SELLING AND THE SALESMAN: PREDICTION OF SHORT-TERM SUCCESS, PERSONALITY CHANGES, AND COGNITIVE DISSONANCE

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TABLE OF CONTENTS

Table of Contents, Continued

LIST OF TABLES

ABSTRACT

The present study attempted to (1) measure the predictive value of several personality and attitudinal variables in regard to sales success; (2) assess any personality changes that may have resulted from selling over a prolonged period of time; and (3) explain Ss rating of the job and company with one of two seemingly mutually exclusive predictive theories--cognitive dissonance and work behavior.

201 college student salesmen participated in the first phase of the study by completing a personality inventory before selling, and then, after a 3-month period, the remaining students completed a second inventory designed to measure (2) and (3) above.

None of the main variables (Extraversion, Neuroticism, Machiavellianism, Self-esteem) correlated significantly with the two sales success criteria. Combining the variables via a discriminant function analysis did not result in significant sales success discrimination among Ss. At the end of the selling period, Ss showed a significant increase on the extraversion ($p < .005$), neuroticism ($p < .005$), and self-esteem ($p < .005$) scales. Several possible explanations for these results were discussed. After reducing the various available avenues of dissonance reduction to only the ones being studied, the sample size was too small to test adequately the specific predictions. However, other related data were incorporated to help define the cognitive dissonance and work behavior positions.

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INTRODUCTION

As the selling interaction is a pervasive social phenomenon, it is surprising that a unified theoretical framework has not been proposed to account for this diverse phenomenon. McMurry (1961) points out that "...selling as an art and science has made little progress since the early days of the industrial revolution" [p.113]. A review of the literature reveals that the complexity and situational specificity of the selling situation are the two main factors which mitigate against the formation of a general theory concerning sales techniques and successful sales personalities (Greenberg & Mayer, 1964; Guion, 1965; McMurry, 1961).

It is important for studies to define explicitly the sales population studied, its methods, and its products. If this is not done, then it will be very difficult to develop an integrative theory of selling. Therefore, before explaining the three separate parts of the present study, the relevant dimensions of the particular sample of subjects (*S*s) studied will be discussed.

McMurry's (1961) classification scheme has identified seven categories or types of selling on a continuum of creative sales. At one end is the delivery man, or one that is only capitalizing on the existing market. Then comes, (2) the inside order taker, (3) the outside order taker, (4) the "good-will" man, (5) the technical knowledge salesman, e.g., "the engineering salesman who is primarily a consultant to the "client" companies [p. 114], (6) the creative seller of tangibles, and (7) the creative seller of intangibles. The salesmen studies were in category six, since the product was books. Since the ambiguity of the selling interaction increases from category one to category seven, it may be that certain personality traits would be highly correlated with sales success in unstructured situations such as would be found in categories six and seven, but the possession of these same personality traits may not be as important for sales success in categories one, two, and three.

In addition to being in category six, the Ss in the present sample were college students and accepted this door-to-door selling job for a twelve to fourteen week period only; in all likelihood it will not be their full-time vocation. The books sold were moderately priced (nine to thirty dollars) and did not require extensive financing. Ten of the eleven books were also religious in nature, e. g., Bibles, Bible dictionaries, Bible story books. The one non-religious book was a medical encyclopedia. By studying a relatively homogeneous sales group, all selling the same products under the same conditions, the effects of different personality traits or attitudes upon sales success should be most clearly demonstrated. The present study was a limited exploratory study attempting to elucidate the relationship among several variables thought important to this particular selling situation.

Prediction of Sales Success

There have been almost as many "sales success traits" identified as there have been predictive studies. The bulk of the testing has focused on the salesman's personality because it is inextricably interwoven with his sales technique and work habits. Miner (1962) identified three factors positively associated with sales success (general dependence, self-confidence, happiness) and two factors negatively associated (low aggression and strong superego). Other factors or personality traits that have been positively identified are responsibility (Hughes & Dodd, 1961), the ability to be an habitual "wooer" (McMurry, 1961), high self-esteem (Husband, 1935), empathy and high ego drive (Greenberg & Mayer, 1964), dominance, altruism, and gregariousness (Hughes, 1965), social dominance (Lewis, 1947), and introversion-extraversion or neuroticism (Anderson, 1929; Dodge, 1938; Husband, 1936; Kornhauser, 1933).

The introversion-extraversion factor seems to be one of the more recurrent factors in sales ability, although it has not always been positively associated with sales success. Anderson (1929) found extraversion as the outstanding success trait at Macy's department store. Changing times and consumer behavior may well have altered that correlation today, though. The poor department store salesmen were characterized by introversion, underactivity, and instability. Lovett (1934) found extraversion not to be a useful sales success indicator for a national soap producer and distributor. Kornhauser (1933) found good salesmen no more free from introversion or neurotic tendencies than others. But Lewis (1947) found that salesmen differed significantly from normals on six MMPI subscales. Ma (hypomania) showed the greatest disparity in a positive direction.

Many of the studies cited are pre-1958 and therefore could not use either the Maudsley Personality Inventory (Eysenck, 1958) or the Eysenck Personality Inventory (EPI) (Eysenck, 1963). The two inventories have extensive reliability and validity and can be meaningfully compared across studies. The apparent discrepancy in the studies cited may have resulted from two problems: (1) the sales situations were radically different from study to study and (2) the various tests of introversion-extraversion were different and quite possibly not highly positively correlated.

A high E score on the EPI is also indicative of high sociability (the E scale correlates .81 with social extraversion on the Minnesota T-S-E Inventory (Buros, 1965)), thus sales studies measuring sociability may have relevance for extraversion studies. Dodge (1938), Miner (1962). and Waters and Waters (1970) have found sociability positively related to sales success; while Hughes and Dodd (1961) found the reverse. Hughes and Dodd perceived the popular personality stereotype of successful salesmen as dominant, assertive, a self-assured type who likes people and gets along easily with them, rather than as a conscientious and thorough individual who shows great persistence in completing a job while maintaining a high standard of performance. The latter individual actually had greater sales success, however (Hughes & Dodd, 1961).

