A Training Seminar in Human Relations and a

Personality Trait Study

οf

Internal Auditors

#### DISSERTATION

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

bу

Dennis L. Bull, B.A., M.A., Th.M.

Denton, Texas

February 1983

Bull, Dennis L., <u>A Training Seminar in Human Relations</u> and a Personality Trait Study of Internal Auditors. Doctor of Philosophy (Counselor Education), May, 1983, 68 pp., 20 tables, bibliography, 48 titles.

Little research has been done on the personality of internal auditors. However, there does exist a negative stereotype. They are seen as hostile and unsympathetic. The purpose of this research was to see if the negative stereotype was indeed true and to see if undesirable behavior could be changed through training.

Subjects for the human relations training program were recruited from the Dallas Chapter of the Institute of Internal Auditors (I.I.A.). There was a mix of volunteers and those assigned to come. They were given the Leadership Opinion Questionaire (LOQ), and the Index of Interpersonal Communicative Competence (IICC). Their supervisors were given the LOQ to be answered the way they thought their auditors would answer (LOQ-Sup.).

Thirteen subjects were assigned to the experimental group, and 22 to the control group. All but six were randomly assigned. The experimental group took the human relations training seminar called "Adventures in Attitudes." The control group was given articles to read related to human relations. Later, the control group was allowed to take the seminar and then was again retested.

The results, using analysis of covariance showed the

experimental group compared to the control group significantly (p=.05) increased the consideration scale scores, and decreased the structure scale scores of the LOQ. The IICC and LOQ-Sup. showed no significant change. Using the correlated t-test, the control group showed no significant change on any of the tests after taking the seminar compared to their pretraining scores.

Also, the Taylor-Johnson Temperament Analysis (T-JTA) was given to 94 internal auditors, 64 male auditors and 30 female. Dallas Chapter volunteers made up 61 subjects and the other 33 subjects came from various locations throughout the U.S.

In general it was found that auditors are significantly more unexpressive, unsympathetic, dominant, hostile, self-disciplined and not depressed than the general population.

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# A TRAINING SEMINAR IN HUMAN RELATIONS AND A PERSONALITY TRAIT STUDY OF INTERNAL AUDITORS

Internal auditing is a relatively new occupational group. An internal auditor is employed by his company to monitor all procedures from basic accounting practices through management processes. Internal auditing is defined by Sawyer (1981, p.6) as

An independent appraisal of the diverse operations and controls within an organization to determine whether acceptable policies and procedures are followed, established standards are met, resources are used efficiently and economically, and the organization's objectives are being achieved.

Ideally this function is an extension of management. It extends beyond fault-finding and the monitoring of rules to include the appraisal of those rules to find if they are valid or necessary. An internal auditor often operates primarily with finances and accounting controls, but his duties do extend to management functions as well. Internal auditors are often recruited from the public accounting profession, which has as one of its duties to carry out external audits. Whereas the public accountant is independent of the company and works to insure the accuracy of the financial statement, the internal auditor works within the company and monitors a broad range of financial and management areas.

In 1941 a group of internal auditors incorporated into an international organization called the Institute of Internal Auditors (I.I.A.). There are over 24,000 members with local chapters all over the nation and in 85 countries. The I.I.A. administers an examination by which, a person becomes a Certified Internal Auditor (C.I.A.).

However, the internal auditing profession lacks empirical research on the personality of its members because of its relatively new and separate identification. Unfortunately, a general image of the typical internal auditor does exist and it is not complimentary. Others perceive him to be an unsympathetic and overly critical analyst. The internal auditor's interpersonal communication with auditees and employees and his lack of considerate behavior may be a major problem in his job performance and effectiveness.

Churchill and Cooper (1965) found that 58% of 26 respondents to a questionnaire saw the auditor as most like a policeman. Mints (1972, p.2) found employees saying, "...if only the auditors had a little more empathy and considered the feelings of the employees..." In a separate article, Mints (1973) reported one of the primary causes of auditee antagonism was

Hostile audit style: a cold and distant aspect, a lack of understanding of the auditee's problems, an absence of empathy, an air of smugness or superiority, an excessive concentration on insignificant errors, a prosecutorial style when asking questions, and a greater concern with parading defects than helping constructively to improve conditions. (p.35)

Sawyer (1981), author of the leading textbook on internal auditing, devotes an entire chapter to the problems of dealing with people. He points out that the goal of doing an audit is to get the auditee to want to implement the recommendations of the auditor. Therefore, the style of dealing with the auditees may be just as important to an auditor's overall job function as his technical competence. Mints (1972) reviewed The Internal Auditor from 1950 to 1970 and found a multitude of articles concerning auditors' relationships to auditees. He takes this as confirmation of the problem, but he found no record of any attempt to establish its extent or relative importance.

Internal auditors need training to improve their human relations skills. This is the problem. If the stereotyped image of hostility has some basis it would appear that job effectiveness and job functioning are decreased by the effect of negative personality traits and insufficient interpersonal skills. The purpose of this research is to identify personality traits that may pose problems for auditors and ascertain whether behaviors from those traits may be changed through training. In that this is a newly defined occupation with little previous research, there is a need to extend the studies of behavioral research for this group.

There appears to be no existing research that has objectively studied the personality traits of the specific

population of internal auditors. Also, there are surprisingly few studies that have objectively researched the personality traits of accountants in general. This was determined by a computer search of the literature. This was also confirmed by the researcher personally talking with the following people: Mr. John Datola, director of research for the Institute of Internal Auditors Research Foundation; Dr. Joseph DeMaris, head of the accounting department, North Texas State University (NTSU); Dr. William Morris, accounting professor teaching in the area of auditing, NTSU; Dr. Doug Johnson, psychology professor teaching in the area of industrial psychology, NTSU.

The negative stereotype of accountants is often stated in the literature. For instance, the well-known humanistic psychologist Maslow (1965) saw accountants as being overly concerned with numbers, tangibility, predictability, control, law and order, and tradition. He thought psychiatrists view accountants as the most obsessional of any occupational group. Maslow saw this as ultimately the mistrust of self which is opposite from the creative personality which trusts itself sufficiently to face new problems and situations without any preparation. O'Dowd and Beardslee (1960) found that college students had an image of accountants as conforming, having low social interest, poorly developed esthetic sensibility, passive and cold, as well as constructive and well-balanced.

Some studies have researched the personality traits of accounting students. Peterson (1966) found them scoring high on the social introversion scale of the MMPI. Segal (1961) did a psychoanalytic study using the Rorschach Ink Blot Test and the Bender Visual-Motor Gestalt Test. He found accounting students readily accepted social norms, had positive and rigid identification with authority figures, had little tolerance for ambiguity, tended to control their emotions, and were insensitive and awkward in handling complex emotional situations.

Schlesinger (1963) did a psychoanalytic study of seniors and graduate students comparing majors in accounting, chemical engineering, and educational psychology. She found the accounting students highest on cleanliness, orderliness, regularity, accumulation, retention of possessions, friendly relations with others, distaste for direct expression of anger, and distaste for wastefulness. The engineering students were very much like the accounting majors and the psychology students were most unlike them.

In contrast, Reckers and Bates (1978) found no difference using the California Personality Inventory (CPI) between accounting students and the general college norms. Also, Baker (1976) did a comparison between accounting majors and non-accounting majors on the Rokeach Values Scale. He found accounting majors were: less concerned with a "comfortable life", placed greater value on the "world of beauty", were less "ambitious," were more "imaginative", and

had a lower sense of "responsibility". Kochanek and Kochanek (1977) found mixed results in confirmation of the stereotype. They used the 16PF and compared accounting students to the general undergraduate norms. They found the accounting students intellectually brighter, more self-assured, assertive, and emotionally stable. But, they also found them more tough-minded, suspicious, sober, and reserved.

A few studies have researched the personality traits of professional accountants. Several of these studies have compared the personality traits of various levels of accountants, but did not compare the accountants to the general population. For instance, DeCoster and Rhode (1971) compared partners of various CPA firms to the managers and juniors under them using the CPI. They found the partners higher on the responsibility, self control, good impression, communality, and femininity scales but lower on the capacity for status, sociability, social presence, socialization, tolerance, achievement via independence, intellectual efficiency, and flexibility scales. Harris (1972) did a similar study comparing partners to students, seniors, and managers using the CPI. The partners were significantly different from the students on 12 scales, from the seniors on 6 scales, and from the managers only on 1 - responsibility. Willis (1975) also did a similar study comparing partners with seniors, supervisors, and staff accountants

using the 16 PF. He found the non-partners were apprehensive and socially clumsy. In addition, he compared high and low job satisfaction groups and found no difference. Interestingly, he compared the specialties of auditing, tax, and management services and found no difference among the three.

Coffman (1973) compared public accountants, private accountants, and accounting students using the CPI. too, found many differences between the students and the practicing accountants. The public and private accountants were more alike than different. They only differed on one scale, flexibility, with the public accountants being more flexible. Additionally, he compared the public accountants from the eight largest public accounting firms with the non-"big-eight" public accountants and found the "big-eight" accountants higher on dominance, sociability, social presence, self-acceptance, and achievement via independence. Istvan (1973) did a study using the Predictive Index which measures dominance, extraversion, passivity, and conformity. He found the partners to be high on dominance and extraversion, and low on passivity. Staff accountants he found to be low on dominance and extraversion, and high on conformity. Interestingly, he found the audit managers to have the same profile as the staff accountants. He took this to mean that audit managers had very good organizational ability but poor relational skills because they are intense,

impatient, driving, brusque, and have little understanding of people.

A few researchers have studied the personality traits of accountants and compared them to the population in general, as well as between differing levels of accountants. Jacoby (1980) used the Myers-Briggs Type Indicator (MBTI) which is based on Jungian typology. It measures four pairs of opposites: extroversion vs. introversion, sensing vs. intuition, thinking vs. feeling, and judgment vs. perception. Extroversion (E) is an orientation to the outer world of actions, objects, and persons. Introversion (I) is an orientation to the inner world of concepts and ideas. Sensing (S) is an orientation to the immediate, real, practical facts of experience and life. Intuition (N) is an orientation to the possibilities, relationships, and meanings of experience. Thinking (T) is an orientation towards objectively, impersonally considering causes and where decisions may lead. Feeling (F) is an orientation towards subjectively and personally weighing values and how they matter to others. Judgment (J) is an orientation to a decisive, orderly way aiming to control events. Perception (P) is an orientation to a spontaneous, flexible way aiming to understand life and adapt to it. Each of these four pairs can be arranged to produce 16 different combinations of personality types. Jacoby found slightly more introverts (53%) than extroverts (47%). He found substantially more

thinking (68%) than feeling (32%) types, and judgment (75%) than perceptive (25%) types. The most frequent type was the ISTJ (19.8%) followed by the ESTJ (13.8%). The types ISTJ, INTJ, and ENTJ were found in significantly greater proportions than the population in general. There was a similarity across CPA firms and no difference existed between CPA's and non-CPA's. Interestingly, the ISTJ type was twice as frequent among successful auditors than successful management accounting service people or tax practitioners, whereas there was no difference between the latter Shackleton (1980) did a similar study in Britain using the MBTI. He found more introverts (58%) than extroverts (42%) among accountants. The largest two groups, ISTJ and ESTJ. combined for 41% of his total population. Also, Barrett (1969) studied 80 professional auditors among public accountants and found the ISTJ type of the MBTI to be the largest single personality type.

