one possessing high loadings on the three performance variables and factor two

containing high loadings on the cue monitoring variables. Hence, not surprisingly, there are two separate relationships being measured with the dependent variables, performance and cue monitoring ability.

TABLE 4-18
Factors For Dependent Variables

	Varimax	Loadings
	F ₁	F ₂
1. Performance Ranking	.63	.20
2. Dollar Sales	. 89	05
3. Dollar Compensation	.87	03
4. Verbal Cues	.11	.75
5. Nonverbal Cues	03	.82
Percent Variance	39.04	25.64
Cum. Percent Variance	39.04	64.68
Communality	.44	. 79

Attention may now be turned to the three dependent measures involving performance. When the intercorrelations among the performance variables are examined in Table 4-19, it can be seen that these correlations, while significant, are not of great magnitude.

TABLE 4-19

Correlation Matrix for Performance Criteria

	Percent Ranking	Dollar Sales	Compensation
Percent Ranking	1.0000	.37*	.33*
Dollar Sales		1.0000	.73*
Compensation			1.0000

^{*}Significant at the .01 level.

There is a considerable amount of variance unaccounted for by the correlations. Even the most significant relationship, between compensation and dollar sales, reveals only 54 percent common variance between the two measures. This tends to support the findings of Rush and others who concluded that there were multiple performance criteria. 19

The same problem becomes evident when examining cue monitoring abilities. There is only a .26 correlation between number of verbal and number of non-verbal cues recorded in the audio-visual selling simulation. This argues for several measures of cue monitoring ability rather than just one.

Because of these multivariate relationships, the final step in the analysis was to perform canonical

¹⁹ Rush, op. cit.

analysis on the data. The objective of this analysis was to determine the maximum correlations between the criterion variables and predictor variables. Two such analyses were performed. First, all of the independent variables were correlated with the performance variables. Second, the cue monitoring variables were correlated with the independent variables. Table 4-20 indicates that in each analysis the canonical r is not significant.

TABLE 4-20
Canonical Correlations

	Number of Signifi- cant Eigen-values Removed	Corresponding Canonical Correlation	Level of Signifi- cance
Performance Variables and Independent Variables	0	. 39	N.S.
Cue Monitoring Vari- ables and Inde- pendent Variables	0	.23	N.S.

Summary of Multivariate Findings

When all ten of the variables utilized in this research were factor analyzed, four significant factors appeared. Cue monitoring ability and performance variables make up the first two factors. The third factor has high loadings on "empathy", Machiavellianism and

performance and is very similar to the findings of Mayer and Greenberg. They say that,

"A good salesman absolutely needs at least two basic qualities. The first of the essential qualities he must possess is a large capacity for empathy: that is the important central ability to feel as the other fellow does in order to be able to sell him a product or service. Having empathy does not necessarily mean being sympathetic. One can know what the other fellow feels without agreeing with that feeling. But a salesman simply cannot sell well without the invaluable and unreplaceable ability to get a powerful feedback from his client through empathy. The second of these basic qualities is a particular kind of ego drive which makes him need to make the sale in a personal or ego way."20

The variables ego drive and Machiavellianism are very similar. The high "mach" will be concerned with accomplishing his task and will not become over-involved emotionally with the prospect and lose sight of his goals. Thus, although the relationships between "empathy" and Machiavellianism or between Machiavellianism and performance were not significant in the bivariate analyses, they were related in this multivariate analysis.

The fourth factor has high negative loadings on performance and self-acceptance and a high positive loading on other-directedness. That is, this factor consists of

²⁰Greenberg and Mayer, op. cit., pp. 113-114.

low performers who are other-directed and not self-accepting. This salesman would be oriented toward others but would not be secure and therefore, would not be as effective a performer as he might otherwise have been.

The multivariate analysis revealed two independent predictor sets of variables and two criterion sets. The first predictor set is characterized by high factor loadings on "empathy" and other-directedness, while the other factor has high positive loadings on Machiavellianism and self-acceptance. These two factors could be related to the person's sensitivity toward others and his self-confidence in persuasive relationships, respectively.

The criterion variables may be divided into two factors. The first factor is cue monitoring ability with its verbal and nonverbal components. The second factor has high loadings on the performance variables of dollar sales, compensation and performance ranking.

It was also shown that a linear combination of the independent variables was not significantly related to the performance of the salesmen sampled and that no significant relationship existed between the predictor set and the cue monitoring set.

CHAPTER V

SUMMARY AND CONCLUSIONS

The objective of this chapter is to present the findings and conclusions of this research. The first section discusses the abnormal sampling frame presented by this study. The second portion reviews the findings of the investigation. The third section sets forth some cautions regarding the interpretation of these findings. This is followed by a discussion of the implications of this research. The last section notes several areas for future research.

Truncated Sample

The distribution of responses received from this study was truncated by several factors. First, it consisted only of relatively inexperienced salesmen who attended a company sponsored sales school. This tended to eliminate those persons who were not considered viable candidates for sales positions but it also eliminated the seasoned veterans who possessed many years of sales

experience and excellent track records. Examination of the salesmen involved in this research indicates that there were relatively few experienced salesmen or salesmen who received large compensations. The median age of the respondents was 27 years with a median employment experience of 2.4 years with the sponsoring company. Their mean income was \$8,086 with a standard deviation of \$2,269. These factors point out the nature of the sample. It is skewed in the direction of the less experienced and less highly paid salesmen.

The responses were also not weighted very heavily with those salesmen who had terminated employment with the sponsoring company. Although the turnover rate for new hires in this type of sales position approaches twenty percent per year, only seven and one half percent of the sample represented these salesmen. Two reasons could be put forth for salesmen leaving the company. Either they were very high performers and left for other opportunities or they were not deemed qualified salesmen and were released by the sponsoring company. In either of these cases, the high and low performing ends of the sample would be deleted.