Another major variable that has shown a significant positive relationship to sales success is self-esteem (Harrell, 1960; Husband, 1935; Miner, 1962). Self-esteem should be a most important factor in door-to-door selling because door-to-door salesmen are always in an inferior position vis-a-vis the prospect; they are a perpetual intruder, and rudeness and rebuffs are often a matter of course. Since statistically, by number of calls, they fail more often than they succeed, salesmen must find it no affront to their ego to be told "no." High self-esteem _Ss_ could logically buffer these "nos" and join the few people that "have the ability to accept rejection with equanimity" (McMurry, 1961, p.115).

But there is another sbtle variable that would favor high self-esteem Ss. The situational specificity of the selling job would, of course, act as a filter for prospective applicants. Each would assess the job demands and decide whether he would like to work for the company. Korman (1966) proposed that:

> ...self-esteem operates as a moderator variable in the process of vocational choice...for those high in self-esteem their self-perceived needs are those that have been satisfied in the past, and it is, therefore, appropriate and consistent for the individual to seek out these roles where they will be satisfied in the future. [the low self-esteem person] has not satisfied his needs in the past, therefore he has become more familiar with non-need satisfying situations and more accepting of them [p.485].

Thus, individuals with high self-esteem should pay particular attention to the situational specificity of the job, and accept it only if it is congruent with their abilities that have led to success in the past. Other high self-esteem individuals, recognizing that the job demands are incongruent with their beliefs about themselves, should be "self-screened" from accepting the job. But low self-esteem Ss should not participate in this "self-screening" and consequently are more likely to fail at this new endeavor because of improper or no assessment of the job demands.

Cohen (1968) reinforces the self-consistency idea by stating:

> Individuals with high self-esteem might be expected to react to new situations with expectations of success since characteristically they have been successful in the past in meeting their needs. Those with low self-esteem, characteristically expecting failure, may be more vulnerable to the effects of failure experiences, thereby reinforcing the general discrepancy between self-ideals and self-percept. Persons of high self-esteem should exert more influence attempts than persons of low self-esteem when they interact [p.384].

Another personality characteristic that should allow persons to "exert more influence attempts" if they possess it to a great extent is Machiavellianism (Christie & Geis, 1970). The Machiavellianism scale was designed to tap a person's general strategy for dealing with people and the degree to which he feels other people are manipulative in interpersonal situations. Those scoring high on the scale (high Machs) have a "cool detachment" which makes them less "emotionally involved with other people, with sensitive issues, or with saving face in embarrassing situations" (Christie & Geis, 1970, p.312). High Machs use power (subtle or otherwise) in interpersonal relations and may be known in the vernacular as "con artists." In laboratory experiments, males seem to be better manipulators than females, and in four-person groups High Machs tend to take over and direct (Geis, 1968). High Machs show a tendency to exploit situations and others for self-gain, and in the laboratory high Machs do not get distracted by emotional involvements irrelevant to winning (Geis, Weinheimer & Berger, 1970). The Mach scale has not, as yet, been tested for its predictive value for sales success; however, Christie and Geis (1970) have briefly discussed the relationship between Machiavellianism and sales:

> The high pressure salesman is enshrined in folklore along with the carnival pitchman as the epitome of manipulation. Although this stereotype may be true, available data indicate that four nonrandom samples of salesmen who represented both institutional and door-to-door selling scored below the random sample of adults in the NORC sample on Mach V, but were much higher on the built-in measure of social desirability. Although it is theoretically consistent that a high Mach would make a better salesman than a low Mach, there are good reasons why he might not enter the field or, if once in it, would leave. [p.356]

The first part of the present study attempted to predict sales success via the measurement of four personality variables: (1) introversion-extraversion (I-E), (2) neuroticism (N), (3) self-esteem (S-E), and (4) Machiavellianism. The I-E factor was included in the present study because of prior equivocal results, and because of the high reliability and validity of the EPI (see Carrigan, 1960, for a thorough treatment of introversion-extraversion). Eysenck and Eysenck's (1968) description of the ideal extravert in the EPI manual tends to fit the salesman stereotype:

> The typical extravert is sociable, likes parties,

> has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves excitement, takes chances, often sticks his neck out...is generally an impulsive individual...He prefers to keep moving and doing things, tends to be aggressive [p. 6]

They see the typical introvert as:

> [a] quiet, retiring sort of person, introspective, fond of books rather than people, he is reserved and distant except to intimate friends ...he does not like excitement, takes matters of everyday life with proper seriousness, and likes a well-ordered mode of life. He is reliable, somewhat pessimistic, and places great value on ethical standards [p. 6]

Given these I-E descriptions it might seem that extraverts would be better salesmen than introverts, however, in view of the past studies cited, this may not be the case. Instead, the present study proposes that the concept of anxiety or neuroticism must be added to the I-E factor in order to make an accurate prediction of sales success. This is in keeping with Eysenck's (1960, 1967) theoretical framework. The neuroticism (N) factor on the EPI is orthogonal to the I-E factor. A person scoring high on the N scale may still function "adequately in work"; however, "such individuals are predisposed to develop neurotic disorders under stress..." (Eysenck & Eysenck, 1968). When both N and I-E scores are taken into account, stronger sales success predictions are possible. Eysenck sees high neurotic introverts as tending to develop dysthymic disorders such as anxiety syndromes and depressive reactions; this proclivity toward psychopathology would generally predict poor work performance. A sales situation should lead to even poorer performance for neurotic introverts. Introverts should find it intrinsically difficult to approach strangers in a door-to-door selling situation; this coupled with a high N score or a "pre-disposition to develop neurotic disorders under stress" should lead to impaired sales performance. High N extraverts, low N extraverts, and low N introverts would not have the necessary combination of factors that should lead to poor sales success. The first prediction was then that <u>only the combination</u> of low E and high N scores should be detrimental to sales success. Any one dimension, I-E or N, should not be highly correlated with sales success.

In view of the literature, the second prediction of the first part of the present study was that self-esteem should be positively correlated with sales success. In addition, door-to-door selling situations should demand a very satisfactory self-image, given the customer-salesman interaction.

The third prediction was that Machiavellianism should also be positively correlated with sales success. This was based on Christie and Geis's (1970) analysis of the interplay between the laboratory and the outside world. They have proposed that "Machiavellianism becomes relevant when rewards or outcomes are not tied to objectively defined performances but can be influenced by the way the situation is handled." (Christie & Geis, 1970, p.344). The present selling situation contained the three conditions necessary for the relevancy of the Mach concept.