In other studies, Jacob and Traxler (1954) measured accountants on the Kuder Preference Test and found they liked to direct others, preferred new and challenging situations to old and familiar ones, and avoided conflict. Segal and Szabo (1964) compared accountants to writers. They found writers tolerated ambiguity better and handled complex emotional situations better. They also found accountants had a more rigid identification. Gray (1963) used the Edwards Personal Preference Schedule and the Miller

Occupational Values Indicator. He found accountants to be people who: move away from people, are quantitative, have a high level of striving, are rigid, resistant to change, strive to influence others' beliefs, are hard workers. persistent, and insist on closure. The 16PF handbook (Cattel, Eber, & Tatsuoka, 1970) found accountants to be conscientious, intelligent, tough-minded, shrewd, dependent, serious, submissive, and self-sufficient. Dinnis and McIntyre (1979) used a variety of measures and found accountants high on security, routine, conventionality, flexibility, and concentration, but low on creativity and empathy. Martin (1978) found CPA's willingness to risk as a varying thing related to the situation. Sometimes they were willing to risk with only a 35% chance of success, at other times it had to be 80% sure before they would. Sneed (1980) studied 116 auditors in public accounting and found they had a tendency towards conservatism as measured by the Wilson and Patterson Conservatism Scale, and a distinct aversion to risk as measured by the Wallace Choice Dilemma Procedure. In a Canadian study, Armenic, Aranya, and Pollock (1979) used Holland's personality types and found 27.5% fit the conventional category, 21.4% the enterprising category, and 19.3% the social category. In 1971, DeCoster reviewed the literature and concluded there were two distinct groups of accountants, one which fit the accountant stereotype and one that did not. Now, in 1982, it would seem the same overall

with the weight of the evidence leaning a little more on the stereotypical side.

Mints (1972) was the research project director of an extensive study on behavioral aspects of internal auditing. He designed a series of laboratory projects used to simulate an internal auditor using different styles of interpersonal behavior. He found that group project completion times were more improved by a friendly helping observer as opposed to a neutral observer or an aloof, critical observer. In a series of field studies, Mints found that auditees' reactions and acceptance of the auditors' recommendations directly corresponded to the auditors' behavior. The more participative the approach to the audit, the more acceptance its findings drew.

There is some related research in which a structured human relations training program has been given to managers and executives. Carron (1964) trained supervisors in a chemical company for two hours a week for six months. He used the Leadership Opinion Questionnaire (LOQ) and the Authoritarianism F Scale of Adorno. Their structure and authoritarianism scores significantly decreased after training. Consideration did not. Seventeen months later, the follow up found no changes. Hand and Slocum (1970) trained middle managers for 28 weeks, one and one half hours once a week. They used the LOQ and others and found no significant change 90 days later. Then in 1972 Hand and Slocum did a follow up study. They retested with the LOQ and its related

test, the Supervisor Behavior Description (SBD) 18 months after the experimental group completed the training. The consideration scale of both the LOQ and SBD had significantly improved. These attitude changes were also accompanied by performance changes. Similarly, Hand, Richards, and Slocum (1973) used the LOQ and SBD to measure change in middle managers after training. Again, there was no change after 90 days but the consideration scale did change 18 months later.

Masvick (1971) reviewed the literature on the effectiveness of human relations training for scientists, technicians, and engineers. He compared this with the effectiveness of training for non-technical populations. He found that 5 out of 7 studies showed significant change for the technical populations as opposed to 12 out of 36 for the non-technical populations.

Nothing was found in related literature on the effectiveness of a training program for human relations skills.

"Adventures in Attitudes" was selected as the human relations program for this study. (See Procedure) There was no published research using this program as established by a search of related literature and was further verified through personal contact with the publishers of the program.

The following hypotheses were formulated for this study.

 When compared to the control group, the experimental group will score significantly higher on the consideration scale of the Leadership Opinion Questionnaire (LOQ).

- When compared to the control group, the experimental group will score significantly higher on the consideration scale of the LOQ taken on the auditors by their supervisors (LOQ-Sup.).
- 3. When compared to the control group, the experimental group will score significantly higher as measured by the Index of Interpersonal Communicative Competence (IICC).
- 4. When compared to their pretreatment scores, the control group will show a significantly higher score on the consideration scale of the LOQ after they have received the experimental treatment.
- 5. When compared to their pretreatment scores, the control group will show a significantly higher score on the consideration scale of the LOQ-Sup. after they have received the experimental treatment.
- 6. When compared to their pretreatment scores, the control group will show a significantly higher score as measured by the IICC after they have received the experimental treatment.
- 7. The composite personality profile measured by the norms of the Taylor-Johnson Temperament Analysis (T-JTA) will indicate
  - a significantly lower sympathy score for internal auditors than the general population,

b. a significantly higher hostility score for internal auditors than the general population.

#### Method

### Subjects

Subjects for the human relations training seminar were volunteers from members of the Dallas Chapter of the I.I.A. In addition, non-member subjects were assigned to take the training by their supervisors who were Dallas Chapter members. Therefore, a mix existed of those volunteering and those assigned to come. The Chapter officially endorsed this research project and actively supported it as well as encouraging participation by its members. Thirty-five subjects received the training.

There were 94 subjects who agreed to take the personality test which related to the second aspect of this study. Data were gathered from the 35 subjects who received the training, from 26 other members of the Dallas Chapter, and from 33 subjects from a wide variety of geographic locations across the country who were recruited from participants in I.I.A. sponsored seminars unrelated to this research. In total the test was taken by 30 females and 64 males.

#### Instruments

The instruments used in this research were as follows:
The Leadership Opinion Questionnaire, The Leadership Opinion
Questionnaire-Supervisor, The Index of Interpersonal

Communicative Competence, and the Taylor-Johnson Temperament Analysis.

The Leadership Opinion Questionnaire (LOQ) was selected because of research showing its statistical validity and because it measures one of the exact dimensions this experimental procedure hoped to modify. (See Appendix 5) The LOQ measures two dimensions of supervisory and leadership behavior: structure and consideration. It consists of 40 statements to which the respondent answers as to how frequently he thinks he should do what is described in the There are five choices to each statement which are given scoring weights from zero to four. The manual (Fleishman, 1969) reports that factor analysis has revealed the measures of consideration and structure to be independent and that the correlation coefficients between the two are low. Structure is the extent an individual is likely to structure his own role and those of his subordinates toward goal attainment. This measure is irrelevant to the purpose of this study. But the dimension called consideration by the test looks at exactly what this research hoped to be able to influence. Fleishman (1969), researcher and author of the LOQ manual, defines consideration in the following way:

It reflects the extent to which an individual is likely to have job relationships with his subordinates characterized by mutual trust, respect for their ideas, consideration of their feelings, and certain warmth between himself and them. A high score is indicative of a climate of good rapport

and two-way communication. A low score is indicative that the individual is likely to be more impersonable in his relations with group members. (p,1)

In using the split-half method, Fleishman (1969) found that reliability for the structure scale varied from .69 to .88 and for the consideration scale from .62 to .89. Test/retest coefficients for two different groups were .74 and .67 for structure, and .80 and .77 for consideration.

The Leadership Opinion Questionnaire was developed to maximize construct validity by using factor-analysis to develop the two dimensions and item analysis to produce homogeneous measures of those dimensions. Empirical validity studies were carried out in a variety of organizations using various criteria. (See Appendix 1) In one such study (Parker, 1963) structure and consideration scores were found to be significantly correlated with a number of group effectiveness criteria. Consideration was related to "favorable attitudes toward supervision" (r=.51), to "group feelings of goal achievement" (r=.24), and to "recognition" for good performance" (r=.23). In none of the studies were there found cases where low consideration went with good performance. The results with structure depended more on the situation. One study (Fleishman, Harris, & Burtt, 1955) has shown that managers low in both consideration and structure were more likely to be bypassed by subordinates. The manager with high structure and low consideration was more likely to show more stress, turnover, and grievances

among subordinates. (Fleishman & Harris, 1962) Related validity studies have been carried out on the Supervisory Behavior Description (SBD) which was similarly developed at the Ohio State University and which measures the same two dimensions. In it subordinates are asked to describe their supervisors. Consideration correlated -.49 and -.42 with subordinates' absenteeism and accidents, respectively, and structure correlated .27, .45, and .51 with subordinates' absences, labor grievances and turnover respectively (Fleishman, Harris, & Burtt, 1955).

Validity of the Leadership Opinion Questionnaire is supported by the good reviews in Buros. Kirchner (Buros, 1965) says there is good evidence that the consideration score correlates with successful ratings of supervisory performance in a variety of settings. He notes it was normed on a sizeable group of 780 and says:

Overall this is not a bad instrument. It has been developed through careful research and careful statistical techniques. It appears to be reliable, presents good evidence of validity, and presents reasonably good norms. It seems well suited for research activities and training activities... (p. 1372)

Gribb (Buros, 1972) says,

The most notable, and the most complete, research directed toward the determination of dimensions of leader behavior has been that of the Ohio State Leadership Studies. (p. 1149)

Gribb notes that a number of subsequent studies have confirmed that consideration and structure may be regarded as the two major dimensions of leader behavior. He concludes, "Despite difficulties and as yet incomplete information, the LOQ is a well-made instrument." (p. 1150)

The LOQ manual does caution that there is a need to establish a link between attitude and behavior. The attitudes shown on the test will not necessarily be reflected in behavior. But even this correlates with one of the purposes of the research, which is to change attitudes which will hopefully be translated into behavior change that can be measured by observation from the supervisors.

The LOQ was designed to measure traditional supervisory/subordinate relationships. The relationship between auditor and auditee is not exactly the same. Certainly all the aspects of the test that measure initiating structure do not apply. Only in an extremely limited sense does an auditor set goals for an auditee. However, the consideration scale does measure an aspect of a relationship which would parallel supervisor/subordinate relationships and auditor/auditee relationships. The auditor must illicit cooperation from the auditee to do his job effectively. One of the main goals of doing an audit is to make recommendations for future actions. The auditor wants the auditee to accept and initiate those recommendations. Cooperation and initiation are greatly enhanced in an atmosphere of consid-In addition to any self-report measure, an outside eration. observation measure would enhance the validity of any' The Ohio State Leadership Studies have devised two change.

measures that give subordinate reports of supervisory style on the same two dimensions of structure and consideration. They are the Leadership Behavior Description Questionnaire (LBDQ) and the Supervisor Behavior Description (SBD). The questions are posed with the traditional supervisor/ subordinate relationship in mind and not appropriate for the auditor/auditee relationship, even on the consideration scale.

Through a thorough search of the literature, no valid instrument was found which measures the behavior, focused on in this research, of a subordinate as reported by his supervisor. Therefore, the researcher decided to modify a statistically valid test, the LOQ, with statistically known independent variables. The audit supervisors were asked to take the LOQ and answer it according to the attitudes they see in their subordinate auditors' behavior and how they think their auditors would answer. This was called the LOQ-Sup. The use of the LOQ in this manner has no precedent in the literature, but by using a test with known criterion-related validity and then modifying it, this may possibly have an advantage over using a newly designed instrument with only face validity.

The Index of Interpersonal Communicative Competence (IICC) is an instrument designed by Vaught (1979) for his doctoral dissertation in Business Management at North Texas State University. (See Appendix 6) Eight supervisory

problem situations are constructed. The respondent is told to pick one of five choices which most closely corresponds with how he would react. The five choices correspond to five levels of interpersonal communicative competence. levels were devised based on the theories of several humanistic psychologists such as Truax and Carkhuff (1967). Rogers (1951), Perls (1969), and Ellis (1962). Level one is judgmental and is lowest in competence. Level two is the advisory level which fosters a sympathetic, advisory relationship. Level three is named empathetic understanding and conveys empathy, respect and genuineness. Level four is confrontation, which goes beyond mere responsiveness to the point of confronting one's irrational and irresponsible attitudes and behavior. The final level is level five and is problem solving. It provides some guidance in solving a problem along with empathy and confrontation.

Vaught used 309 subjects varying in sex and age from a cross section of Dallas/Fort Worth's publically and privately owned businesses. Managerial as well as first-line supervisors were tested. The IICC scores were correlated with the scores on the Personal Orientation Inventory (POI) and with scores on the consideration scale of the Supervisory Behavior Description (SBD). There was found a significant positive relationship to nine of the twelve scales of the POI, which substantiates a positive relationship to this general measure of self actualization. The correlation of

the IICC to the consideration scale of the SBD was only significant at the .10 level.