Therefore, the respondents to this study were probably more homogeneous with respect to age, experience and

performance ranking than a random sampling of the company's sales force. This lack of variability in responses may have obscured some of the hypothesized findings, especially where the less powerful nonparametric tests were utilized.

Review of the Findings

The coding method used in the Grikscheit study proved reliable; that is, it produced the same results when repeated under the same conditions. However, the replication of the significant Grikscheit hypotheses, while almost uniformly in the predicted direction, did not possess the same statistical significance attached to the original research.

The present study was able to differentiate between effective cue monitoring salesmen and less effective monitors in several ways. Bivariate analysis indicated that the number of verbal cues reported was related positively to "empathy," while the number of nonverbal cues reported was positively correlated with self-acceptance.

The study also showed that high and low performers could be differentiated in several ways. Performance ranking correlated positively with "empathy" while dollar sales was positively related to other-directedness.

Although many of the other relationships were in the predicted direction, none was of a statistically significant magnitude.

When all of the variables utilized in this research were factor analyzed, four significant factors appeared. Cue monitoring ability and performance variables made up the first two factors. The third factor had high loadings on "empathy", Machiavellianism and performance ranking. The fourth factor had high negative loadings on performance and self-acceptance and a high positive loading on other-directedness.

The multivariate analysis revealed two independent predictor sets of variables and two criterion sets. The first predictor set was characterized by high factor loadings on "empathy" and other-directedness, while the other factor had high positive loadings on Machiavellianism and self-acceptance. These two factors could be related to the person's sensitivity toward others and his self-acceptance in persuasive relationships, respectively.

The criterion variables divided into two factors.

The first factor was cue monitoring ability with its

verbal and nonverbal components. The second factor had

high loadings on the performance variables of ranking,

dollar sales and compensation.

It was also shown that a linear combination of the independent variables was not significantly related to the performance of the salesmen sampled and that no significant relationship existed between the predictor set and the cue monitoring variables.

A Caution Regarding the Generalizations to be Drawn from These Findings

Because of the many correlations used in this study, care should be taken when interpreting the results. When a large number of correlations are used, chance alone would dictate that some of the relationships be significant. Hence, spurious correlations may exist which are indigenous only to these data. Furthermore, this study was conducted on a sub-sample of one company's salesmen at a particular point in time. Therefore, generalizing to other populations should be done only with great care. Replication of this study is essential to determine its reliability and to overcome the problems of a truncated sample and an inefficient performance measure.

Implications of the Study to Marketing Practice

Since both performance and the ability to monitor verbal cues are positively related to "empathy," it would follow that the salesman be a good listener in the face

to face situation if he is to effectively size up the prospect. Crissy discusses the need for listening in the sales presentation and points out that, "Two way communication provides intervals during which the salesman can devote his full attention to observing and listening.

This enables him to catch manner cues and nuances of meaning he might well miss were he talking. These are of vital importance in sizing up the motivational and personality characteristics of the prospect."

This being the case, salesmen should be <u>taught</u> to <u>listen</u> as well as talk. Too often, sales management focuses on the sending of messages and ignores the monitoring of feedback. Selling simulations, such as the one used in this research, video taping of selling encounters and role playing can all be effectively utilized to improve the salesman's ability to <u>listen</u>.

This research indicates a positive relationship between performance and the ability to effectively size up the prospect. However, another finding of this study showed that "empathy" while important to sales success, must be tempered by a task orientation or emotional detachment lest the salesman over-identify with the

¹cash and Crissy, op. cit., Vol. 7, p. 28.

prospect and lose sight of his goals. This would mean that the salesman must possess or be taught a proper perspective regarding his task orientation if he is to be successful.

The salesman who possesses self-acceptance will pick up more nonverbal cues. However if he is looking to others for his orientation and unsure of himself, he will not be a high performer. Therefore, it is necessary for sales managers to attempt to build the confidence of their salesmen, so that they may possess the inner-security necessary to help the prospect. Again, role playing and video tape with supportive feedback can be a method of effectivity bolstering self-confidence.

Since several of the independent variables correlate positively with performance, it would seem that they might be used along with other selection devices to more effectively <u>pick</u> new salesmen. Also, since several of these qualities are potentially learnable, the data collection instruments utilized in this research could be used to measure the salesman's progress in learning and to measure the effectiveness of sales training.

Implications of the Study to Marketing Theory

Several findings from this research have theoretical significance. First and foremost, the successful replication of the Grikscheit coding method adds a valuable tool to the behavioral sales analyst. This finding opens up many research possibilities using open ended questions to test the ability of salesmen to monitor feedback.

Since the nonverbal elements of feedback are so important and so difficult to quantify, this measurement scheme is very important.

The multivariate support of the findings of Mayer and Greenberg is also relevant. These findings would seem to indicate the tendency of "empathy and ego drive" to be associated with higher sales performance in still another study, even though the variables were measured in a completely different fashion. However, since the Machiavellian trait did not have any bivariate relationship to sales performance, a very important point is illustrated; namely, the complex nature of human behavior. Human behavior may vary over time, across dyads or in different situations. Confounding or mediating variables may also obscure meaningful relationships. Therefore, trying to explain behavior without taking note of these interrelationships may be very difficult.

Suggestions for Further Research

Several areas for future research may be noted.

First, the study should be replicated using larger

samples. This would be needed to determine whether the

findings were, in fact, reliable or whether they repre
sented spurious relationships. It would also be interest
ing to perform these analyses on other salesmen in other

industries to determine whether any of the relationships

examined could be generalized to other types of selling.