First, subjects must be motivated to accomplish specific goals (earn money). Second, subjects must be "in situations and role relationships in which neither an external authority or the structure of the situation itself dictated exactly what others were obligated to do or required to refuse." [p. 345] (a thirty minute sales demonstration and close), and third, the possibility for irrelevant affect must exist (prospect becomes involved emotionally).

Since all four personality measures were obtained for each S, there was the possibility of various combinations of personality traits leading to greater sales success. It was predicted that high self-esteem, high Mach, low neurotic extraverts would be the best salesmen, and that low self-esteem, low Mach, high neurotic introverts would be the worst. It was further predicted that generally Ss with high self-esteem would be better salesmen that Ss with low self-esteem, irrespective of their scores on the other three variables, except, of course, in the case of neurotic introverts. These combination predictions were based simply on the notion that someone possessing all of the desirable personality characteristics relating to sales success should be a better salesman than someone just possessing one or two of the proposed "sales success" traits. Self-esteem was expected to account for a larger proportion of the variance in sales success than the other three variables, thus it would be the most important personality variable relating to sales success.

A few religiosity questions were also included in the inventory because of the nature of the books published by this particular company. Since ten of the eleven books sold by the Ss were religious in nature, four questions concerning the Ss' religious attitudes were included to see if there was a relationship between religious attitudes and degree of sales success.

Some sample questions from the New Left Scale (Christie, Friedman & Ross, 1969) were also administered. Students scoring high on the New Left Scale would probably never have accepted a selling job because of its capitalistic overtones. Nevertheless, it was thought that there would be an inverse relationship between New Left scores and sales success because of most students' seeming agreement with Fromm--"[man] cannot be manipulated without being harmed. Yet the objective of the market place is to achieve this "thingness' in people..." (Shostrom, 1967, p. 36).

Personality Change

The area of personaltiy change is very complex, and questions still exist as to what extent change scores represent changed states rather than altered traits. These traits presumably possess stability through the influences of one's heredity or early environment. For a thorough analysis of personlity change, the interested reader is referred to Chapter 11 in the _Handbook of Multivariate Experimental Psychology_ (Cattell, 1966). Eysenck sees an enduring structure to personality in which the concept of trait is central. However, Secord and Backman (1960) seem to disagree when they state that:

> ...[the] focus of stability and change [is] in the interaction process rather than in the intrapersonal structures. At the same time, the importance of habit, cognitive structure, and similar concepts is not denied, but these mechanisms do not by themselves establish necessary conditions for behavioral

stability [p. 22].

Given a prolonged selling interaction, certain personality changes should then be manifested in Ss' behavior. This part of the study attempted to measure personality change on three variables: (1) extraversion, (2) neuroticism, and (3) self-esteem.

Daily approaching strangers in a door-to-door selling situation would demand a large degree of social extraversion. It was predicted that after engaging in characteristic extraverted behavior for a period of time, Ss should become more extraverted.

One might think that for most Ss there would be no significant change in neuroticism after a period of selling, and this was the present prediction. However, to the extent that Eysenck's N correlated with anxiety (.62-.74 with Cattell's anxiety factor (SAF) and Institute for Personality and Ability Testing (IPAT) anxiety scales), Ss' N scores may be elevated or depressed depending on how well they acclimated to the selling situation and quite possibly their degree of success.

It was also predicted that only successful Ss should show an increase in self-esteem. The unsuccessful Ss should retain their original score or possible have lower self-esteem. As an area for further study, Rosenberg (1965) indicated a need for specific studies of naturalistic change, especially regarding self-esteem. He stated that:

> The great question is: What kinds of stimuli, influences, or experiences under what kinds of conditions, acting upon what kinds of people, produce what kinds of change in what parts of the self-image?
>
> [p. 284]

Cognitive Dissonance

Festinger's cognitive dissonance theory (1957) has generated voluminous research and continues to be a matter of present debate (Bem, 1968; Chapanis & Chapanis, 1964). Basically, dissonance theory holds that man connot tolerate inconsistency among his cognitions, and he continually strives to eliminate any inconsistent cognitions.

The present study attempted to show that in certain situations people may not "love" things for which they have suffered as some cognitive dissonance studies have reported (Aronson & Mills, 1959), but rather that a general reinforcement theory may account for the bulk of human behavior. Leventhal and Brehm (1962) found that liking for instrumental activity increased directly with increments of reward. Likewise, M. J. Rosenberg (1965) reported evidence that attitude change varied directly, rather that inversely, with the amount of reward.

Abraham Korman (1966, 1968, 1970) in his work on job satisfaction has found that satisfaction with a job and company is directly related to the degree of competency achieved:

> All other things being equal, individuals will (a) choose, (b) adjust their performance to, and (c) find satisfying those behavioural roles which will maximize their sense of cognitive balance or consistency...Thus, to the extent that an individual has a self-cognition of himself as a competent, need-satisfying individual, then, to that extent he will find most satisfying those situations which are in balance with these self-perceptions. (1968, p. 485)

The extension of cognitive dissonance arguments into the field would support the supposition that a subject who had worked hard all summer and had not earned much money must conclude that he likes selling and the company, when other avenues of dissonance reduction are successfully blocked. So even though Festinger and Korman draw heavily from Lecky's (1945) theory of self-consistency, it seems that in this specific situation they would predict different outcomes.

Festinger (1964) stated "...a person might know that he is a very intelligent, highly capable person. At the same time, he knows he meets repeated failure. These two cognitions would be dissonant" [p. 512]. Aronson (1961) suggested a way to reduce this dissonance when he stated that "stimuli associated with no reward gain attractiveness if a person has expended effort in an attempt to attain the reward" [p. 375]. Similarly, Glass (1968) stated:

> If a person continues to expend effort in order to reach a positively valent object, but does not reach it, he will presumably experience dissonance. His cognition that he is expending effort is dissonant with his cognition that he is unrewarded. One way to reduce dissonance is to attach extra value to performance of the unrewarded activity. [p. 813]

On the other hand, Korman has shown that task success and task liking are positively related for high self-esteem Ss and unrelated for low self-esteem Ss. Festinger (1957) would seem to agree that the added self-esteem dimension is needed because a dissonant relationship assumes the person wants to win; "if for some strange reason (low self-esteem) the person wants to lose, this relationship would be consonant" [p. 13]. Korman's (1968) study did not involve "free choice" as described in the dissonant literature, however, his later generalizations to actual on-the-job behavior recognizes the necessary condition of "free choice" when assessing Ss' attitudes about their job.