The Index of Interpersonal Communicative Competence was chosen because it measures behavior which could be expected to change through training. It does measure an aspect of behavior which was hypothesized to create problems for auditors - interpersonal relationship skills.

The Taylor-Johnson Temperament Analysis (T-JTA) is the selected personality instrument for this research. (See Appendix 4) It was selected specifically to gather a composite profile of what the sample looks like. It was also selected because it is one of the few widely used, standardized, personality tests that measures both empathy and hostility. Other widely used tests measure one or the other but not both. The Taylor-Johnson Temperament Analysis is a trait-measure test and was not used in a pretest/ posttest fashion to measure change.

The T-JTA manual (Nash 1980) gives statistics for reliability on a test/re-test interval yielding a correlation ranging from .71 to .87 on the various scales. On a split-half reliability estimated by analysis of variance, it showed coefficients ranging from .76 to .90.

The construct validity of the T-JTA was done by comparing its scales to the scales in the Sixteen Personality

Factor Questionaire (16PF) and the Minnesota Multiphasic

Personality Inventory (MMPI). (See Appendix 2) For instance

Sympathetic (T-JTA) is correlated .31 with E-Accommodating

(16PF) and .34 I-Tender-minded (16PF). Hostile (T-JTA) is correlated .51 with E-Assertive (16PF), .37 L-Suspicious (16PF), and .32 Q4-Tense (16PF). All of the T-JTA scales showed significant correlations with one or more of the MMPI scales.

The T-JTA was originally published as the Johnson Temperament Analysis in 1941. In 1967, it was published in the revised form by Robert Taylor as the T-JTA. It measures traits on a continuum with their opposites: nervous vs. composed; depressed vs. light-hearted; active/social vs. quiet; expressive/responsive vs. inhibited; sympathetic vs. indifferent; subjective vs. objective; dominant vs. submissive; hostile vs. tolerant; and self-disciplined vs. impulsive. Each of the 9 scales has 20 questions pertaining to it. There is also an attitude scale which measures test-taking bias. (See Appendix 4) It was reviewed in Buros (1978) by Robert Stahmann and was given a good review as an adequate research instrument.

## Procedure

Thirty-five subjects were obtained through the Dallas Chapter of the Institute of Internal Auditors. Subjects were recruited through announcements in their local newsletters and in their monthly meetings. Subjects were acquired through the Dallas Chapter board meetings where audit supervisors were asked to send auditors they supervised. The seminar was presented as a research project that involved a four-day human relations training seminar. The

auditors were informed that since it was a research project, they were allowed to participate on a cost-only basis of \$50 per person for a seminar that is nationally marketed for as much as \$400 per person. It was expected that this would be seen as an incentive for participation. For most of the subjects, the fee was paid through the training budget of the companies they worked for. Seminar materials cost \$45 per person with the extra \$5 covering other expenses such as mailing costs. All monies went into a special bank account.

All subjects were divided into two groups - the experimental group and the control group. Each was assigned randomly by the flip of a coin. Random selection was impossible in that six subjects (two in the experimental group and four in the control group) had previous commitments on the assigned date of the seminar, therefore, 13 subjects ended up in the experimental group and 22 in the control group. Both groups were allowed to participate in the seminar, but the control group did not go through the seminar until all testing and data gathering was completed. Subjects from both groups were pretested in small groups at various times during the two weeks before the experimental group began the seminar. At the pretesting meeting, all subjects took the LOQ, IICC, and the T-JTA. During this same two-week time period, the LOQ-Sup. was mailed to the immediate supervisor of each subject. The supervisors took them on their auditors and then returned them by mail to the researcher. Follow-up was done by phone to insure maximum participation. The supervisors were told of this aspect of the research and a cover letter from the Dallas Chapter president of the I.I.A. accompanied the request to fill out the LOQ-Sup. All responses were kept confidential.

At the pretesting meeting, all control group subjects were given a packet of articles and told to read them before coming to the posttest meeting. The articles included showed the importance of human relations skills to internal auditing and explained what interpersonal skills were. The articles were "Dealing With People" (Sawyer, 1981, chap. 2) and "Interpersonal Skills for the Group Leader" (Berg & Landreth, 1979, chap. 2). This packet was given in the hope of setting up similar expectancies of the seminar, and therefore served as a type of placebo. In order to see which group was most effective, the control group, which was given the packet to read, was compared to the experimental group, which was given the seminar. As opposed to doing nothing, the control group was given something to do between the pre- and posttesting.

The posttest meeting was held immediately after the experimental group seminar. The control group subjects were posttested on the LOQ and the IICC later that day at the same location. One month from that date, all subjects' supervisors were mailed the LOQ-Sup. to be taken as a posttest. One month was allowed to give the supervisors

ample time to observe any changes in attitude or behavior of the subjects.

After all the data were gathered, the control group was allowed to participate in the seminar. The seminar was given in the same way to the control group. At the end of the seminar, the control group was again re-tested on the LOQ and the IICC. One month later their supervisors took the LOQ-Sup. to see if the seminar was effective in producing change for the control group. A significant change in scores would be additional support for the effectiveness of this treatment program.

The T-JTA served the purpose of a secondary aspect of this study. It was given to a large number of auditors not participating in the research seminar. It was given after a Dallas Chapter meeting and also in conjunction with another I.I.A. seminar to gain 59 more test scores to total 94 auditors. This obtained useful information to further research and hypothesize who is attracted to auditing and what general strengths and weaknesses auditors possess. The T-JTA was not used in posttesting in that it is a trait-measure not a behavior-measure and, therefore, cannot be expected to change as a result of a single seminar of four days.

The seminar used is the nationally marketed human relations training program entitled "Adventures in Attitudes" (A.I.A.) and is produced by the Personal Dynamics Institute. It is a 30-hour program consisting of 74 structured exercises done in small groups of six to eight. Twenty tape

recorded messages accompany the exercises and they are all completed through group participation. The exercises enhance personal awareness and increase human relations skills. They are structured so that the leader merely gives directions and monitors the time. The program has ten major divisions with two main units each with several projects under each unit. The ten divisions includes the following subjects:

- 1. communication skills and problems in communications
- 2. understanding yourself and removing personal roadblocks
- self-confidence, and self-discovery and awareness
- 4. understanding others and the key to good human relations
- 5. getting through to people and problem-solving skills
- 6. perception of yourself by others and group dynamics
- 7. the secret of motivation and six mental steps to motivation
- 8. how our ego speaks to others and setting goals
- 9. time and management expectations
- 10. guide to a pleasing personality and fulfillment of personal needs

Bob Conklin developed and started teaching the seminar in 1957 through the Minneapolis evening adult education program. In 1970, he and Leo Houser founded the Personal Dynamics Institute to market the seminar. Since then, it has become the leading organization of its type and the

seminar has been given in all 50 states, 18 foreign countries and in 7 languages. The program has been experienced by 250,000 individuals. The A.I.A. seminar was selected because of its availability, wide use, and subjectively perceived helpfulness. It was also selected for its need to be tested empirically for its effectiveness.

The seminar leader must be an approved A.I.A. trainer as required by the Personal Dynamics Institute. Mr. Courtenay Thompson was the trainer for both the experimental and the control groups. As well as being an approved A.I.A. trainer, he holds his Master of Business Administration degree and is a Certified Public Accountant. He is a professional consultant in the internal auditing field and is on the board of the Dallas Chapter of the I.I.A.

#### Results

The LOQ, IICC and LOQ-Sup. were scored by hand by the researcher. The two group analysis of covariance was used to test the significance of the difference between the two groups. The pretest scores served as the covariates. The .05 level of significance was used as the basis upon which to judge statistically significant findings.

Hypothesis 1 stated that when compared to the control group the experimental group would show a significantly higher score on the consideration scale of the LOQ. Means for the two groups on the consideration scale are presented in Table 1.

Table 1

Means for the Consideration Scale of the Leadership Opinion Questionnaire

Mean						
Group	Pre	Post	Adj.			
Experimental (N = 13)	53.62	59.54	59.30			
Control (N = 22)	53.34	53.36	53.51			

The results of the analysis of covariance on the consideration scale are presented in Table 2.

Table 2

Analysis of Covariance Results
for the Consideration Scale of the
Leadership Opinion Questionnaire

df	Mean Squares	F Ratio	Significance of F
1	273.051	16.958	.001
32	16.102		
	1	df Squares  1 273.051	df Squares Ratio  1 273.051 16.958

There was a difference found at the .05 level of significance between groups on the consideration scale. Hypothesis 1 was supported.

There was no hypothesis stated concerning the structure scale of the LOQ. However, the scores were computed and analyzed by the analysis of covariance. Means for the two groups on the structure scale are presented in Table 3.

Table 3

Means for the Structure Scale of the Leadership Opinion Questionnaire

Group	Pre	Post	Adj.	
Experimental (N = 13)	42.77	39.31	40.80	
Control $(N = 22)$	44.43	43.1	44.20	

The results of the analysis of covariance on the structure scale are presented in Table 4.

Table 4

Analysis of Covariance Results for the Structure Scale of the Leadership Opinion Questionnaire

Source of Variation	df	Mean Squares	F Ratio	Significance of F
Between	1	87.302	5.840	.022
Within	32	14.948		

There was a difference found at the .05 level of significance between groups on the structure scale. The experimental group significantly decreased their structure scale score.

Hypothesis 2 stated that when compared to the control group, the experimental group would show a significantly higher score on the consideration scale of the Leadership Opinion Questionnaire taken on the auditors by their supervisors (LOQ-Sup.). Means for the two groups on the consideration scale of the LOQ-Sup. are presented in Table 5.

Table 5

Means for the Consideration Scale of the Leadership Opinion Questionnaire-Supervisor

Group	Pre	Post	Adj.
Experimental (N = 9)	51.78	51.11	51.05
Control (N = 17)	51.65	48.71	48.74

The results of the analysis of covariance on the consideration scale of the LOQ-Sup. are presented in Table 6.

Table 6

Analysis of Covariance Results for the Consideration Scale of the Leadership Opinion Questionnaire-Supervisor

Source of Variation	df	Mean Squares	F Ratio	Significance of F
Between	1	31.267	1.186	.287
Within	23	26.362		

There was found no difference at the .05 level of significance between groups on the consideration scale of the LOQ-Sup. Hypothesis 2 was not supported.

There was no hypothesis stated concerning the structure scale of the LOQ-Sup. However, the scores were computed and analyzed by the analysis of covariance. Means for the two groups on the structure scale of the LOQ-Sup. are presented in Table 7.

Table 7

Means for the Structure Scale of the Leadership Opinion Questionnaire-Supervisor

Group	Pre	Post	Adj.
Experimental (N = 9)	42.00	42.56	43.41
Control (N = 17)	44.24	43.53	43.07

The results of the analysis of covariance on the structure scale of the LOQ-Sup. are presented in Table 8.

Table 8

Analysis of Covariance Results of the Structure Scale of the Leadership Opinion Questionnaire-Supervisor

Source of Variation	df	Mean Square	F Ratio	Significance of F	
Between	1	1.640	.019		
Within	23	33.010			

There was no difference found at the .05 level of significance between groups on the structure scale of the LOQ-Sup.

Hypothesis 3 stated that when compared to the control group, the experimental group would show a significantly higher score as measured by the Index of Interpersonal Communicative Competence (IICC). Means for the two groups on the IICC are presented in Table 9.

Table 9

Means for the Index of Interpersonal Communicative Competence

Group	Pre	Post	Adj.
Experimental (N = 13)	23.87	28.92	28.80
Control $(N = 22)$	23.17	25.50	25.57

The results of the analysis of covariance on the IICC are presented in Table 10.