Another suggestion for further research is to use a different sampling method and a better measure of performance. The sampling method would involve field administration of the data collection instrument and the sampling of entire sales districts. This would have two effects. First, it would include both the seasoned professional salesman and the raw recruit, thus providing more variation in compensation, dollar sales and performance ranking. This method would also eliminate interrater variances in performance ranking. One individual could evaluate all of the salesmen under his direction and thus, hopefully, use the same criteria in evaluating them.

To get a better measure of performance, the paired comparison technique might be used. This system lends

itself to rating any aspect of employee performance, although, in most of its applications, it has been used for rating overall job performance. One procedure which could be followed is the Personal Comparison System. This system makes it much easier for management appraisal of performance. Therefore, it overcomes the two most important limitations of paired comparison; the time required to administer the test and the boredom inherent in the ranking of a large number of pairs. The administration of the system is as follows:

- "1. The names of individual pairs are typed on separate sections of the forms according to a pre-determined order which is presented in table form. The table provides for pairing each employee with each other employee.
- 2. The sections are separated and the slips are assembled into a booklet by means of a paper fastener inserted through prepared holes.
- 3. The rater checks the preferred name on each slip.
- 4. The number of times each individual is preferred is tallied on a summary sheet.
- 5. A performance rating index is derived from a table, the specific index being determined by the number of times each individual was preferred and the number of individuals being rated." (The

²C. H. Lawshe, N. C. Kephart and E. J. McCormick.
"The Paired Comparison Technique," <u>Journal of Applied</u>
<u>Psychology</u>, Vol. 33, No. 1 (February, 1949), pp. 69-77.

indexes in the table should be based on the proportion of times each individual is preferred, converted to standard score units.)³

The designers of this procedure reached the following conclusions regarding this method:

- "1. There was a high degree of reliability between the ratings of two or more raters who rated the same employees.
- 2. There was a high degree of reliability between successive ratings, made on different days by each of three raters, on the employees whom they individually supervised.
- 3. The analysis of the ratings of a selected subgroup of employees revealed very little relative displacement in their rank-order position derived from the ratings on only the selected employees, as compared with their relative rank-order positions "extracted" from the ratings of the larger group of which they were a part.
- 4. The evidence accumulated did not indicate that the time required of raters was excessive."4

Another suggestion for further research would be to conduct this study longitudinally, observing salesmen over a period of time to see what changes might occur in the qualities and relationships they exhibited. Study of the Machiavellian trait over time would be especially interesting since there was such a significant inverse relationship between age and Machiavellianism.

^{3&}lt;u>Ibid.</u>, p. 70.

^{4&}lt;u>Ibid.</u>, p. 77.

Finally, salesmen could be tested for "empathy" across several dyads to see if this ability to size up people does differ from dyad to dyad.

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APPENDIX A

QUESTIONNAIRE USED ON SALESMEN IN CONJUNCTION WITH THE AUDIO VISUAL SELLING SIMULATION, "A SALES CALL ON THE HOLT COMPANY"

NOTE ON APPENDIX A:

This is one of sixteen identical forms which were filled out by each subject. Following each encounter in the selling simulation each salesman was asked to fill out a form similar to this one.*

^{*}This form was taken from an unpublished Ph.D dissertation completed by Gary M. Grikscheit, "An Investigation into the Ability of Salesmen to Monitor Feedback," Michigan State University, East Lansing, Michigan, 1971 pp. 189-191.

1.	What did you see, hear, or	feel that was:	
	Very positive?		
	Slightly positive?		
	Very negative?		
	Slightly negative?		
2.	Overall, how would you rat	e the encounter?	(Check one)
	Very favorable	[]	
	Slightly favorable	[]	
	Slightly unfavorable	[]	
	Very unfavorable	[]	

3. Now what will you do?

4. What will you say next?

5.	Overall, how do you rate what you will say and do next? (Check one)		
	A radical change in tactics - a change in approach	[}
	An intermediate adjustment in tactics - like changing to another sales point?	ĺ)
	No change - continue reinforcing present sales point?	Į)
	Move to the next point in the sales presentation or move to a close?	[]
6.	What will you avoid doing or saying next?		

7. Which step in the NCR selling plan are you working on?

8.	Can you outl	ine your plan to accomplish the step?
	Yes	[]
	No	[]
9.		t, can you outline your overall plan or strategy Holt Company?
	Yes	[]
	No	[]

APPENDIX B COVER LETTERS AND FOLLOW UP QUESTIONNAIRE FOR SELECTED SALESMEN

Dear*

We need your assistance in a research effort designed to improve the effectiveness of NCR's training program - both in the field and at Sugar Camp.

You will contribute greatly to our research effort if you will complete the following questionnaire and return it to:

Mr. Donald W. Jackson, Jr. Department of Marketing Arizona State University Tempe, Arizona 85281

This information will be used only to improve sales training and will be kept strictly confidential.

We appreciate your help -- thank you very much.

Sincerely,

^{*}cover letter to salesmen

Dear*

I am a graduate student in Marketing and as part of the requirement for my degree I have undertaken a study of turnover in major American Business. You have been chosen as part of my sample. I must have complete response to this questionnaire if I am to arrive at any meaningful conclusions and get my degree.

Part I asks you to compare yourself to a former supervisor. Parts II through IV ask more questions about you.

Please help me, this questionnaire will not take long to fill out and your cooperation is required for my success. Please return this to:

Donald W. Jackson, Jr. Department of Marketing College of Business Arizona State University Tempe, Arizona 85281

I thank you in advance.

Sincerely,

^{*}cover letter to departed salesmen.