Cognitive dissonance theorists would then see high ratings of the company and job as dissonance reducing behavior for high self-esteem Ss who had expended effort but had failed to reap commensurate benefits. On the other hand, Korman's work on job satisfaction shows that the "common sense" interpretation of this situation best fits the data, i.e., the S had expended effort, he had high self-esteem, and still he did not succeed, therefore, he concludes that he does not particularly like the company or the job.

It is therefore the high self-esteem, non-successful Ss who expended effort that are crucial to the different predictions between the two camps. Dissonance theorists would predict that these Ss would rate the job and company highly, while Korman would predict that these Ss would give the job and company poor ratings.

METHOD

Subjects. 201 student salesmen from high schools, colleges, and universities across the country completed the initial inventory during the first morning of a week-long training session in Nashville, Tennessee. The inventory was administered to all Ss at the same time in a large auditorium. Participation was voluntary, and 90% of the students in training completed the inventory. All subsequent testing was restricted to this initial pool of Ss.

Inventory Materials. All of the experimental measures were obtained either from the initial multiple inventory (pre-test) or from the multiple inventory (post-test) sent to those Ss still selling at the end of the summer. The pre-test consisted of: (1) the Eysenck Personality Inventory--Form A (Eysenck, 1963), (2) the Self-Esteem Scale (Rosenberg, 1965), (3) the Mach IV Scale (Christie & Geis, 1970), (4) a religiosity subscale extracted from the Radicalism-Conservatism Scale (Comrey & Newmeyer, 1965), and (5) four sample questions highly loaded on the political activism subscale of the New Left Scale (Christie, et. al., 1969).

The post-test consisted of: (1) the Eysenck Personality Inventory--Form B (Eysenck, 1963), (2) the 10 items with the highest part-whole correlations from the Mach V (Christie & Geis, 1970), (3) the Self-Esteem Scale (Rosenberg, 1965), and (4) various questions concerning the Ss summer of selling and his attitude toward the company.

Procedure. All Ss were administered the pre-test inventory at the beginning of the first day of sales school in June, 1970. All Ss had previously signed a contract to sell with the company, so they were assured a job. A cover sheet explained that the inventory was part of a study being conducted by a graduate student at the College of William and Mary, that all individual results would remain confidential, and the data would only be released to the company as statistical aggregates.

The post-test was mailed to each S in the original sample who was still selling at the end of the summer. Each S had been selling for approximately 12 weeks when he completed the post-test. Half of the Ss were instructed to complete the post-test before their delivery period, and half were instructed to complete it after their delivery period. The delivery period was a 5-10 day period at the end of the summer when Ss personally delivered ordered books to the customers. Most of these books had a substantial deposit on them. The Ss were to return the completed post-test to the writer in an enclosed self-addressed, stamped envelope. It was reiterated on the post-test cover sheet that all individual information was confidential and would not be released to the company. If the post-test had not been returned by the fourth week following its distribution, a postcard reminder ~~(see Appendix)~~ was mailed to those particular Ss.

There were two criterion measures of sales performance used: (1) the total wholesale business during the three month period, June through August, and (2) the wholesale business divided by the total number of calls made over the summer (sales index). It was hoped that the latter measure would indicate a salesman's ability relatively uncontaminated by amount of effort expended. The company supplied the criterion measures and other data needed that were not readily available from the Ss in November after the final official tabulations had been made.

RESULTS AND DISCUSSION

Prediction of Sales Success

Of the 201 Ss completing the initial inventory, 180 Ss' inventories were scorable. Of these 180 Ss, 111 were still selling at the end of the 12 week selling period. 51 of the 111 Ss selling at the end of the summer returned scorable post-inventories, for a 46% return percentage. The prediction of sales success was based on the 111 Ss completing the summer of selling.

Visual inspection revealed that both the criterion measures and the predictor variables closely approached normal distributions, therefore, no data transformations were necessary (see Appendix A). Of the four major predictor variables, none showed a significant correlation with sales success as measured by the wholesale business criterion. The correlations for all Ss in the sample completing the summer (N=11) are given in Table 1. None of the four major personality variables correlated significantly with the criterion. However, the four sample questions from the New Left scale were positively correlated with wholesale business (r=.19, p<.05, df=110). The items with the highest part-whole correlation coefficients on the political activism subscale were the four New Left questions administered. It was somewhat surprising to find this positive correlation, because it was believed that the Ss scoring highest on the New Left items would be the least likely to even engage in such a capitalistic enterprise as door-to-door selling, much less to do it best. The reliability and validity of a four item test are suspect, and this is borne out by the non-significant correlation between the New Left items and wholesale business when the sample is broken down into three groups--first, second, and third year salesmen.

It seems as if S's religious beliefs do not affect his sales, even though the product he is selling is religious in nature. The correlation between the religiosity questions and wholesale business was non-significant (r=.00).

Two variables that not surprisingly were correlated with wholesale business were hours worked (r=.47, p<.01) and number of calls (r=.32, p<.01). The hours worked and number of calls were supplied by the company. The company compiled these figures from weekly reports received from Ss throughout the selling period. It seems as if the old adage "there is no substitute for hard work" is true.

The first-year men (N=85) had essentially the same correlational pattern as all Ss combined. Table 1 shows that none of the personality variables correlated significantly with the wholesale business criterion. The number of hours worked and the number of calls were again positively correlated with wholesale business, r=.57 and .49 respectively (p<.001).

For second-year salesmen (n=15) there was one significant personality-sales correlation. Their scores on the Mach IV test correlated .48 (p<.05) with wholesale business. Table 1 shows that this correlation was found only for second-year salesmen; therefore, it is believed to be a chance correlation. The mean Mach IV score for second-year salesmen did not differ significantly from first or third-year men. As with the first-year men there were positive correlations between number of hours worked (r=.53, p<.05, df=14), number of calls (r=.52, p<.05, df=14)

TABLE 1

Wholesale Business Correlations

Variable Measured	All S's (N=111)	First-Yearmen (N=85)	Second-Yearmen (N=15)	Third-Yearmen (N=11)
Extraversion	-.008	-.001	-.256	.304
Neuroticism	.059	.046	-.020	.327
Self-Esteem	.024	-.138	.092	-.498
Machiavellianism	.061	.063	-.485*	.356
Religiosity	-.004	-.088	.331	-.014
New Left	.189*	.006	.107	.292
Total Calls	.320**	.495***	.521*	.115
Total Hours	.476**	.570***	.528*	-.413

* $p < .05$
** $p < .01$
*** $p < .001$

Note: All probability levels are for two-tailed tests.

and wholesale business (See Table 1).