Table 10

Analysis of Covariance Results for the Index of Interpersonal Communicative Competence

Source of Variation	df	Mean Squares	F Ratio	Significance of F
Between	1	84.183	2.747	.107
Within	32	30.651		

There was no difference found at the .05 level of significance between the on the IICC. Hypothesis 3 was not supported.

Hypothesis 4 stated that compared to their pretreatment scores, the control group would score significantly higher on the consideration scale of the LOQ after they had received the experimental treatment.

The results of the correlated t-test on the consideration scale of the LOQ are presented in Table 11.

Table 11

Correlated T-Test Results for the Consideration Scale of the Leadership Opinion Questionnaire

Group	Mean	SD	T-Value	Significance of T
Pre	53.6875	4.715		
Post	56.1875	5.764	-1.65	.120
	= 16 d:	E = 15		

There was found no difference at the .05 level of significance between pretest scores and posttest scores on the consideration scale of the LOQ. Hypothesis 4 was not supported.

There was no hypothesis stated concerning the structure scale of the LOQ. However, the scores were computed and analyzed by a correlated t-test. The results of the correlated t-test on the structure scale of the LOQ are presented in Table 12.

Table 12

Correlated T-Test Results for the Structure Scale of the Leadership Opinion Questionnaire

Group	Means	SD	T-Value	Significance of T	
Pre	44.4375	5.715			
Post	42.6875	6.041	1.16	.264	

There was found no difference at the .05 level of significance between the pretest scores and posttest scores on the structure scale of the LOQ.

Hypothesis 5 stated that when compared to their pretreatment scores, the control group would score significantly higher on the consideration scale of the LOQ-Sup. after they had received the experimental treatment. The results of the correlated t-test on the consideration scale of the LOQ-Sup. are presented in Table 13.

Table 13

Correlated T-Test Results for the
Consideration Scale of the
Leadership Opinion Questionnaire-Supervisor

Group	Means	SD	T-Value	Significance of T	
Pre	47.9000	10.908			
Post	49.5000	8.618	72	.489	
	N = 10	df = 9			

There was found no difference at the .05 level of significance between pretest scores and posttest scores on the consideration scale of the LOQ-Sup. Hypothesis 5 was not supported.

There was no hypothesis stated concerning the structure scale of the LOQ-Sup. However, the scores were computed and analyzed by a correlated t-test. The results of the correlated t-test on the structure scale of the LOQ-Sup. are presented in Table 14.

Table 14 Correlated T-Test Results for the Structure Scale of the Leadership Opinion Questionnaire-Supervisor

Pre 46.1000 5.877	icance T	Significa of T	T-Value	Sd	Mean	Group
Post /5 0000 9 129 /0 (1				5.877	46,1000	Pre
1051 43,0000 8.136 .49 .63	35	. 635	.49	8.138	45.0000	Post

There was found no difference at the .05 level of significance between pretest scores and posttest scores on the structure scale of the LOQ-Sup.

Hypothesis 6 stated that when compared to their pretreatment scores the control group would score significantly higher on the IICC after they had received the experimental treatment. The results of the correlated t-test on the IICC are presented in Table 15.

Table 15 Correlated T-Test Results for the Index of Interpersonal Communicative Competence

Group	Mean	SD	T-Value	Significance of T	
Pre	26.1250	6.174			
Post	26.3125	4.922	18	.862	

N = 16 df = 15

There was found no difference at the .05 level of significance between pretest scores and posttest scores on the IICC. Hypothesis 6 was not supported.

Hypothesis 7 stated the composite personality profile measured by the norms of the T-JTA would show a significantly lower sympathy score and a significantly higher hostility score for internal auditors than the general population.

The results of the composite T-JTA personality profile are presented in Table 16.

Table 16

Composite Taylor-Johnson Temperament Analysis Personality Profile Results for Males, Females, and Combined.

	Male		Female		Combined	
	N=64		N=30		N=94	
Scale	Mean	S.D.	Mean	S.D.	Mean	S.D.
Nervous Depressive Active Expressive Sympathetic Subjective Dominant Hostile Self-disciplined	10.72	7.29	12.43	7.56	11.27	7.38
	8.25	8.22	9.63	6.96	8.69	7.83
	27.77	8.55	25.97	7.96	27.19	8.37
	26.89	9.02	28.57	6.69	27.43	8.35
	29.03	6.63	29.07	5.32	29.04	6.21
	9.72	7.32	12.00	6.52	10.45	7.12
	26.27	7.26	25.70	7.46	26.09	7.29
	12.12	7.50	12.93	8.03	12.38	7.64
	27.86	7.34	28.30	5.90	28.00	6.89

There were no significant differences between males and females on any of the scales as found through an analysis of variance.

The combined scores were then compared to the general population norm groups used for the July 1966 standard-ization as given in the T-JTA Manual (Nash, 1980, p.22), using analysis of variance. The results are listed in Table 17.

Table 17

The Combined Auditors' Scores Compared to the General Population Norm Group of the Taylor-Johnson Temperament Analysis

	Auditors N=94		Norm Group N=922			
	Mean	S.D.	Mean	S.D.	F Ratio	Significance of F
Nervous	11,27	7.38	10.85	7.60	. 260	
Depressive	8.69	7.83		8.20	.175	
Active	27.19	8.37	26.56	6.97	.612	
Expressive	27.43	8.35	28,62	6.94	2.421	.001
Sympathetic	29.04	6.21	32.00	5.45	22.460	.001
Subjective	10.45	7.12	10.43	6.92	.001	
Dominant	26.09	7.29	23.06	6.18	16,295	.001
Hostile Self-	12.38	7.64	9.86	7.11	10.629	.001
disciplined	28.00	6.89	25.02	7.99	12.124	.001

Table 18

The Male Auditors' Mean Scores Compared to the General Population Norm Group of the Taylor-Johnson Temperament Analysis

	Audit N=6	<del>-</del>				
Scale	Mean	S.D.	Mean	S.D.	F Ratio	Signif- icance of F
Nervous Depressive Active Expressive Sympathetic Subjective Dominant Hostile Self-	10.72 8.25 27.77 26.89 29.03 9.72 26.27 12.12	7.29 8.22 8.55 9.02 6.63 7.32 7.26 7.50	11.25 9.71 26.30 27.97 30.56 10.69 24.34 11.58	7.76 8.64 7.38 7.67 6.35 7.14 7.16 8.05	.285 1.732 2.334 1.170 3.479 1.113 4.357 .279	.005 .005 .05 .001
disciplined	27.86	7.34	24.68	7.83	10,016	.001

The mean scores of the female auditors were compared, by the analysis of variance, with the female general population norm group as given in the T-JTA Manual (Nash, 1980, p. 27). The results are listed in Table 19.

Table 19

The Female Auditors' Mean Scores Compared to the Female General Population Norm Group of the Taylor-Johnson Temperament Analysis

	Audit N=3		Norm (			
Scale	Mean	S.D.	Mean	S.D.	F Ratio	Signif- icance of F
Nervous Depressive Active	12.43 9.63 25.97	7.56 6.96 7.96	12.70 12.48 25.92	8.62 9.98 7.62	.028 2.411 .001	.005
Expressive Sympathetic Subjective Dominant Hostile	28.57 29.07 12.00 25.70 12.93	6.69 5.32 6.52 7.46 8.03	29.76 32.73 12.22 20.73 9.65	7.39 5.49 8.20 7.10 7.24	.767 13.0552 .002 16.709 5.990	.001 .001
Self- disciplined	28.30	5.90	24.48	8.47	6.028	.001

The mean scores for the male auditors and the female auditors were plotted by the percentile norms tables of the T-JTA as if they were individual scores to see what percentile the mean would correspond to. The results are listed in Table 20.

Table 20

Mean Scores and Percentile Scores for Both Male and Female Auditors Plotted on the Individual Percentile Norms Table of the Taylor-Johnson Temperament Analysis

	Mai Audi	-	Female Auditors				
Scale	Mean Raw Score	Percentile	Mean Raw Score	Percentile			
Nervous	10.72	54	12.43	51			
Depressive	8.25	53	9.63	49			
Active	27.77	55	25.97	45			
Expressive	26.89	37	28,57	38			
Sympathetic	29.03	32	29.07	19			
Subjective	9.72	52	12.00	56			
Dominant	26,27	55	25.70	77			
Hostile Self-	12.12	58	12.93	71			
disciplined	27.86	63	28.30	61			

A significant difference was found at the .001 level between the mean scores of internal auditors and the general population mean scores on the sympathetic and hostile scales. Hypothesis 7 was supported.

No hypotheses were stated concerning the other scales but additional significant differences were found. Internal auditors also are more dominant and self-disciplined, and less expressive than the general population.

When comparing male auditors to the general male population, male auditors were more active, dominant and self-disciplined; and less depressive, expressive, and sympathetic. When comparing female auditors to the general female population, female auditors were found more dominant.

hostile, and self-disciplined; and less depressive and sympathetic.

#### Discussion

This study investigated the effectiveness of a human relations training program, "Adventures in Attitudes", in increasing the consideration and the interpersonal communicative competence of internal auditors. It was found that consideration was significantly improved in the experimental group though it was not confirmed by observation by the auditors' supervisors nor by subsequent training of the control group. There was found no significant change in interpersonal communicative competence.

This study also investigated the composite personality traits of 30 female and 64 male internal auditors and compared them to general population norms. The combined group of female and male auditors were found to be unexpressive, unsympathetic, dominant, hostile, and self-disciplined. The male auditors were found to be active, unexpressive, unsympathetic, dominant, self-disciplined, and not depressed. The female auditors were found to be unsympathetic, dominant, hostile, self-disciplined, and not depressed.

The training proved to be very effective for the experimental group in changing their consideration scores. When the control group later received the identical training, their consideration scores moved in the predicted

direction to a p = .12, though this was not statistically significant. Although not reported on, this was consistent with a subjective researcher-designed rating scale that the subjects took at the end of the training. They reported the training to be very beneficial. So it would seem the training merits some promise and deserves further empirical research.

The fact that the auditors' supervisors observed no change in considerate behavior may be due to several factors. Some supervisors may have had little chance to observe the direct contact between their auditors and the auditees. They may mainly supervise the techniques their auditors use and the final conclusions they reach. In addition, many supervisors found it difficult to answer the LOQ-Sup. As reported to the researcher, they found it difficult to know with confidence how their auditors would answer. This could have made it difficult to record any observed behavior change. Of course, it is entirely possible the auditors felt they had changed but they perceived the change they felt as never really having affected their behavior.

Although nothing was specifically hypothesized about the structure scale of the LOQ, it is interesting to note two things. First, the mean scores of the experimental and control groups were quite low to begin with. The experimental group had a mean raw score of 42.77 which falls at

the 17th percentile. The control group had a mean score of 44.43 which falls at the 22nd percentile. Secondly, the treatment had the effect of lowering the experimental group scores even further to a mean raw score of 31.31 which falls at the 8th percentile. These low scores would not be expected. It could be argued that this is inconsistent with the high self-discipline scores on the T-JTA.

Most internal auditors are given a great deal of freedom and autonomy in their work. Perhaps this is one of the most appealing aspects of their work. Perhaps auditors want structure for others but not for themselves. The implications of the low structure scores need to be explored further. It could be the further lowering of the structure scores is a disadvantage of this training.

The personality trait data gathered proved to be interesting and informative. The high self-disciplined scores reveal that auditors are indeed in a profession suited for them. The auditing of procedures and finances requires a high degree of order to be effective. This self-disciplined trait makes for good technical competence.