NCR-Universities - Sales Research Project

Questionnaire A: For Salesmen

The following questionnaire consists of <u>four</u> parts. Be sure to answer each question in each part. No one but the researchers will see the individual results of the questionnaire, so please be frank and honest.

Personal Information	
Name	· · · · · · · · · · · · · · · · · · ·
Age	
Number of years with NCR	
Branch name and number	
Immediate Supervisor's name	& title

PART I

Instructions for Part I: Each salesman will evaluate both himself and his supervisor on this part of the questionnaire. The form used in this part contains a number of traits or attributes on which we wish you to rate both yourself and your supervisor. For each trait you will rate on a scale of 1 to 5.

A score of <u>one</u> on a particular attribute means that the person possesses a great deal of the first trait, i.e., he is unsure, he is superior, he is selfish, friendly, a leader, or has a poor sense of humor.

A score of <u>five</u> on a particular attribute means that a person possesses a great deal of the second attribute, i.e., very much self confidence or very inferior, unselfish, unfriendly, a follower or has a good sense of humor.

The scores 2 - 4 indicate increasingly greater amounts of the second attribute. Now turn the page and complete the grid by placing an (X) in the proper box following each attribute.

On each trait:

First - Rate yourself

Then - Rate your supervisor

Then - Rate your supervisor as you believe he will rate himself

Last - Rate yourself as you believe he will rate you.

page three

You must give a rating for each question!

2 1 UNSURE/SELF CONFIDENT yourself your supervisor your supervisor as you believe he will rate himself yourself as you believe he will rate you SUPERIOR/INFERIOR yourself your supervisor your supervisor as you believe he will rate himself yourself as you believe he will rate you SELFISH/UNSELFISH yourself your supervisor your supervisor as you believe he will rate himself yourself as you believe he will rate you FRIENDLY/UNFRIENDLY yourself your supervisor your supervisor as you believe he will rate himself yourself as you believe he will rate you LEADER/FOLLOWER yourself your supervisor your supervisor as you believe he will rate himself yourself as you believe he will rate you LACK OF SENSE OF HUMOR/SENSE OF HUMOR yourself your supervisor your supervisor as you believe he will rate himself yourself as you believe he will rate you

The other person to be evaluated on this page is_____

PART II

The following 17 statements are about things you may or may not like; about things with which you may or may not agree. Look at this example:

- A. Ambition should be moderate.
- B. One should get ahead by work.

Which of these statements do you agree with more? Circle its letter, either A or B. If you agree with both, choose the one you like better. If you disagree with both, choose the one you dislike less (the one you agree with more). Your choice should be a description of your own personal likes and feelings. Be sure that you circle the letter A or the letter B in each pair of statements. You cannot be given a score unless you make a choice for each pair. So please do not skip any.

- 1. A. What matters is what one can accomplish.
 - B. It is desirable to be more cooperative than competitive.
- 2. A. If a man is trying to accomplish something it is necessary to gamble "all or nothing".
 - B. A secure job is better than a risky one which involves high stakes.
- 3. A. A person should be able to fit into any kind of group.
 - B. People like to be able to do things better than other people can.
- 4. A. Wasting time shouldn't particularly bother a person.
 - B. Anyone who doesn't take work seriously should be disliked.
- 5. A. Being "people-minded" is preferable to being "job-minded".
 - B. A person should like to find out what great men have thought about various problems in which he is interested.
- 6. A. Being like certain people whom one admires is an important aim in life.
 - B. It's all right to be an individual, but a person shouldn't want to be very different from those around him.
- 7. A. Anyone who doesn't take work seriously should be disliked.

- B. Ambition should be moderate.
- 8. A. Teachers should be more concerned with the child's social adjustment than with his academic progress.
 - B. The teacher is supposed to see that the children learn a curriculum, not that they enjoy it or learn group cooperation.
- 9. A. A person should judge people by their traits—not by what they actually do.
 - B. It's more important to get the job done than worry about hurting people's feelings.
- 10. A. To have security is better than the chance for great achievement.
 - B. It is better to be famous than well-liked.
- 11. A. It's a good idea to have a strong point of view about things.
 - B. When planning something, one likes to get suggestions from his friends.
- 12. A. In sports one should rather be thought of as a good team member than a star player.
 - B. A person should like situations which are demanding.
- 13. A. A person should like to have strong attachments with his friends.
 - B. Success against odds is the best of American ideals.
- 14. A. What matters is what one can accomplish.
 - B. It's all right to be an individual but a person shouldn't want to be very different from those around him.
- 15. A. People like to be able to do things better than other people can.
 - B. Being "people-minded" is preferable to being "job-minded".
- 16. A. A parent shouldn't want his child to get very far "out of step" with other children.
 - B. One's ambition should be to get to the top.
- 17. A. Wasting time shouldn't particularly bother a person.
 - B. If someone "delivers the goods", it doesn't make much difference what kind of person he is.

PART III page six

This is a study of some of your attitudes. Of course, there is no right answer for any statement. The best answer is what you feel is true of yourself.