There were no significant correlations between any of the variables and wholesale business for third-year salesmen (N=11), not even for hours worked and number of calls, r=-.41 and .12 respectively. The strong though non-significant negative relationship between hours worked and wholesale business for third-year salesmen is not easily explanable. Since this finding was not replicated for first and second-year salesmen, it may just be a chance relationship or it actually may reflect the greater expertise and efficiency of the best third-year salesmen relative to their less successful counterparts.

A second criterion measure, sales index, was used along with wholesale business in an attempt to define operationally sales ability. The sales index was obtained by dividing the wholesale business by total number of calls S made. It can be seen immediately that this index was not another independent criterion. Calls were significantly correlated with wholesale business and without extracting this factor wholesale business was correlated .628 with the sales index. Nonetheless, the index should be a better measure of S's sales ability vis-a-vis the prospect, because even though it was contaminated with perseverance and work motivation, it was a possible index of Ss' sales efficiency or selling ability. It could well be that the hard-working, conscientious salesman does the most business as Hughes and Dodd (1960) found, but this does not clarify the question of who is the best "salesman" in the popular sense of the word. In the extreme, someone may sell every customer he calls on, yet he may only call on 10 over a three month period; thus, a low wholesale business figure. On the other hand, somone else may only sell every twentieth customer, yet through hard work and long hours he may have a very large wholesale business figure. This is obvious, but it warrants constant repetition because most researchers choose sales volume as their sales criterion and when negative results are obtained they erroneously conclude that their personality measures or tests have nothing to do with "sales ability". This is more than just a subtle semantic distinction, because if certain personality variables do correlate highly with "sales ability", then it would be prudent for companies to hire these people and decrease the extra variance associated with wholesale business by added motivation, incentive, better job status, etc.

Unfortunately, in the present sales population, the sales index criterion yielded only one significant correlation. Table 2 gives the sales index correlations. The significant negative self-esteem correlation was found only for third-yearmen. Since it was not replicated for first and second-yearmen, no explanation will be attempted; there was no obvious reason for this result.

So far, analyses of the data have been restricted to linear models. To check for any curvilinear relationships, the four major personality variables were plotted against both criterion measures. The scatter-plots approximated a random distribution for all variables (see Appendix B).

In order to check on the summary prediction that Ss possessing certain combinations of personality characteristics would sell more or possess more sales ability, several discriminant function analyses were performed on the data. Two detailed accounts of the discriminant function are available to the interested reader (Cattell, 1966; Cooley & Lohnes, 1962). Essentially, by taking account of covariance among the variables, and assigning optimal weights to the predictor variables, the computer program used (BMDO 7M, Health Sciences Computing Facility,

TABLE 2

Sales Index Correlations

Variable Measured	First-Yearmen (N=85)	Second-Yearmen (N=15)	Third-Yearmen (N=11)
Extraversion	.066	-.419	.381
Neuroticism	-.045	.117	.307
Self-Esteem	-.050	-.176	-.558*
Machiavellianism	.072	-.460	.342
Religiosity	-.060	.146	.029
New Left	-.074	.130	.248
Total Calls	-.178	.121	-.087
Total Hours	-.029	.263	-.529

*$p < .05$

UCLA) determined the resulting probability of any S belonging to a particular predetermined group. On the basis of these probabilities, it thus assigned Ss to the most appropriate group. For example, the sample could hypothetically be divided into three groups: (1) good salesmen, (2) mediocre salesmen, and (3) poor salesmen as determined by any criterion measure. The discriminant function program would then review the Ss that the experimenter had placed in group (1) by the sales criterion and decide whether they did in fact belong in group (1) on the basis of some specified mediator variable(s) common to groups (1), (2), and (3). The discriminant function would then place each S in group (1) into either group (1), (2), or (3) following an optimal placement procedure. It would follow the same procedure for placing Ss pre-divided into groups (2) and (3). The resulting matrix would be a 3 x 3, and an appropriate statistical test for significance would be the chi-square test. Heavy placement in the matrix diagonal would be desired for optimal prediction.

In the following data analysis, the discriminant function will be used several times in an attempt to successfully identify good, mediocre, and poor salesmen via the personality variables measured. First-year men only were used in the discriminant analysis. The first analysis attempted to see if the four main personality variables could in any way determine into which sales group S would fall. The wholesale business was divided into three categories; High ($3000 or more), Medium ($1501-3000), and Low ($1500 or less). The cut-off points approximated the company's judgment of which wholesale business figures would be low, medium, or high for first-year salesmen. In addition, it was attempted to insure that the high category was reserved for only the very best salesmen. The median for first-year wholesale business was \$1754. The discriminant function could not successfully place the Ss into the three categories by optimally weighing the four personality variables. Table 3 shows how the Ss in each pre-formed group were actually placed based on the probability of their belonging in the High, Medium, or Low category.

The best discrimination resulted when the self-esteem variable was used alone for prediction. The mean self-esteem scores for the three groups were: Low 15.64, Medium 14.58, and High 13.81 (F=1.74, df=2, 82, n.s.) with the higher scores indicating higher self-esteem. This is in the opposite direction of the predicted self-esteem effect upon sales. Using just the self-esteem variable the discriminant function analysis classified the Ss as shown in Table 4. A χ^2 performed on the data was significant at the .10 level (χ^2=13.61, df=8). So on the basis of self-esteem alone, Table 4 shows that an S's wholesale business category could be predicted to some degree, but mainly only for Ss in the High and Low groups. This limited discrimination does not, of course, warrant implementation of a self-esteem scale as an employee screening device.