However, all the other traits, especially those in combination, have a substantial negative effect on interpersonal relationships. The data gathered revealed that auditors are unexpressive, unsympathetic, dominant, and hostile. As a whole, auditors are unexpressive and have difficulty expressing their feelings to others. They may

appear closed and aloof to others. They are also unsympathetic so that auditees are likely to feel misunderstood or rebuffed. Internal auditors show hostility through a critical attitude. While dominance as a trait standing alone shows the good qualities of self-confidence and assertiveness, in combination with hostility it can be very detrimental to good interpersonal relationships. Subordinates will see this kind of person as pushy and controlling. So these four traits in combination make for a generally negative style in relating to others. While some personality traits of internal auditors enhance their technical skills, other traits contribute to ineffective job functioning because to elicit cooperation and to encourage change one must possess good human relations skills.

It is also interesting to note that the female and male raw scores for hostility and sympathy are nearly alike, yet when compared to their respective norms the traits of hostility and lack of sympathy are pushed higher for the females than the males. While the combined male and female auditors are more hostile and unsympathetic than the general population, it would appear especially so for the female auditors compared to the female general population. It may be that the field of internal auditing attracts females who are most like their male counterparts. It may also be that it takes an aggressive female to do well in a field that has traditionally been dominated by men.

One issue this study has not addressed is whether people with these personality traits are attracted to a field which allows them to vent their hostilities and other traits in an effort to find errors, or whether the job itself causes these personality traits to be increased over time. This study does not show which is the cause, which is the effect, or whether it is a combination of the two. This will require further research.

### Appendix 1

#### Summary of Validities of LOQ Scales for Different Groups and Criteria

SAMPLE	CRITERIA	С	s
42 Sales supervisors	Rank-order performance ratings 3 years later	.32**	.05
80 Foremen in a pharmaceutical company	Attitudes toward supervisors	.,**	.22*
80 i otemen in a pitatinaceutical company	· ·	.51	1.22
	Performance and instrumentality	.24	.22*
	Supervisory recognition	.45**	,05
	Order-pricing errors	~.10	.23*
	Order-filling errors	1]	.15
	Productivity	.13	.07
	Employment security	-,06	21
	Watehouse size	06	.22*
53 First-line supervisors in a petrochemical plant	Forced-choice performance rating 2 years later	.29**	09
88 Department managers in a shoe manu-	Overall-proficiency ratings regardless of man-		
facturing company	ager rank	.30	.50
	Overall-proficiency ratings within manager		I
110 11 - 1-1	groups of equal rank	.43	.61
118 Hospital supervisors	Intradepartmental stress <sup>a</sup>	1 .	l .
60 Government hospitals		37*	-,41*
58 Voluntary hospitals		31	.20
22 Small		02	.45**
36 Medium		46**	~.07
110 11	b b	1	
118 Hospital supervisors	Interdepartmental stress <sup>b</sup>		
60 Government		-,16	.06
58 Voluntary		.18	36**
22 Small		.15	30
36 Medium		.19	39**
4.4 Mar of a constraint of		1	
44 Nursing supervisors	Intradepartmental stress <sup>a</sup>		
17 Government hospitals		40*	~.32
27 Voluntary hospitals		23	.55**
12 Small		i05	.41
15 Medium		31	.62**
	,		'V"
44 Nursing supervisors	Interdepartmental stress <sup>b</sup>	]	
17 Government hospitals		24	.02
27 Voluntary hospitals		.08	58**
12 Small		.19	
15 Medium		.01	24 79**
		,,,,	"
48 Nonnursing supervisors 35 Government hospitals	Intradepartmental stress <sup>a</sup>		
(hotel and clerical)		45**	42**
13 Voluntary hospitals			''-
(prof. and nonmedical)		-,32	.39
•	,		1 .37
48 Nonnursing supervisors	Interdepartmental stress <sup>b</sup>		
35 Government hospitals			
(hotel and clerical)		03	.09
13 Voluntary hospitals			107
(prof. and nonmedical)		,21	so**
102 Electronics managers (all levels)	Catama.		1
107 Mechanics managers (an tevels)	Satary	.08	.02
	Peer rating	.07	.02
	Weighted peer rating	06	.03
	Peer rank	06	.02
	Supervisory rank	01	<b></b> 10
84 Flectronics managers (first-line)	Salary		
o v vicentonies managers (1913) inter	•	08	04
	Peer rating	~.10	02
	Weighted peer tating	10	.02
	Peer rank	13	.02
	Supervisory rank	07	<b>−</b> .12

SAMPLE	CRITERIA	С	S
21 Chemical supervisors	Rating behavior (forced distribution)		*.
	1959	1	.28*,0
	1960	ŀ	.44**,c
	1961	[	,36*,0
	1962		.20 <sup>c</sup>
21 Chemical supervisors	Rating behavior (forced distribution)		
	1959		.28*,d .39*,d
	1960		.39*,d
	1961	1	.13 <sup>d</sup>
	1962		.22 <sup>d</sup>
35 Business school students	Peer ratingse	.26	03
	#Positive peer ratings	.32	-,01
	#Negative peer ratings	07	<b>→.16</b>
45 ROTC cadets	Situational test	18 <sup>*</sup>	02
25 Department managers	Effectiveness ratings <sup>f</sup>	02	.02

Significant at the .05 level. Significant at the .01 level.

a Index from six items with five alternative responses.

b Index from four items with five alternative responses,
c Tau correlations between S-C rank (difference score between S and C, ranked) and mean overall ratings given rank,

d Tau correlations between S-C scores (difference score between S and C) and variance of overall ratings given.

Based on students' responses in regard to their group; who would they most like to have as their boss; who would they least like to have

Two types filled out by four plant managers: (1) overall effectiveness form; (2) ratings on a 13-point scale, where each plant manager compared each subordinate manager with performance of all supervisors at that level known to him in the past. Scale points ranged from among the lowest 10% to among the top 10%.

TABLE X Correlations between the T-JTA and the 16 PF Variables N=129

T-JTA								16 J	PF	_	_	_				
Variable	Α	В	С	£	F	G	Н	ı	L	M	N	0	<b>Q</b> 1	Q2	Q3	Q.
Nervous	.04	13	53	05	10	.09	~.21	.00	.37	02	- 15	.59	14	.00	21	.5
Depressive	14	.05	~.54	06	29	.00	<b>- 4</b> 6	.06	.29	.13	09	.70	15	.21	18	.5
Active-Social	32	02	.21	.12	.42	.21	60	=.12	06	12	.02	23	.07	48	.23	.0
Expressive-Responsive	.29	04	.37	.04	:36	.19	.62	.06	18	.06	.15	28	.14	35	.11	-1
Sympathetic	.12	.02	.10	- 31	14	.18	.06	.34	14	05	04	.16	11	25-	.05	<b>-</b> .0
Subjective	17	10	43	1 <del>9</del>	14	02	39	.05	.31	04	18	.59	33	.16	38	5
Dominant	.08	09	.10	.60	.33	05	.46	37	.11	.12	04	38	.26	02	.20	<b>–</b> .0
l Hostile	01	17	24	.51	.25	20	.13	26	.37	13	- 04	.13	.03	.11	- 07	.3
Self-Disciplined	.24	.15	.08	.05	14	.26	.17	01	07	18	.11	13	.02	12	.58	0

<sup>\*</sup>Significance .05 level = .17; for 125 degrees of freedom .01 level = .23.

TABLE XA
Salient Factor Loadings for T-JTA and 16 PF Variables

					T-JTA								16	PF				
Factor	A	8	С	D	E	F	G	H 	<u> </u>	<b>c</b>	E	F	н	ŀ	0	Q3	Q4	
I. General Anxiety	.84	.83				.70				- 66					.81		.79	
II. Extraversion			.78	.79			.51					.60	.74					
III. Dominant-Aggressive							.50	.74			.57			45				
IV. Self-Control									.87							.78		

TABLE XI Correlations between the T-JTA and the MMPI Variables N=200

T-JTA		MMPI													
Variable	Mean	S.D.	I,	F	K	Hs	q	Ну	Pd	Mf	Pa	Pt	Sc	Ma	Si
A Nervous	11.33	7.24	<b></b> 20**	.38**	<b>-</b> .44**	• .53 <b>**</b>	.45**	· .16*	.40**	* .15*	.16*	.63**	.50**	.28**	<b>.</b> 38
B Depressive	8.4	7.13	26**	.46**	<b>-</b> 43**	.44**	.54**	.01	.42**	.16*	.31**	.66**	.59**	.17*	.51
C Active-Social	27.5	7.11	.03	<b></b> 28**	.09	10	23·* <del>*</del>	.07	14*	03	<b>13</b>	<b>-</b> .23**	22 <b>**</b>	.18*	<b></b> .53
D Expressive	31.0	5.77	.11	<b></b> 35**	.25**	*19**	34* <del>*</del>	.12	23 **	*03	<b>18</b> *	<b>35</b> **	<b>-</b> .35**	.04	56
E Sympathetic	32.2	4.88	.20**	11	.11	05	.02	.08	08	.25**	.08	04	<b>15</b> *	<b>~.</b> 07	14
F Subjective	11.1	6.34	28**	.38**	<b>→,5</b> 3**	.34**	.41**	11	.24*	.23**	.20**	.58**	.52**	.19**	.52
G Dominant	20.0	6.49	.03	<b></b> 16*	.09	71	<b></b> 26**	.04	.01	<b>−.17</b> *	<b>~</b> .07	<b>−,</b> 25;**	<b></b> 18*	.16*	<b>~.</b> 50
H Hostile	9.1	6.06	÷.31*	.30**	41*·	* .25**	.22**	03	.31.*	* .02	.06	.36:**	.38**	.20**	• ,23
Self-Disciplined	22.6	7.51	.22 **	·29 <b>**</b>	.24*	* <b>-</b> .25 **	·17*	.01	20*	*17 *	→.09	32 **	·31**	24 <b>*</b> "	*17
Mean			3.0	3.8	15.9	4.7	19.8	22.1	·15.7	34.6	9.9	12.2	10.9	16.9	24.4
Standard Deviation			1.94	2.75	4.32	3.63	4.53	4.27	4.21	6.65	2.49	7.41	6.95	4.43	8.38

<sup>\*</sup>Correlation significant at .05 level, \*\*Correlation significant at .01 level.

#### TAYLOR-JOHNSON TEMPERAMENT ANALYSIS

#### Sten Profile

These Ans	swers De	escribe				<del></del>	<del> </del>	Age		ex	_Date	· · · · · · · · · · · · · · · · · · ·
School		Gr	adeDe	gree	Major	Осс	upation			. Counselor		
Single	_ Years	Married_	Years Di	vorced	Years Wid	dowed C	hildren: M_	Ages		FA	ges	
Answers i	made by	; SELF an	d husband, v	vife, fathe	er, mother, so	n, daughter, b	rother, sister,	, or	<del>-</del>	of the	person	describe
Norm(s):		A	В	С	D	E	F	G	Н	I	Attitude Score:	
Mid	ds				1	_					Total:	Sten:
Raw s	cote										Raw	score
Ste	en										S	ten
Approx.	TRAIT			Active-	Expressive-			_		Self-	JRAIT	Appro
Adults	Sten	Nervous	Depressive	Social	Responsive	Sympathetic	Subjective	Dominant	Hostife	disciplined	Sten	o∕oile Value
2%	10		•	•		-	• ,	. •	•		10	99
5º/a	9	•			•	•			•	•	9	96
9º/₀	8		•	•	•	•	•	•	•	•	8	89
15%	7	•	•		•	•	•	•	•	•	7	77
19º/o	6 V E R	•	•	•	•	•	•	•	•		6	60
19%	5 A E	•	•	•	•	•	•	•	•	•	5	40
15%	4	•	•	•	•	•	•	•	•	. •	4	23
9º/a	3		•	•	•	•	•	•	٠	•	3	11
5°/°	2		•	•		•	•	•	•	•	2	4
2º/₀	1		•	•	•	•	•	•	•	•	1	1
TRA OPPO		Compos	ed Light-	Quiet	Inhibited	Indifferent	Objectiv <b>e</b>	Submissive	Tolerant	Impulsive	1	RAÎT POSITE

#### DEFINITIONS

#### TRAITS

Nervous -- Tense, high-strung, apprehensive.