You are to respond to each question on the answer sheet according to the following scheme:

	A at all e of my- f	B Slightly true of myself	C About half- way true of myself	D Mostly true of myself	E True mysel				
	ember, the lies to yo		is the one wh	ich	Not 7	rue			True
1.			d find someone my personal pro		A	В	С	D	E
2.		uestion my w k others do.	orth as a perso	on, even	A	В	С	D	E
3.	it diffic I think m	ult to belie	things about move they really kidding me or	mean it.	A	В	С	D	E
4.			cism or anyone just can't tak		A	В	С	D	E
5.	I'm afrai		ocial affairs de will criticistong thing.		A	В	С	D	E
6.	tively bu	t I just don	t living very o't believe I'vo	e got it	A	В	С	D	E
7.		ward people	feelings and as being quite	•	A	· B	С	D	E
8.	satisfied turns out that this	with any jo well, I get is beneath	ust won't let ib I've donei: a very smug fome, I shouldn't this isn't a fo	f it eeling t be	A	В	С	D	E
9.	like to h	ave the feel	other people. ing of security m not too diffe		_				

A B C D E

from others.

page seven Not True True 10. I'm afraid for people that I like to find out what I'm really like, for fear they'd be disappointed in me. ABCDE 11. I am frequently bothered by feelings of inferiority. BCDE 12. Because of other people, I haven't been able to achieve as much as I should have. BCDE 13. I am quite shy and self-conscious in social situations. ABCDE 14. In order to get along and be liked, I tend to be what people expect me to be rather than anything else. ABCDE 15. I seem to have a real inner strength in handling things. I'm on a pretty solid foundation and it makes me pretty sure of myself. ABCDE 16. I feel self-conscious when I'm with people who have a superior position to mine in business or at school. CDE 17. I think I'm neurotic or something ABCDE 18. Very often I don't try to be friendly with people because I think they won't like me. ABCDE 19. I feel that I'm a person of worth, on an equal plane with others. ABCDE 20. I can't avoid feeling guilty about the way I feel toward certain people in my life. ABCDE 21. I'm not afraid of meeting new people. I feel that I'm a worthwhile person and there's no reason why they should dislike 22. I sort of only half-believe in myself. ABCDE 23. I'm very sensitive. People say things and I have a tendency to think they're criticizing me or insulting me in some way and later when I think of it, they may not

ABCDE

have meant anything like that at all.

A Property of the Wind of the

page eight

24.	. I think I have certain abilities and		Not True				
	other people say so too, but I wonder if I'm not giving them an importance way beyond what they deserve.	A	В	С	D	E	
25.	I feel confident that I can do something about the problems that may arise in the future.	A	В	С	D	E	
26.	I guess I put on a show to impress people. I know I'm not the person I pretend to be.	A	В	С	D	E	
27.	I do not worry or condemn myself if other people pass judgment against me.	A	В	С	D	E	
28.	I don't feel friendly with people who do things which I consider wrong.	A	В	С	D	E	
29.	When I'm in a group I usually don't say much for fear of saying the wrong thing.	A	В	С	D	E	
30.	I have a tendency to sidestep my problems.	A	В	С	D	E	
31.	Even when people do think well of me, I feel sort of guilty because I know I must be fooling them—that if I were really to be myself, they wouldn't think well of me.	A	В	С	D	E	
32.	I feel that I'm on the same level as other people and that helps to establish good relations with them.	A	В	С	D	E	
33.	I feel that people are apt to react differently to me than they would normally react to other people.	A	В	С	D	E	
34.	I live too much by other people's standards.	A	В	С	D	E	
35.	When I have to address a group, I get self-conscious and have difficulty saying things well.	A	В	С	D	E	
36.	If I didn't always have such hard luck, I'd accomplish much more than I have.	A	В	С	D	E	

PART IV page nine

Listed below are a number of statements. Each represents a commonly held opinion and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number following each statement. The numbers and their meaning are indicated below:

If you <u>agree strongly</u>, circle +3
If you <u>agree somewhat</u>, circle +2
If you <u>agree slightly</u>, circle +1

If you <u>disagree</u> <u>slightly</u>, circle -1
If you <u>disagree</u> <u>somewhat</u>, circle -2
If you <u>disagree</u> strongly, circle -3

First impressions are usually best in such matters. Read each statement, decide if you agree or disagree and the strength of your opinion, and then circle the appropriate number following the statement. Give your opinion on every statement.

If you find that the numbers to be used in answering do not adequately indicate your own opinion, use the one which is closest to the way you feel.

		Strongly Agree			rong sagr		
1.	Never tell anyone the real reason you did something unless it is useful to do so.	+3	+2	+1	-1	-2	-3
2.	The best way to handle people is to tell them what they want to hear.	+3	+2	+1	-1	-2	-3
3.	One would take action only when sure it is morally right.	+3	+2	+1	-1	-2	-3
4.	Most people are basically good and kind.	+3	+2	+1	-1	-2	-3
5.	It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	+3	+2	+1	-1	-2	-3
6.	Honesty is the best policy in all cases.	+3	+2	+1	-1	-2	-3
7.	There is no excuse for lying to someone else.	+3	+2	+1	-1	-2	-3

					P	age	ten
		Strongly Agree				rong sagr	-
8.	Generally speaking, men won't work hard unless they're forced to do so.	+3	+2	+1	-1	-2	-3
9.	All in all, it is better to be humble and honest then to be important and dishonest.	+3	+2	+1	-1	-2	-3
10.	When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which carry more weight.	+3	+2	+1	-1	-2	-3
11.	Most people who get ahead in the world lead clean, moral lives.	+3	+2	+1	-1	-2	-3
12.	Anyone who completely trusts anyone else is asking for trouble	+3	+2	+1	-1	-2	-3
13.	The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.	+3	+2	+1	-1	-2	-3
14.	Most men are brave.	+3	+2	+1	-1	-2	-3
15.	It is wise to flatter important people.	+3	+2	+1	-1	-2	-3
16.	It is possible to be good in all respects.	+3	+2	+1	-1	-2	-3
17.	Barnum was wrong when he said that there's a sucker born every minute.	+3	+2	+1	-1	-2	-3
18.	It is hard to get ahead without cutting corners here and there.	+3	+2	+1	-1	-2	-3
19.	People suffering from incurable diseases should have the choice of being put painlessly to death.	+3	+2	+1	-1	-2	-3
20.	Most men forget more easily the death of their father than the loss of their property.	+3	+2	+1	-1	-2	-3

APPENDIX C

COVER LETTER AND QUESTIONNAIRE FOR SALES MANAGERS

Dear*

We need your assistance in a research effort designed to improve the effectiveness of NCR's training program - both in the field and at Sugar Camp.