The next discriminant function analysis divided the Ss into three groups by median scores: (1) high extravert, low neurotic, high self-esteem, high Mach, (2) all Ss left over after determination of groups (1) and (3), and (3) low extravert, high neurotic, low self-esteem, low Mach. The cut-off scores were 13, 9, 16, and 90 for extraversion, neuroticism, self-esteem, and Machiavellianism respectively. Group (1) and (3) Ss were hypothesized to be the best and worst salesmen, respectively. The variable that the discriminant function used in an at-

TABLE 3

Discriminant Function Matrix For Low, Medium, And High Wholesale Business Groups Using All Four Personality Variables As Predictors

		Actual Placement of Ss		
		Low	Medium	High
Pre-Formed Groups	Low (N=33) $0 - $1499	18	5	10
	Medium (N=36) $1500 - $3000	14	9	13
	High (N=16) $3000	6	1	9

TABLE 4

Discriminant Function Matrix For Low, Medium, And High Wholesale Business Using Self-esteem As The Predictor Variable

		Actual Placement of Ss		
		Low	Medium	High
Pre-Formed Groups	Low (N=33) $0 - $1499	22	2	9
	Medium (N=36) $1500 - $3000	20	1	15
	High (N=16) $3000	6	0	10

tempt to correctly place Ss into the three groups was wholesale business. The resulting matrix is given in Table 5. Of the nine Ss in the pre-formed worst personality configuration group, six were successfully placed in the worst sales group. The mean wholesale business for the nine worst group salesmen was \$1696.55. The mean sales for the best and medium groups were \$2040.39 and \$2143.70, respectively. Seven Ss out of the fifteen in the best group were placed in the worst group, seven in the medium group, and only one in the best group. Therefore, it appears that the High S-E, High Mach, High E, and Low N salesmen do not do better than those with average scores on the four scales; however, Ss with Low S-E, Low Mach, Low E, and High N scores do perform the worst, although not significantly so (F=.4148, df=2,82, n.s.). It is now becoming apparent that the personality traits measured do not to any great extent relate to sales volume. The discriminant function analysis also used the sales index variable in an attempt to predict into which of the three personality combination groups Ss could be successfully placed, but no discrimination was possible using the sales index either. The means on sales index for the three groups were not significantly different (F=1.63, df=2,82).

The Ss were divided into four sales index groups--Worst, Low, Medium, and Best. The sales index cut-off points were obtained by dividing the sales index into four approximately equal spreads centered around the mean (1.18). Since only one S was below .25, for practical purposes there were three categories with .50 point spreads, and one from 1.75 up in order to include some of the better first-year salesmen. There was some discrimination for the Worst group using only one variable as a predictor--self-esteem (F=3.79, df=1,81, p<.10). Table 6

TABLE 5

Discriminant Function Matrix For Predicted Best, Medium, And Worst Salesmen Groups Using Wholesale Business As The Predictor Variable

		Actual Placement of Ss		
		Best	Medium	Worst
Pre-Formed Groups	Best-Hi SE, Hi Mach, Hi E, Lo N (N=15) Actual $\overline{X}$ sales $2040	1	7	7
	Medium-All Ss not in Best or Worst group (N=61) Actual $\overline{X}$ sales $2173	3	25	33
	Worst-Lo SE, Lo Mach, Lo E, Hi N (N=9) Actual $\overline{X}$ sales $1696	1	2	6

TABLE 6

Discriminant Function Matrix For Four Different Sales Index Groups

Using Self-esteem As The Predictor Variable

		Actual Placement of Ss			
		Worst	Low	Medium	Best
Pre-Formed Groups	Worst .10-.75 (N=25)	18	5	0	2
	Low .75-1.25 (N=25)	11	14	0	0
	Medium 1.25-1.75 (N=24)	14	9	0	1
	Best 1.75 (N=11)	5	6	0	0

shows that 18 out of 25 Ss in the Worst group were actually placed in that group using self-esteem as the predictor variable. The overall self-esteem F was 1.27 (df=3,81, n.s.). The respective self-esteem means for the Worst, Low, Medium, and Best groups were 15.8, 13.9, 14.8, and 14.9. The discriminative power was weakened, however, when all four personality variables were combined. The final matrix is shown in Table 7. It can be seen that by using the personality variables to predict "sales ability" no Ss in the Best Sales Index group (1.75→) would be predicted to be actually in that group. Instead, five out of the eleven were placed in the worst group (.10-.75).

A review of the predictive sales results would indicate that the personality variables measured do not account for much of the variance associated with sales volume or sales ability. None of the variables were effective predictors; however, of the four main variables, self-esteem consistently appeared as the best relative predictor. The addition of extraversion, neuroticism, and Machiavellianism seemed only to cloud the picture. But, the self-esteem effect at first glance would appear to be opposite of the given prediction. That is, Ss with the highest self-esteem scores (18-20) had a lower mean wholesale business figure than those with medium self-esteem (14-18), although the difference was non-significant.

It should be emphasized that all Ss possessed relatively high self-esteem. This is congruent with Rosenberg's (1965) findings that indicate that most students do have high self-esteem. The medium S-E ($\bar{X}$=14.6) college Ss have an adequate self-image of themselves, and would be rated as high relative to Rosenberg's high school student norms (median=13.3 converted to present scoring system; see Appendix C for com-

TABLE 7

Discriminant Function Matrix For Four Different Sales Index Groups

Using All Four Personality Variables For Group Prediction

Pre-Formed Groups	Actual Placement of Ss: Worst	Low	Medium	Best
Worst .10-.75 (N=25)	11	5	6	3
Low .75-1.25 (N=25)	5	10	4	6
Medium 1.25-1.75 (N=24)	8	7	7	2
Best 1.75 (N=11)	5	2	4	0

plete comparison). The same may be true for the Low S-E ($\bar{X}$=13.8) Ss who had the largest wholesale volumes; Rosenberg's low self-esteem Ss scored from 6 to 10. Thus, the negative correlation between S-E and wholesale business does not mean that Ss with inadequate self-images sold more, but rather that relative to the present sample's mean S-E score, the Ss with lower S-E scores sold more.

All of the predictive analyses used only the data for first-year salesmen (N=85), but there seemed to be no differences between the personality scores of drop-outs (Ss not selling after 10 weeks), repeaters, and first-year salesmen (see Table 8). There is an obvious significant difference in sales between first, second, and third-year salesmen. The correlation between years with the company and wholesale business was .62 (df=110, p<.001). In view of the present results this increase would be attributed simply to increased experience and continued motivation, rather than certain personality characteristics that returning salesmen possess.