Depressive — Pessimistic, discouraged, dejected.

Active-Social — Energetic, enthusiastic, socially involved.

Expressive-Responsive --- Spontaneous, affectionate, demonstrative.

Sympathetic — Kind, understanding, compassionate.

Subjective — Emotional, illogical, self-absorbed.

Dominant — Confident, assertive, competitive.

Hostile — Critical, argumentative, punitive.

Self-disciplined — Controlled, methodical, perservering.

#### **OPPOSITES**

Composed — Calm, relaxed, tranquil.
Light-hearted — Happy, cheerful, optimistic.
Quiet — Socially inactive, lethargic, withdrawn.
Inhibited — Restrained, unresponsive, repressed.
Indifferent — Unsympathetic, insensitive, unfeeling.
Objective — Fair-minded, reasonable, logical.
Submissive — Passive, compliant, dependent.
Tolerant — Accepting, patient, humane.
Impulsive — Uncontrolled, disorganized, changeable.

Note: Important decisions should not be made on the basis of this profile without confirmation of these results by other means.

<sup>\*</sup> Approximate percentage of adults attaining each sten score.

<sup>\*\*</sup> Approximate percentile value at center of each sten interval

# Taylor-Johnson Temperament Analysis

Devised by Roswell H. Johnson, 1941 Revised by Robert M. Taylor, 1967

#### INSTRUCTIONS

Do not open this booklet until you have read all of these instructions.

- 1. Fill in carefully the personal information asked for in the upper right-hand corner of the answer sheet.
- 2. Please do not write or mark on this booklet.

  Indicate your answers on the answer sheet as explained below.
- 3. Please answer every question, even if you feel uncertain about the answer. Do not think too long about any one question.
- 4. The blank space . . . in each question applies to yourself, unless you are describing another person. As you read each question, insert mentally the appropriate name in the space . . . indicated.
- 5. On the answer sheet you are given three columns in which to mark your answer.

	÷	Mid	-	
1.	<del></del>			Plus (±) means "decidedly yes" or "mostly so."
2.		•		Mid means "undecided."
3.			<del></del>	Minus (=) means "decidedly no" or "mostly not so."

- 6. Decide how each question applies to you or to the person you are describing. Record your decision by making a heavy pencil mark between the pair of dotted lines in the column which best indicates your answer. If you change an answer, please erase your first mark completely.
- 7. Try to give a definite plus (+) or minus (-) response. Avoid MID responses when possible.

Published Exclusively by

## Psychological Publications, Inc.

5300 Hollywood Boulevard, Los Angeles, California 90027

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# Taylor-Johnson Temperament Analysis

#### **QUESTIONS**

#### Mark your answers on the answer sheet. Do not mark on this booklet.

#### Please answer every question.

- 1. Is . . . by nature a forgiving person?
- 2. Does . . . take an active part in community affairs or group activities?
- 3. Is . . . relatively calm when others are upset or emotionally disturbed?
- 4. Can . . . put himself or herself sympathetically in another person's place?
- 5. Does . . . have a marked influence on the thinking of family or associates?
- 6. Does . . . prefer a restful, inactive vacation to an energetic one?
- 7. Does . . . have difficulty concentrating while reading or studying?
- 8. Does . . . prefer to be a follower rather than a leader in group activities?
- 9. Does . . . lead a quiet life, without becoming involved in many relationships outside of home and work?
- 10. Does . . . take the initiative in making arrangements for family outings and vacations?
- 11. Does . . . make many unrealistic plans for the future, which later have to be abandoned?
- 12. Does . . . feel compassion for people who are weak and insecure?
- 13. Does . . . enjoy belonging to clubs or social groups?
- 14. Does . . . seek to keep peace at any price?
- 15. Is . . . easily bothered by noise and confusion?
- 16. Does . . . avoid physical exertion and strenuous activity?
- 17. Does . . . usually appear composed and serene?
- 18. Is . . . seriously concerned about social problems, such as poverty and unemployment, even when not directly affected by them?
- 19. Does . . . like to keep on the move in order not to waste time?
- 20. Is . . . a well-organized person who likes to do everything according to schedule?
- 21. Is . . . sensitive to the feelings and needs of any member of the family who is ill?
- 22. Does . . . act deliberately rather than impulsively?
- 23. Is . . . highly competitive in games, business, or personal relations?
- 24. Docs . . . prefer to be alone rather than with people?
- 25. Does . . . feel uneasy when riding or driving in traffic?
- 26. Does . . . exercise regularly in order to keep in condition?
- 27. Is . . . more excitable than most people?
- 28. Does . . . like to entertain guests at home?
- 29. Does . . . like to be in charge of and supervise others?
- 30. Is . . . extremely neat and orderly?
- 31. Is . . . so self-assured that at times it is annoying even to friends?

- 32. Does . . . quickly recover composure after an accident or other disturbing incident?
- 33. Does . . . move briskly and with energy?
- 34. Would . . . prefer to accept an unfair situation rather than complain?
- 35. Do noisy, active children get on . . . . 's nerves?
- 36. Is . . . quick to know when someone needs encouragement or a kind word?
- 37. Is . . . the kind of person one might call a "self-starter" or a "go-getter"?
- 38. Does . . . often allow tension to build up to the point of feeling "ready to explode"?
- 39. Does . . . need encouragement and approval in order to work effectively?
- 40. Does . . . frequently use medication to aid in relaxation?
- 41. Does . . . stand up for his or her rights?
- 42. Does . . . have a wide range of interests?
- 43. Does . . . like to let people know where he or she stands on issues?
- 44. Is . . . relatively free from worry and anxiety?
- 45. Does . . . like to have plenty to do?
- 46. Is . . . deeply concerned about the welfare of others?
- 47. Does . . . worry a great deal about health?
- 48. Is . . . self-confident in most undertakings?
- 49. Is . . . too soft-hearted to be a strict disciplinarian?
- 50. Does . . . tend to rely on others when there are decisions to be made?
- 51. Do many people consider . . . to be incapable of deep feeling?
- 52. Does . . . find it easy to give way to wishes of others?
- 53. Is . . . a sympathetic listener when someone needs to talk about himself or herself?
- 54. Is . . . always trying to convert someone to a particular point of view?
- 55. Is . . . considered an industrious and tireless worker?
- 56. Does . . . have any nervous mannerisms such as nail-biting, foot-tapping, etc.?
- 57. Is . . , the kind of person to whom others turn in time of distress or trouble?
- 58. Does . . . find it difficult to follow a definite plan?
- 59. Does . . . insist on prompt obedience?
- 60. Does . . . believe that everyone is entitled to a second chance?
- 61. Does . . . get into difficulty occasionally because of some impulsive act?
- 62. Does . . . suffer from indigestion or loss of appetite when worried or under tension?
- 63. Is . . . easily taken advantage of by others?
- 64. Does . . . limit himself or herself to one or two friends?
- 65. Does . . . find it difficult to relax because of a restless need constantly to be busy?
- 66. Is . . . easily tempted by a bargain?
- 67. Does . . . like to speak in public and enjoy the challenge of a debate?
- 68. Does . . . seek release from tension by excessive smoking, eating, or drinking?
- 69. Is . . . easily moved to pity?

- 70. Does . . . sleep well, and find it easy to relax when sitting or lying down?
- 71. Would . . . take a special interest in helping young people who are frequently in trouble?
- 72. Is . . . regarded as a "high-strung" person?
- 73. Is . . . quick to sense another person's feelings and moods?
- 74. Is . . . very emphatic and forceful in voice and manner?
- 75. Does . . . often have "the jitters" for no particular reason?
- 76. Does . . . prefer to read or watch television after a day's work, rather than go out or engage in social activities?
- 77. Does . . . make plans well in advance of the event and carry them out?
- 78. Does . . . prefer to listen and observe rather than take part in discussions?
- 79. Does . . . enjoy taking chances?
- 80. Does . . . get tense and anxious when there is much work to be done in a short time?
- 81. Does . . . think our nation concerns itself too much with the needs and suffering of people in other countries?
- 82. Does . . . enjoy activity and excitement?
- 83. Does . . . prepare a budget and make every effort to stay within it?
- 84. Would . . . do everything possible to protect an animal from neglect or cruelty?
- 85. Does . . . find it difficult to say "no" to a persuasive salesperson?
- 86. Does . . . have little interest in other people's emotional problems?
- 87. Is . . . interested in people and in making new friends?
- 88. Is . . . considerate and understanding when dealing with an elderly person?
- 89. Would people refer to . . . as a person who is "always on the go"?
- 90. Does . . . think it unnecessary to apologize after hurting someone's feelings?
- 91. Is . . . able to express affection without embarrassment?
- 92. Is . . . apt to make thoughtless, unfeeling remarks?
- 93. Is . . . thought of as a warm-hearted, outgoing person?
- 94. Does . . . often feel left out or unwanted?
- 95. Does . . . have a place for everything and everything in its place?
- 96. Is . . . free from racial and religious prejudice?
- 97. Does . . . feel disillusioned about life?
- 98. Is ... openly affectionate with members of the immediate family?
- 99. Does . . . sometimes become so emotional as to be unable to think or act logically?
- 100. Does . . . find it difficult to express tender feelings in words?
- 101. Is . . . hopeful and optimistic about the future?
- 102. Does . . . tend to analyze and dwell on inner thoughts and feelings?
- 103. Is . . . understanding when someone is late for an appointment?
- 104. Does . . . have phobias or a deeply disturbing fear of any object, place, or situation?
- 105. Does . . . tend to be reserved in manner?
- 106. Does anyone ever complain that . . . is "bossy" or unreasonable?

- 107. Do people sometimes accuse . . . of being illogical?
- 108. When ... offers a suggestion, is it apt to be more helpful than critical?
- 109. Does . . . reach conclusions only after looking at all sides of a question?
- 110. Does . . . find any discussion of sexual matters difficult or embarrassing?
- 111. Does . . . have a quick temper?
- 112. Does . . . express appreciation and pleasure when looking at beautiful things?
- 113. Is . . . inclined to be argumentative?
- 114. Does . . . sometimes get the uncomfortable feeling of being stared at or talked about?
- 115. Does . . . like to stick to one job until it is finished?
- 116. Are there times when . . . feels discouraged or despondent over lack of progress or accomplishment?
- 117. Is . . . inclined to "tell people off"?
- 118. Does . . . feel that life is very much worth living?
- 119. Does . . . tend to be suspicious of people's motives and actions?
- 120. Is . . . apt to be too hasty in making decisions?
- 121. Does . . . find it difficult to be friendly and responsive in contacts with people?
- 122. Does . . . have a deep respect for all human beings?
- 123. Is . . . easily embarrassed?
- 124. Is . . . inclined to stop and think before acting?
- 125. Does . . . tend to be impatient with someone who is frequently ill?
- 126. Is . . . always working toward some future goal?
- 127. Is . . . bothered at times by feeling unappreciated or by the idea that "nobody cares"?
- 128. Does . . . readily show tenderness to children?
- 129. Is . . . apt to be sarcastic when annoyed with someone?
- 130. Does . . . often dwell on past misfortunes?
- 131. Is . . . apt to keep feelings "bottled up inside"?
- 132. Does . . . feel contempt for men who seem unable to make a living?
- 133. Is . . . very methodical about keeping records of personal and business affairs?
- 134. Is . . . likely to be jealous?
- 135. Is . . . often so low in spirit as to be close to tears?
- 136. Does . . . find it hard to accept criticism or blame?
- 137. Is . . . frequently depressed because of personal problems?
- 138. Does . . . speak with animation, enthusiasm, or frequent gestures?
- 139. When deeply disturbed about something, has . . . ever contemplated suicide?
- 140. Is . . . inclined to carry a grudge?
- 141. Does . . . have many friends and acquaintances?
- 142. Is . . . often troubled by a lack of self-confidence?
- 143. Does . . . find it difficult to express sympathy to someone in sorrow?
- 144. Is . . . logical in thinking and speaking?