You will contribute greatly to our research effort if you will complete the following questionnaire and return it to:

Mr. Donald W. Jackson, Jr. Department of Marketing Arizona State University Tempe, Arizona 85281

This information will be used only to improve sales training and will be kept strictly confidential.

We appreciate your help -- thank you very much.

Sincerely,

^{*}cover letter to sales managers.

·		

NCR-Universities - Sales Research Project

Personal Information	
Name	
Age	
Sales points 1971	
Sales points 1972 1/1 - 9/1	
Number of years with NCR	
Branch name and number	
Level of branch	
We are interested in knowing your evalu	uation of the following
salesmen. We would like you to rank each me	an using the following
criteria: Compared to all other NCR account	ting machine salesmen I
have known, at this career stage, I would ra	ank him in theth
percentile based upon his overall performand	ce. A ranking of 35 th
percentile for instance, would mean that 65	percent of the salesmen
you have known ranked higher than this sales	sman and 34 percent ranked
lower than him in overall performance. The	se are the salesmen we wish
you to rank.	
Salesman	Percentile ranking

For each of the salesmen evaluated we would also like the following information:

	1971 Sales points	1972 Sales points 1/1 - 9/1	Earnings 1971	Earnings 1/1-9/1/72
Name				
				·
				•

The following questionnaire consists of four parts. Be sure to answer each question in each part. No one but the researchers will see the individual results of the questionnaire, so please be frank and honest. If you are evaluating more than one salesman, please fill out a separate Part I of the questionnaire for each salesman. You are to fill out only one of Parts II, III and IV.

Instructions for Part I: Each supervisor will evaluate both himself and his subordinate(s) on this part of the questionnaire. If you are evaluating more than one salesman please use a separate sheet for each salesman. Note that the salesman's name who you are to evaluate on this part is listed on the bottom of the next page(s).

The form used in this part contains a number of traits or attributes on which we wish you to rate both yourself and your subordinate(s). For each trait you rate on a scale of 1 to 5. A score of <u>one</u> on a particular attribute means that the person possesses a great deal of the first trait, i.e., he is unsure, he is superior, he is selfish, friendly, a leader, or lacks a sense of humor.

A score of <u>five</u> on a particular attribute means that a person possesses a great deal of the second attribute, i.e., very much self confidence or very inferior, unselfish, unfriendly, a follower or has a good sense of humor.

The scores 2 - 4 indicate increasingly greater amounts of the second attribute.

Now turn the page and complete the grid by placing an (X) in the proper box following each attribute.

For each trait:

First - Rate yourself

Then - Rate your salesman

Then - Rate your salesman as you believe he will rate himself

Finally - Rate yourself as you believe he will rate you.

The salesman to be evaluated on this page is_____

AR MALIA

PART II

The following 17 statements are about things you may or may not like; about things with which you may or may not agree. Look at this example:

- A. Ambition should be moderate.
- B. One should get ahead by work.

Which of these statements do you agree with more? Circle its letter, either A or B. If you agree with both, choose the one you like better. If you disagree with both, choose the one you dislike less (the one you agree with more). Your choice should be a description of your own personal likes and feelings. Be sure that you circle the letter A or the letter B in each pair of statements. You cannot be given a score unless you make a choice for each pair. So please do not skip any.

- 1. A. What matters is what one can accomplish.
 - B. It is desirable to be more cooperative than competitive.
- 2. A. If a man is trying to accomplish something it is necessary to gamble "all or nothing".
 - B. A secure job is better than a risky one which involves high stakes.
- 3. A. A person should be able to fit into any kind of group.
 - B. People like to be able to do things better than other people can.
- 4. A. Wasting time shouldn't particularly bother a person.
 - B. Anyone who doesn't take work seriously should be disliked.
- 5. A. Being "people-minded" is preferable to being "job-minded".
 - B. A person should like to find out what great men have thought about various problems in which he is interested.
- 6. A. Being like certain people whom one admires is an important aim in life.
 - B. It's all right to be an individual, but a person shouldn't want to be very different from those around him.
- 7. A. Anyone who doesn't take work seriously should be disliked.

- B. Ambition should be moderate.
- 8. A. Teachers should be more concerned with the child's social adjustment than with his academic progress.
 - B. The teacher is supposed to see that the children learn a curriculum, not that they enjoy it or learn group cooperation.
- 9. A. A person should judge people by their traits—not by what they actually do.
 - B. It's more important to get the job done than worry about hurting people's feelings.
- 10. A. To have security is better than the chance for great achievement.
 - B. It is better to be famous than well-liked.
- 11. A. It's a good idea to have a strong point of view about things.
 - B. When planning something, one likes to get suggestions from his friends.
- 12. A. In sports one should rather be thought of as a good team member than a star player.
 - B. A person should like situations which are demanding.
- 13. A. A person should like to have strong attachments with his friends.
 - B. Success against odds is the best of American ideals.
- 14. A. What matters is what one can accomplish.
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PART III page seven

This is a study of some of your attitudes. Of course, there is no right answer for any statement. The best answer is what you feel is true of yourself.