Sales success in the present situation seemed not to be related to personality variables. It may be that success was determined largely by three factors: (1) effort expended, (2) the extent to which they followed company instructions, and (3) their motivation to succeed. In any event, the personality characteristics measured accounted for only a negligible amount of the variance. It may be that other personality variables are related to sales success, but on the basis of the present data it could be speculated that if a student worked a minimum number of hours, followed company instructions (i.e., used company sales talks, and closely followed company procedures regarding demonstrations and closes), and maintained a strong motivation to succeed over the three

TABLE 8

Descriptive Data (Means) For Drop-outs,

First, Second, and Third-Year Salesmen

	Drop-outs (N=69)	1st-Year (N=85)	2nd-Year (N=15)	3rd-Year (N=11)
Wholesale Business		$2078	$4484	$5792
Extraversion	12.493	13.212	13.933	12.636
Neuroticism	9.826	9.000	7.133	10.364
Lie	3.087	3.341	3.133	4.000
Mach	87.725	88.553	88.333	94.091
Self-esteem	15.087	14.847	16.867	15.909
Religiosity	19.290	19.271	18.867	19.182
New Left	6.725	6.600	8.933	9.273
Hours		659.459	729.866	722.727
Calls		1821.376	1587.467	1949.818
Sales/Calls	($ per call)	1.181	2.825	2.971
Sales/Hours	($ per hour)	3.151	6.144	8.014
Hours/Calls		0.362 hrs.	0.460 hrs.	0.371 Hrs.

month period, then his chances for success would probably be very good, errespective of his personality traits.

Personality Change

Three personality variables were re-measured at the end of the summer in an attempt to assess any personality change that may have occurred over the summer.

The prediction that all Ss would show an increase in extraversion as a result of forcing themselves to knock on 40-60 (company average) strange doors a day and demonstrate a product to 20-35 strangers was supported. Personality change analyses were computed separately for first and second-year salesmen. Analyses were not computed for third-year Ss since only five returned the post-questionnaire. Table 9 gives the extraversion change data for first-year salesmen. A repeated measure, analysis of variance (ANOVA) (Kirk, 1969) revealed a significant pre-post difference ($F=10.50$, $df=1,33$, $p<.005$). Non-successful salesmen showed an increase from 13.00 to 13.95 on the E scale of the EPI, and successful salesmen showed an increase from 11.67 to 14.00. The interaction effect was not significant. Success was operationally defined as \$2000 or more wholesale business. \$2215 was the median but for the data analysis \$2000 was used since the next lowest S did \$1914 wholesale business.

The same change pattern held for second-year salesmen ($F=22.32$, $df=1,8$, $p<.001$). Table 9 shows that successful second-yearmen (\$4000 or more wholesale) increased their score on the E scale from 12.00 to 14.40; unsuccessful second-yearmen increased from 14.00 to 16.60 ($F=22.32$, $df=1,8$, $p<.001$). All pre-selling E measures were from the EPI, Form A; all post-selling measures were from the EPI, Form B. Since a 2.1 E score difference between Form A and Form B is reflected in the norms for American college

TABLE 9

Summary Tables For Unweighted Means Analysis Of Variance

On Extraversion Change Data

First-Year Salesmen (N=35)

Source	df	Mean Square	F
A (Success)	1	7.06	.29
Error A	33	23.97	-
B (Pre/Post)	1	46.20	10.50*
AxB	1	8.20	1.86
Error B	33	4.40	-

Second-Year Salesmen (N=10)

Source	df	Mean Square	F
A (Success)	1	22.05	1.62
Error A	8	13.65	-
B (Pre/Post)	1	31.25	22.32**
AxB	1	0.05	0.03
Error B	8	1.40	-

* $p < .005$
**$p < .001$

students (Eysenck & Eysenck, 1968), 2.1 was subtracted from every post-selling E score in an attempt to equate the two forms. All analyses were performed on these transformed data.

It was also predicted that only the successful Ss would show a significant increase in self-esteem. It should be remembered that all of the personality and criteria variables were normally distributed, except self-esteem, which was slightly negatively skewed. On a 0-20 scale, the mean was 14.85 and the median 16. The self-esteem prediction was not supported. The successful salesmen increased their S-E scores an average of 2.9 points (14.87 to 17.73). The unsuccessful Ss increased their scores an average of only 1.2 points (15.40 to 16.60). While the pre-post main effect was significant ($F=11.06$, $df=1,33$, $p<.005$), the interaction was not ($F=1.86$, $df=1,33$), thus yielding only partial confirmation of the prediction.

Second-year salesmen showed a surprising decrease in self-esteem ($F=6.73$, $df=1,8$, $p<.05$). Unsuccessful Ss decreased from 17.20 to 14.00, successful Ss decreased from 17.80 to 15.20. Again the AB interaction was not significant (see Table 10). This decrease is very puzzling, but it may reflect personal dissatisfaction with unachieved high expectations. Often, second-year salesmen return expecting to "set the world on fire," and even though they do relatively well as evidenced by their mean wholesale business, they have a lingering feeling of inadequate performance. First-year salesmen, on the other hand, are generally heartened at saving a modest amount of money, since they did not know what to expect.

Finally, it was predicted that no change would occur on the N scale or the EPI after 12 weeks of selling. Such was not the case.

TABLE 10

Summary Tables For Unweighted Means Analysis Of Variance

On Self-esteem Change Data

First-Year Salesmen (N=35)

Source	df	Mean Square	F
A (Success)	1	1.54	.08
Error A	33	18.57	-
B (Pre/Post)	1	70.88	11.06**
AxB	1	11.90	1.86
Error	33	6.41	-

Second-Year Salesmen (N=10)

Source	df	Mean Square	F
A (Success)	1	4.05	.22
Error A	8	18.55	-
B (Pre/Post)	1	42.05	6.73*
AxB	1	.45	.07
Error B	8	6.25	-

* $p < .05$
**$p < .005$

Table 11 shows a significant pre-post difference (F=18.55, df=1,33, p<.005) for both successful and unsuccessful first-year salesmen (interaction F=2.27, df=1,33, n.s.). Successful salesmen's N mean increased from 8.05 to 11.65; unsuccessful salesmen's from 9.20 to 10.93. Second-year salesmen showed the same trend, although not quite as strongly (F=6.01, df=1,8, p<.05) (see Table 11). Successful salesmen increased from 7.90 to 9.8; unsuccessful Ss increased from 7.00 to 10.80. There was no significant interaction (F=.31, df=1,8, n.s.).