- 145. Is . . . considered lenient and easy-going?
- 146. Is . . . easily disheartened by criticism?
- 147. Does . . . frequently tend to dominate people around him or her?
- 148. Does . . . feel a bit uncomfortable when expected to express enthusiasm over a gift?
- 149. Is . . . quick to forgive a mistake and overlook a discourtesy?
- 150. Is . . . a fair-minded, reasonable person?
- 151. Is . . . a talkative person?
- 152. Does . . . often have "the blues" or feel downhearted for no apparent reason?
- 153. Does . . . work methodically and deliberately?
- 154. Does . . . frequently misinterpret what others do and say?
- 155. Does . . . at times suffer extreme physical exhaustion resulting from emotional conflicts?
- 156. Is . . . overly critical of some member of the family?
- 157. Does . . . feel self-conscious with most people?
- 158. Does . . . often make such blunt, cutting comments that someone's feelings are hurt?
- 159. Does . . . smile or laugh a good deal?
- 160. In voting, does . . . study personalities and issues, sometimes supporting a candidate of another party?
- 161. Is . . . superior or overbearing in attitude toward others?
- 162. Is . . . thought of as being overly sensitive?
- 163. Does . . . feel free to discuss personal problems as well as joys with close friends?
- 164. Is . . . slow to complain when inconvenienced or imposed upon?
- 165. Is . . . inclined to daydream about things that can't come true?
- 166. Does . . . often do things on the spur of the moment?
- 167. Does . . . find it difficult to get over an embarrassing situation?
- 168. Does . . . find it hard to break a habit such as smoking or overeating?
- 169. Does . . . often feel discouraged because of a sense of inferiority?
- 170. Is . . . inclined to be shy and withdrawn?
- 171. Does . . . have periods of idleness when it is difficult to find any reason for either physical or mental effort?
- 172. Does . . . maintain that most people are "out for all they can get"?
- 173. Does . . . avoid letting emotion influence sound judgment?
- 174. Does . . . find it difficult to be complimentary to members of his or her family?
- 175. Is . . . especially self-conscious and concerned about what others might think?
- 176. Does . . . often feel depressed by memories of childhood or other past experiences?
- 177. Does . . .'s interest often shift from one thing to another?
- 178. Does . . . feel restrained and inhibited in a love relationship?
- 179. If called upon, would . . . be fair and impartial in helping others to settle their differences?
- 180. Does . . . have periods of depression without apparent reason which last for several days or more?

Leadershup Opinion Questionnaire

re Percentile Other			r q
Raw Score			Description of Norm Group
	O	10	

[65.1]

#### INSTRUCTIONS:

For each item, choose the alternative which most nearly expresses your opinion on how frequently you should do what is described by that item. Always indicate what you, as a supervisor, or manager, sincerely believe to be the desirable way to act. Please remember-there are no right or wrong answers to these questions. Different supervisors have different experiences and we are interested only in your opinions.

Answer the items by marking an "X" in the box before the alternative that best expresses your feeling about the item. Mark only one alternative for each item. If you wish to change your answer, draw a circle around your first "X" and mark a new "X" in the appropriate box.



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	l. Put the welfare of your unit above the welfare of any person in it.		Always Often Occasionally Seldom Never	11. Be slow to adopt new ideas.		Always Often Occasionally Seldom Never
	2. Give in to your subordinates in discussions with them.		Often Fairly often Occasionally Once in a while Very Seldom	12. Get the approval of persons under you on important matters before going ahead.		Always Often Occasionally Seldom Never
n Ņ	3. Encourage after-duty work by persons of your unit.		A great deal Fairly often To some degree Once in a while Very seldom	13. Resist changes in ways of doing things.	00000	A great deal Fairly much To some degree Comparatively little Not at all
	4. Try out your own new ideas in the unit.		Often Fairly often Occasionally Once in a while Very seldom	14. Assign persons under you to particular tasks.		Always Often Occasionally Seldom Never
	5. Back up what persons under you do.		Always Often Occasionally Seldom Never	15. Speak in a manner not to be questioned.	00000	Always Often Occasionally Seldom Never
	6. Criticize poor work.		Always Often Occasionally Seldom Never	16. Stress importance of being ahead of other units.		A great deal Fairly much To some degree Comparatively little Not at all
<b>39</b>	7. Ask for more than the persons under you can accomplish.		Often Fairly often Occasionally Once in a while Very seldom	17. Criticize a specific act rather than a particular member of your unit.		Always Often Occasionally Seldom Never
	8. Refuse to compromise a point.		Always Often Occasionally Seldom Never	18. Let the persons under you do their work the way they think is best.		Always Often Occasionally Seldom Never
	9. Insist that persons under you follow to the letter those standard routines handed down to you.		Always Often Occasionally Seldom Never	19. Do personal favors for persons under you.		Often Fairly often Occasionally Once in a while Very seldom
THE PARTY IN	10. Help persons under you with their personal problems.	00000	Often Fairly often Occasionally Once in a wnite Very seldom	20. Emphasize meeting of deadlines.	00000	A great deal Fairly much To some degree Comparatively little Not at all

$\oplus$	21. Insist that you be informed on decisions made by persons under you.	Always Often Occasionally Seldom Never	31. See to it that persons under you are working up to capacity.	00000	⊃ 8 Always Often Occasionall Seldom Never
	22. Offer new approaches to problems.	Often Fairly often Occasionally Once in a while Very seldom	32. Stand up for persons under you, even though it makes you unpopular with others.		Always Often Occasionali Seldom Never
49	23. Treat all persons under you as your equals.	Always Often Occasionally Seldom Never	33. Put suggestions made by persons in the unit into operation.		Often Fairly ofter Occasionali Once in a v Very seldo
ជំ	24. Be willing to make changes.	Always Often Occasionally Seldom Never	34. Refuse to explain your actions.		Often Fairly ofter Occasional Once in a v Very seldo
	25. Talk about how much should be done.	A great deal Fairly much To some degree Comparatively little Not at ali	35. Ask for sacrifices from persons under you for the good of your entire unit.		Often Fairly ofter Occasional Once in a ' Very seldo
<b>.</b> *	26. Wait for persons in your unit to push new ideas.	Always Often Occasionally Seldom Never	36. Act without consulting persons under you.		Often Fairly ofte Occasional Once in a Very seldo
<b>第</b>	27. Rule with an iron hand.	Always Often Occasionally Seldom Never	37. "Needle" persons under you for greater effort.		A great de Fairly mud To some d Comparati Not at all
	28. Reject suggestions for changes.	Always Often Occasionally Seldom Never	38. Insist that everything be done your way.		Always Often Occasiona Seldom Never
	29. Change the duties of persons under you without first talking it over with them.	Often Fairly often Occasionally Once in a while Very seldom	39. Encourage slow-working persons in your unit to work harder.		Often Fairly ofte Occasiona Once in a Very seldu
<b>+</b>	30.  Decide in detail what shall be done and how it shall be done by the persons under you.	Afways Often Occasionally Seldom Never	40. Meet with the persons in your unit at certain regularly scheduled times.		Always Often Occasiona Seldom Never

## HCC

This questionnaire has been designed to describe your particular style of interpersonal communication in a supervisory capacity. There are no right or wrong answers since all people are different and have their own preferences for interpersonal communicative methods.

#### DIRECTIONS

On the following pages you will find several "typical" supervisory situations in which you are asked to respond as the supervisor. After reading each problem situation, please choose the one alternative (1, 2, 3, 4, or 5) that best describes your communicative reaction. In other words, what would you say in order to handle the situation? Remember, if this particular situation occurred in real-life, and you were the supervisor, how do you imagine you would respond?

Please read each alternative carefully. Although you may not agree with any of the alternatives completely, please choose the one that best describes your opinion. You are to mark your choice on the answer sheet you have. Be sure that the number of the response agrees with the number on the answer sheet. Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks in this booklet.

Before you begin the questionnaire, be sure you put your sex, your age, and any other information called for in the space provided on the answer sheet. Do not put your name anywhere on the answer sheet.

For the purpose of completing this questionnaire, please assume you are an office manager for Southwest Corporation having the supervisory responsibility for eight employees. Naturally, you have the necessary authority and responsibility to effectively and efficiently plan, organize, direct, and control the activities of your department and work group.

NOW OPEN THE BOOKLET AND START WITH SITUATION 1.

Bobby C. Vaught, Ph.D. School of Business Southwest Missouri State University



1. Linda Myers comes bursting into your office one morning with the implication that you are "playing favorites" among the employees. For some reason she feels that you don't like her and that you are giving the other workers preferential treatment. Although you honestly don't think the charges are true, you nevertheless want to clear up the situation. Almost in tears, Linda says, "I don't know what you have against me. I've always done a good job."

#### Your response would be:

- 1. "I don't have anything against you; you're a good employee so don't worry about it."
- "You feel bad because you can't figure out what you are doing to cause this problem."
- 3. "That's where you're wrong. I don't think /'ve been playing any favorites around here."
- 4. "You feel bad because you want me to like you but you just can't seem to find a way."
- 5. "It seems that you think I don't like you and you feel bad about that."
- 2. Two months ago you hired Sharon Long from the production department to take over the newly created job of "billings clerk" in your department. Since you conducted the personal interview with Sharon yourself, you were confident that she had the necessary skills to handle the increased responsibility of the position. In addition, her records as a production worker indicated that she was dependable and a hard worker. Recently, however, you have begun to question the wisdom of your original decision. Although Sharon has proven to be dependable and a hard worker, she has continued to make mistake after mistake in her new job. In attempting to explain the situation Sharon remarks, "I'm doing the best I can—I just don't know what else I can do."

#### Your response would be:

- 1. "You haven't been able to handle the new job and this is really frustrating you."
- 2. "You need to pay more attention to your work; try to be more careful from now on,"
- 3. "It could be you're frustrated because you're afraid the job is too much for you."
- 4. "You're frustrated because you can't seem to catch on, and you really want to keep this job."
- 5. "You are making far too many mistakes in your job; you said you could handle it."
- 3. Two weeks ago you recommended one of your best employees. James Boyd, for promotion into a supervisory position at one of the company's other plants. James has indicated several times that he is ready to move up in the company. Unfortunately, top management has turned James down for the new position (due to so many qualified applicants). Naturally James is disappointed at the bad news; in fact, he is downright mad. He shouts, "What's wrong, aren't I good enough for this company?"

#### Your response would be:

- 1. "It was a competitive situation so don't give up; you'll get another chance for a promotion,"
- 2. "Sounds like you're disappointed because you are not moving ahead as fast as you think you should."
- 3. "You have worked hard and now you're disappointed. You're thinking nobody appreciates what you've done."
- 4. "You're disappointed because you haven't moved up, but you really want to work hard and get promoted."
- 5. "I don't understand why you are so upset. We did all we could under the circumstances."

4. Once again it is annual performance review time at Southwest Corporation. As in the past, you have followed the company policy of rewarding your most productive employees with the largest pay increase for the forthcoming year. However, due to financial problems, top management has had to cut back on all pay increases for the next year. Your most productive and conscientious employee, Bill Jones, was hit unusually hard. Bill feels that he is twice as productive as the rest of the employees (which he is) and thus explains, "I've worked myself to death for this company, and what do I have to show for it—nothing."