You are to respond to each question on the answer sheet according to the following scheme:

	A at all e of my f	B Slightly true of myself	C About half- way true of myself	D Mostly true of myself	E True mysel				
	ember, the lies to yo		is the one wh	ich	Not T	rue			True
1.			d find someone my personal pro		A	В	С	D	E
2.		uestion my w k others do.	orth as a perso	on, even	A	В	С	D	E
3.	it diffic I think m	ult to belie	things about move they really kidding me or	mean it.	A	В	С	D	E
4.			cism or anyone just can't tak		A	В	С	D	E
5.	I'm afrai	•	ocial affairs in will criticist ong thing.		A	В	С	D	E
6.	tively bu	t I just don	t living very o't believe I'voies in better o	e got it	A	В	С	D	E
7.		ward people	feelings and as being quite		A	В	С	D	E
8.	satisfied turns out that this	with any jo well, I get is beneath	ust won't let i b I've donei a very smug fo me, I shouldn's this isn't a fo	f it eeling t be	A	В	С	D	E
9.	like to h	ave the feel m knowing I'	other people. ing of securit m not too diff	y that	A	В	С	D	E

page eight

10.	I'm afraid for people that I like to find		Not True				
	out what I'm really like, for fear they'd be disappointed in me.	A	В	С	D	E	
11.	I am frequently bothered by feelings of inferiority.	A	В	С	D	E	
12.	Because of other people, I haven't been able to achieve as much as I should have.	A	В	С	D	E	
13.	I am quite shy and self-conscious in social situations.	A	В	С	D	E	
14.	In order to get along and be liked, I tend to be what people expect me to be rather than anything else.	A	В	С	D	E	
15.	I seem to have a real inner strength in handling things. I'm on a pretty solid foundation and it makes me pretty sure of myself.	A	В	С	D	E	
16.	I feel self-conscious when I'm with people who have a superior position to mine in business or at school.	A	В	С	D	E	
17.	I think I'm neurotic or something.	A	В	С	D	E	
18.	Very often I don't try to be friendly with people because I think they won't like me.	A	В	С	D	E	
19.	I feel that I'm a person of worth, on an equal plane with others.	A	В	С	D	E	
20.	I can't avoid feeling guilty about the way I feel toward certain people in my life.	A	В	С	D	E	
21.	I'm not afraid of meeting new people. I feel that I'm a worthwhile person and there's no reason why they should dislike me.	A	В	С	D	E	
22.	I sort of only half-believe in myself.	A	В	С	D	E	
23.	I'm very sensitive. People say things and I have a tendency to think they're criticizing me or insulting me in some way and later when I think of it, they may not have meant anything like that at all.	A	В	С	D	E	

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PART IV page ten

Listed below are a number of statements. Each represents a commonly held opinion and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number following each statement. The numbers and their meaning are indicated below:

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If you agree slightly, circle +1

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2.	The best way to handle people is to tell them what they want to hear.	+3	+2	+1	-1	-2	-3
3.	One would take action only when sure it is morally right.	+3	+2	+1	-1	-2	-3
4.	Most people are basically good and kind.	+3	+2	+1	-1	-2	-3
5.	It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	+3	+2	+1	-1	-2	-3
6.	Honesty is the best policy in all cases.	+3	+2	+1	-1	-2	-3
7.	There is no excuse for lying to someone else.	+3	+2	+1	-1	-2	-3

					pag	e el	even
			rong ree			rong sagr	-
8.	Generally speaking, men won't work hard unless they're forced to do so.	+3	+2	+1	-1	-2	-3
9.	All in all, it is better to be humble and honest then to be important and dishonest.	+3	+2	+1	-1	-2	-3
10.	When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which carry more weight.	+3	+2	+1	-1	-2	-3
11.	Most people who get ahead in the world lead clean, moral lives.	+3	+2	+1	-1	-2	-3
12.	Anyone who completely trusts anyone else is asking for trouble	+3	+2	+1	-1	-2	-3
13.	The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.	+3	+2	+1	-1	-2	-3
14.	Most men are brave.	+3	+2	+1	-1	-2	-3
15.	It is wise to flatter important people.	+3	+2	+1	-1	-2	-3
16.	It is possible to be good in all respects.	+3	+2	+1	-1	-2	-3
17.	Barnum was wrong when he said that there's a sucker born every minute.	+3	+2	+1	-1	-2	-3
18.	It is hard to get ahead without cutting corners here and there.	+3	+2	+1	-1	-2	-3
19.	People suffering from incurable diseases should have the choice of being put painlessly to death.	+3	+2	+1	-1	-2	-3
20.	Most men forget more easily the death of their father than the loss of their property.	+3	+2	+1	-1	-2	-3

APPENDIX D

RULES FOR CODING RESPONSES TO THE AUDIO VISUAL SELLING SIMULATION "A SALES CALL ON THE HOLT COMPANY."

NOTE ON APPENDIX D:

These rules are taken from an unpublished Ph.D. dissertation completed by Gary M. Grikscheit, "An Investigation into the Ability of Salesmen to Monitor Feedback," Michigan State University, East Lansing, Michigan, 1971, pp. 203-205.

RULES FOR CODING

The rules for coding convert a salesman's written responses to open ended questions into Idea Scores and, where applicable, determine whether that score was triggered by verbal or non-verbal stimuli.