#### Your response would be:

- 1. "The company just doesn't have the money this year; just be patient and keep up the good work."
- 2. "You just can't figure out what kind of effort the company expects and this really upsets you."
- 3. "That kind of attitude certainly won't get you a pay raise; you can't always get what you want."
- 4. "You've been a hard worker and now you're upset because you think the company has let you down."
- 5. "You're upset because you can't accept the company's decision yet you really want to feel good about the job you're doing."
- 5. Recently you have heard complaints from several of the employees concerning Joan Smith. It seems that as part of the work group Joan is not carrying her fair share of the work load. Also, it seems that several of Joan's key reports have been turned in late for the past two weeks thus causing problems throughout the rest of the company. Upon talking with Joan she indicates that she is scheduled for surgery next month. Finally Joan admits, "I'm so upset over this operation that I can't keep my mind on my work."

#### Your response would be:

- 1. "The uncertainty and the waiting around for this operation has really gotten you worried and upset."
- 2. "Sounds like you are worried because you don't know how to handle this conflict between your work and the operation."
- 3. "Your work hasn't been up to par lately. We expect you to get your reports in on time."
- 4. "It's pretty upsetting to you because you can't seem to get a hold of yourself, and you really want to do a good job."
- 5. "Just try to put this thing out of your mind for the time being; it will all work out."
- 6. For the past few days you have noticed one of your employees, Jane Ross, continually arriving late for work. Knowing this will eventually cause trouble among the rest of the employees (the company requires everyone to be at work on time), you decide to call her into your office to determine what the problem is. Reluctantly, Jane explains that her six-year-old daughter must catch the school bus at 8:00 every morning. Since Jane does not want to leave her alone at the bus stop, it is causing Jane to be 30 minutes late for work. Jane then asks the question, "I can't just leave her all alone, can I?"

#### Your response would be:

- 1. "Seems like you don't know how to solve the problem and it's causing you to feel bad."
- 2. "You feel bad because you can't work this thing out but you want to do what's right."
- 3. "Why don't you make some arrangements to have her taken care of in the mornings?"
- 4. "Sounds like you are torn between your daughter and your job, and this is causing you to feel bad."
- 5. "You know that company policy requires everyone to be at work promptly at 8:00."

7. Four months ago Hank Short was transferred into your department from one of the plants back east. However, since it was his choice to relocate in this area he was forced to take a position for which he is obviously overqualified. Because of his education and experience he quickly learned the rather simple task assigned to him in your department. Recently, however, he does not seem to have the motivation to do the great job he is capable of doing. Upon discussing the particular situation with Hank he responds rather dishearteningly, "You know, I just don't seem to have the old drive I once had."

#### Your response would be:

- 1. "Sounds like you're discouraged because you feel trapped in a dead end job."
- 2. "You knew the circumstances of the job when you decided to move to this area."
- 3. "You just can't seem to find any meaning to your work and this is discouraging you."
- "You're discouraged because you think you can't solve this problem and you really want to enjoy your work again."
- 5. "Why don't you look at another transfer, or perhaps you could make this job more of a challenge."
- 8. One afternoon your newest employee. John Doe, walks into your office with a problem. It seems that after two months on the job he is having some difficulty in "fitting-in" with the work group. He complains of petty jealousies and group pressure. Knowing that John has remained somewhat aloof with the rest of the employees, you can certainly understand the situation. After some stumbling around, John finally blurts out, "They don't like me because I am here to work, not socialize."

#### Your response would be:

- 1. "Part of doing a good job is getting along with your fellow workers; try to be more friendly."
- 2. "That's no way to act. What's the matter, can't you learn to get along with other people?"
- 3. "Looks like you don't know how to handle this social situation and you are letting it upset you."
- 4. "You feel angry because you can't relate to people but you want to be accepted as part of the group."
- 5. "Sounds like you are angry because the other people won't accept you."

#### REFERENCES

- Armenic, H.H. Aranya, N., & Pollock, J. Is there a generally accepted standard accountant? <u>CA Magazine</u>, 1979, <u>112</u>, 34-42.
- Baker, C.R. An investigation of differences in values: Accounting vs. non-accounting majors. The Accounting Review, 1976, 51, 886-893.
- Barrett. M.J. Some behavioral attributes of professional audit independence (Doctoral dissertation, University of Colorado, 1969). Dissertation Abstracts International. 1969, 30/10A, 4543. (University Microfilm No. 70-5819)
- Berg, R.C., and Landreth, G.L. <u>Group Counseling</u>. Muncie, Indiana Accelerated Development, Inc., 1979.
- Buros, O.K., (Ed.). The Sixth Mental Measurements Yearbook.

  Highland Park, N.J.: Gyrphon Press, 1965.
- Buros, O.K., (Ed.). The Seventh Mental Measurements Yearbook. (Vol. 2). Highland Park, N.J.: Gyrphon Press, 1972.
- Buros, O.K., (Ed.). The Eighth Mental Measurements Yearbook.

  (Vol. 1). Highland Park, N.J.: Gyrphon Press, 1978.
- Cattell, R.B., Eber, H.W., & Tatsuoka, M.N. Handbook for the

  Sixteen Personality Factor Questionnaire. Champaign, Il.:

  Institute for Personality and Ability Testing, 1970.
- Churchill, N.C. & Cooper, W.W. A field study of internal auditing. The Accounting Review, 1965, 40, 767-781.
- Coffman, E.N. A comparison of male public and private accountants and male accounting students on selected personality characteristics (Doctoral dissertation, George Washington

- University, 1973). <u>Dissertation Abstracts International</u>, 1973. 3401-A, 0272. (University Microfilm No. 73-15, 416)
- Carron, T.J. Human relations training and attitude change: A vector analysis. Personnel Psychology, 1964, 17, 403-424.
- DeCoster, T.D. Mirror, mirror on the wall... <u>Journal of</u>
  Accountancy, 1971, 132, 40-45.
- DeCoster, T.D., & Rhode, V.G. The accountants' stereotype, real or imagined, deserved or unwarranted. The Accounting Review, 1971, 46, 651-664.
- Dinnis, S.J., & McIntyre, S.C. Development and utilization of personality battery for accountants. <u>Psychological Reports</u>, 1979, 44, 43-53.
- Ellis, A. Reason and Emotion in Psychotherapy. New York: Kyle Stuart, 1962.
- Fleishman, E.A. <u>Manual for Leadership Opinion Questionnaire</u>.

  Chicago: Science Research Associates, 1969.
- Fleishman, E.A., & Harris, E.F., Patterns of leadership behavior related to employee grievances and turnover. <a href="Personnel">Personnel</a>
  Psychology, 1962, 15, 43-56.
- Fleishman, E.A., Harris, E.F., & Burtt, H.E. <u>Leadership and Supervision in Industry</u>. Columbus, Oh.: Bureau of Educational Research, Ohio State University, 1955.
- Gray, J.T. Needs and values in three occupations. <u>Personnel</u> and <u>Guidance Journal</u>, 1963, <u>42</u>, 238-244.
- Hand, H.H., & Slocum, J.W. Human relations training for middle management. Academy of Management Journal, 1970, 13, 403-410.

- Hand, H.H., & Slocum, J.W. A longitudinal study of the effects of a human relations training program on managerial effectiveness. <u>Journal of Applied Psychology</u>, 1972, <u>56</u>, 412-417.
- Hand, H.H., Richards, M.D., & Slocum, J.W. Organizational climate and the effectiveness of a human relations training program. Academy of Management Journal, 1973, 2, 185-195.
- Harris, L. Personality traits of accountants. <u>Journal of Accountancy</u>, 1972, <u>133</u> (Feb.), 85-89.
- Istvan, D.F. Improving personnel selection. <u>Journal of Accountancy</u>, 1973, <u>135</u> (Feb.), 35-40.
- Jacob, R. & Traxler, A.E. A strong study of accountants.

  Journal of Counseling Psychology, 1954, 1, 153-157.
- Jacoby, P.F. An empirical descriptive study of selected personality characteristics of professional accountants based on Jungian typology (Doctoral dissertation, George Washington University, 1980). <u>Dissertation Abstracts</u>

  <u>International</u>. 1980, <u>41/02-A</u>, 731. (University Microfilm No. 80-18382)
- Kochanek, R.F., & Kochanek, T.T. Perceived personality characteristics requisite to the accountant's success: two perspectives. The Accounting Journal, 1977, 1, 135-145.
- Martin, J.M. A study of practicing CPA's risk profile to determine attributes relevant to the Certified Public Accountant's personality and practice (Doctoral dissertation,

- University of Alabama, 1978). <u>Dissertation Abstracts Inter-national</u>. 1978. <u>39/04-A</u>, 2372. (University Microfilm No. 78-19198)
- Maslow, A. Eupsychian Management. Howerwood, Il.: Irwin, 1965.
- Mints, F.E. <u>Behavioral Patterns in Internal Audit Relationships</u>.

  Altamonte Springs, Fl.: The Institute of Internal Auditors,

  1972.
- Mints, F.E. Cooperative auditing: The key to the future. The Internal Auditor, 1973, Nov.-Dec., 33-56.
- Mosvick, R.K. Human relations training for scientists, technicians, and engineers a renewal of relevant experimental evaluations of human relations training. Personnel Psychology, 1971, 24, 275-292.
- Nash, L., (Ed.). <u>Taylor-Johnson Temperament Analysis Manual</u> (Rev. ed.). Los Angeles: Psychological Publication, 1980.
- O'Dowd, D.D., & Beardslee, P.C. <u>College Student Wages of a</u>

  <u>Selected Group of Professions and Occupations</u>. Cambridge,

  Ma.: Wesleyan University Press, 1960.
- Parker, T.C. Relationships among measures of supervisory behavior, group behavior, and situational characteristics.

  Personnel Psychology, 1963, 16, 319-324.
- Perls, F. <u>Gestalt Therapy Verbatim</u>. Lafayette, Ca.: Real People Press, 1969.
- Rogers, C.R. Client-Centered Therapy. Boston: Houghton Mifflin, 1951.
- Peterson, C.A. The prediction of students' success in college accounting (Doctoral dissertation; University of Minnesota,

- 1966). <u>Dissertation Abstracts International</u>, 1966, <u>28/01-A</u>, 61. (University Microfilms No.67-7767)
- Reckers, P., & Bates, H.C. The accountant's stereotype impact on career selection. Massachusetts CPA Review, 1978, 52, 7-11.
- Sawyer, L.B. The Practice of Modern Internal Auditing. (2 ed.).

  Altamonte Springs, Fl.: The Institute of Internal Auditors,
  1981.
- Segal, S.J. & Szabo, R. Identification in two vocations:

  Accountants and creative writers. Personnel and Guidance

  Journal, 1964, 43, 252-255.
- Schlesinger, V.J. Dual personality traits and occupational choices: a study of accountants, chemical engineers and educational psychologists (Doctoral dissertation, University of Michigan, 1963). Dissertation Abstracts International, 1967, 24/12, 5551. (University Microfilms No. 64-6745)
- Segal, S.J. A psychoanalytic analysis of personality factors in vocational choice. <u>Journal of Counseling Psychology</u>, 1961, 9, 202-210.
- Shackleton, V. The accountants stereotype: myth or reality?

  Accountancy, 1980, 91, 122-123.
- Sneed, F.R. A study of the effects of conservatism on the evidential sample-size decisions made by auditors (Doctoral dissertation, North Texas State University, 1979).

  Dissertation Abstracts International, 1979, 40/07-A, 4106.

  (University Microfilms No. 80-807)

- Truax, C.B. & Carkhuff, R.R. <u>Toward Effective Counseling and</u>

  Psychotherapy. Chicago: Aldine, 1967.
- Vaught, B.C. An index of interpersonal communication competence and its relationship to selected supervisory demographics, self- actualization, and leader behavior in organizations.

  (Doctoral dissertation: North Texas State University, 1979)

  Dissertation Abstracts International, 1980, 40/12-A, 6351.

  (University Microfilm No. 80-12889)
- Willis, E. Job satisfaction and personality traits of Certified Public Accountants (Doctoral dissertation, University of Cincinnati, 1975). <u>Dissertation Abstracts International</u>, 1975, 36/04-A, 2291. (University Microfilms No. 75-22570).