 Determining Idea Scores - To determine an Idea Score the following rules apply:

Rule	Content	Idea Score
a.	Empty cell or content crossed out	0
b.	One object	1
	An object can be:	
	- A symbol: \$, &, or +	
	- An abbreviation: IBM, NCR	
	- A word: Holt, listen	
	 A word modified by an adjective: new system 	
c.	One object and a relationship	1
	A relationship can be:	
	- A verb	
	- A verb and adverb	
	Example: "Had another appointment." relationship object	
d.	Two objects and a relationship	1
	Example: "Asked salesman for literatur	<u>e</u> ."

relationship object

Rule		Content	Idea Score
e.	One or tw	o objects, a relationship, etment	2
	Adjustmen	nt can be:	
	- A p	repositional phrase	
		ner qualifying phrase or nuse	
	Example:	"Asked for another appointm at a more convenient time."	ent
		adjustment	
f.		o objects and a relationship a conjunction	2
	Example:	"Morley does not want change and he mentioned competition	
g.		lancy, score using rules <u>a</u> subtracting 1 for each	-1
	Example:	"Knight turned cold, lack of interest." Both "Knight turned" and "lack of interest" receive a l for a total of 2 but the redundancy is scored as a minus l, making the fin Idea Score equal to l.	,
h.	For direct behavior	discussion of George Day's	0
Class	sifying Ide	ea Score As Verbal Or Non-ver	bal -
To de	etermine wh	nether an Idea Score is class	ified under
verb	al or non-v	verbal, the following rules a	pply:
a.	Content is	s verbal, if it is a literal	report of
	all or par	rt of the buyer's spoken or w	ritten
	words in t	the section of the audio-visu	al stimuli
	immediate	ly preceding the test point h	eino

2.

analyzed.

- Example: "Morley mentioned he does not want change and he mentioned competition."
- b. Content is non-verbal, if it reports action or the absence of action in the section of the audiovisual stimuli immediately preceding the test point being analyzed.

APPENDIX E

SUMMARY TABLES FOR DATA ANALYSIS

TABLE 1E

Intercorrelations of Independent Variables, Age and Length of Employment

		Number			1	
	Age	of Years Employed	"Empathy"	Other- Directedness	Self- Accentance	Machiavellianism
			7		22.00	
Age	1.00	/				
No. Years Employed	.34*	1.00				
"Empathy"	.14	02	1.00			
Other-Directedness	05	90.	.18	1.00	/	
Self-Acceptance	07	.02	04	26*	1.00	
Machiavellianism	20*	90.	11	05	04	1.00

* Notes significant correlation at .05 level.

TABLE 2E

Kolmogorov-Smirnov Two Sample Tests Comparing Salesmen and Sales Managers

Hypotheses	Variable	Highest Group	Direction	Q	Level of Significance
IE	"Empathy"	Salesmen	N.P.	.1750	N.S.
IIE	Other-Directedness	Salesmen	N.P.	. 2000	N.S.
IIIE	Self-Acceptance	Sales Managers	ф.	.2875	.0013*
IVE	Machiavellianism	Salesmen	N.P.	.3125	**2000.

* indicates one-tailed test ** indicates two-tailed test since the relationship was not in the predicted direction

TABLE 3E
Summary of Nonparametric Findings

Hypothesis	<u>Variables</u>	Test	Direc- tion	Signifi- cance
IA	"Empathy" and verbal cues	rs	P	.05
IB	"Empathy" and nonverbal cues	rs	P	NS
IC	"Empathy" and total cues	rs	P	NS
ID	"Empathy" and performance ranking	rs	P	.03
ID	"Empathy" and dollar sales	rs	P	NS
ID	"Empathy" and compensation	rs	P	NS
ID	"Empathy" and salesmanagers	"KOL"	NP	NS
IIA	Other-Directedness and verbal cues	rs	NP	NS
IIB	Other-Directedness and non- verbal cues	rs	P	NS
IIC	Other-Directedness and total cues	rs	P	NS
IID	Other-Directedness and performance ranking	rs	NP	NS
IID	Other-Directedness and dollar sales	rs	P	.05
IID	Other-Directedness and compensation	rs	P	NS
IID	Other-Directedness and salesmanagers	"KOL"	NP	NS
IIIA	Self-acceptance and verbal cues	rs	P	NS
IIIB	Self-acceptance and non- verbal cues	rs	P	.05
IIIC	Self-acceptance and total cues	rs	P	NS

TABLE 3E--Continued

Hypothesis	<u>Variables</u>	Test	Direc- tion	Signifi- cance
IIID	Self-acceptance and performance ranking	rs	P	NS
IIID	Self-acceptance and compensation	rs	NP	NS
IIID	Self-acceptance and sales- managers	"KOL"	P	.00013
IVA	Machiavellianism and verbal cues	rs	P	NS
IVB	Machiavellianism and non- verbal cues	rs	P	NS
IVC	Machiavellianism and total cues	rs	P	NS
IVD	Machiavellianism and performance ranking	rs	P	NS
IVD	Machiavellianism and dollar sales	rs	P	NS
IVD	Machiavellianism and compensation	rs	NP	NS
IVD	Machiavellianism and sales- managers	"KOL"	NP	.0007

TABLE 4E
Loadings of Ten Variables on Four Orthogonal Factors

			Varimax	Rotation	
		<u>F</u> 1	<u>F</u> 2	<u>F</u> ₃	<u>F</u> 4
1.	"Empathy"	.1390	0132	.7954	0292
2.	Other-directedness	.0772	.1906	1758	.7351
3.	Self-acceptance	.1711	.0146	1662	7469
4.	Machiavellianism	0848	0134	.6440	.0367
5.	Performance ranking	.0752	.6720	.3069	3298
6.	Dollar Sales	.0148	.8673	.0108	.1997
7.	Income	.0144	.8510	1635	.1678
8.	Verbal cues	.8313	.0544	.1146	.1053
9.	Nonverbal cues	.7449	.0069	.0962	.1862
10.	Total cues	.9939	.0351	.0227	0206
Perc	ent variance	23.0152	19.6912	12.4987	13.2360
Cum.	percent variance	23.0152	42.7064	55.2051	68.4411
Comm	unality	61.36	61.50	42.34	66.02