The generally higher N scores following a summer of selling were unexpected and have several possible explanations. On the face of it, it would appear that at the time of re-testing all Ss were more anxious than at the initial testing session--Eysenck"s N factor correlates .67-.74 with Cattell's IPAT Anxiety Scale (Eysenck & Eysenck, 1968). But Eysenck and Eysenck (1968) maintained that N scores are not greatly affected by states or moods. Klavetter (1968) found the N scale positively correlated with the anxiety factor of the Multiple Affect Adjective Check List (Zuckerman & Lubin, 1965) trait instructions, but not with the state instructions (r=.59 and .05, respectively). This leads one to suspect that the present N changes may be closely tied to underlying personality dynamics. However, to summarily draw cause-effect conclusions concerning a summer of selling would be extremely tenuous.

Another bit of evidence also seemed to contraindicate the state anxiety explanation. The general selling situation may have increased Ss anxiety levels and "predisposed them to neurotic disorders" because not very many student salesmen actually delight in knocking on 50-60 new strange doors a day. Toward the end of the summer, salesmen, especially first-yearmen, tend to worry more and find that they have to force

TABLE 11

Summary Tables For Unweighted Means Analysis Of Variance On Neuroticism Change Data

First-Year Salesmen (N=35)

Source	df	Mean Square	F
A (Success)	1	6.17	.04
Error A	33	21.44	-
B (Pre/Post)	1	100.12	18.55**
AxB	1	37.72	2.27
Error B	33	9.46	-

Second-Year Salesmen (N=10)

Source	df	Mean Square	F
A (Success)	1	.45	.03
Error A	8	15.85	-
B (Pre/Post)	1	48.05	6.01*
AxB	1	2.45	.31
Error B	8	8.00	-

* $p < .05$
**$p < .005$

themselves to keep up the intensive selling effort expended during the beginning and middle parts of the summer (12-14 hours per day). Thus, the N scale should tap this increased anxiety. If, then, this is the main source of the N increase, then it should be dissipated at the end of the summer after the student has stopped selling. This can be partially checked, because some of the Ss completed their post-inventory while still selling, and some completed it upon finishing their summer job. But the ANOVA summary table (see Table 12) did not reveal the AxB interaction sought. Instead, the Ss completing their inventory after completion of selling had a higher mean N score (11.94 vs. 10.56 for the still selling Ss). It would seem then that the elevated N score was not due to the narrow situational specificity of knocking on doors vs. not knocking on doors; the cause must lie elsewhere.

Three concepts relating to test-taking may help clarify some of the data. Except for the Mach V test, none of the tests used were expected to be immune from social desirability effects. The N scores may be more easily affected by social desirability than the other scores because it should not be socially desirable to indicate that one worries or is tense very often. The fact that the pre-test was given to the entire sample at one time may heighten the tendency to give socially desirable answers. The post-test was completed by each individual at his leisure and may not have been as susceptible to group influences. Taking this factor into account then, it is not possible to say whether Ss taking the post-test are more neurotic or just admit it more easily than on the pre-test.

Adding a second concept--test faking--to the social desirability factor would make the depressed pre-test N scores and the elevated post-

TABLE 12

Summary Table For Unweighted Means

Analysis Of Variance On Before/After N

Change Data

Source	df	Mean Square	F
A (While selling/After selling)	1	82.75	4.16*
Error A	33	19.88	-
B (Pre-test N/Post-test N)	1	121.05	18.55**
AxB	1	11.05	1.69
Error B	33	6.55	-

* $p < .05$
**$p < .01$

test N scores even more readily explanable. However, both the N and E mean scores for all Ss were almost identical to Eysenck's norms for college students taking the EPI under normal conditions. Eysenck's sample means were 13.1 and 10.9 for E and N respectively (Form A). The present sample's means were 12.96 and 9.24 (Form A). Eysenck's Form B means were 15.2 and 11.4; this study's were 16.5 and 11.2.

Therefore it would appear that Ss were not faking their pre- or post-test scores to any great extent. Gomez and Braun (1967) had Ss complete the EPI as if they were "salesmen candidates" and their results are given in Table 13. There were significant differences between "regular" and "salesman candidate" instructions ($p<.01$) on all three subscales. Given the extremity of Gomez and Braun's scores it would appear that this study's Ss were not attempting stereotypical salesmen scores.

The third test-taking factor, acquiescence, must also be mentioned, since it was not controlled in this study. All positively scored answers on the N scale are "Yes" answers. The question "Does the current state of the S predispose him to acquiesce or has he really changed his personality?" cannot be answered definitively. This factor would probably not account for a large portion of the variance (Eysenck & Eysenck, 1964; Rorer, 1965).

On balance, it appears that the increased N scores following a period of selling should be attributed more to underlying individual dynamic changes than to momentary states, sets, or demand characteristics. The stability and permanence of this heightened "emotionality lability and overreactivity" could not be determined, though. It is interesting to note that the first, second, and third-year salesmen's N, as well as

TABLE 13

EPI Scores Given a "Salesman Candidate" Set[1]

	E		N		L	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
Regular Scores	12.88	13.08	9.48	9.72	2.23	2.08
Faked Scores	14.84	15.02	2.93	3.28	6.89	4.30

[1]From Gomez and Braun (1967)

Note: The instructions for Group 1 were simply to respond as a "Salesman Candidate" would. Group 2 was additionally asked to "try to conceal faking."

E and S-E, scores are not significantly different. Thus, the increases must not have been retained from one year to the next. Cattell (1966) adequately discussed "state" vs. "trait" changes, and the interested reader is referred to this source for a thorough analysis of personality change.

Before leaving the admittedly complicated area of personality change, the difficult methodological question of how to measure change must be touched on briefly. In the present study, the absolute scores were not transformed in any way (except for equating Form A and Form B of the EPI for the E subscale) and were simply subjected to a repeated measures ANOVA. Some theorists have argued for transformations that would make the data more consistent with reality. For example, regression toward the mean must be taken into account. In the present analysis the unaccounted regression factor should not enter into an analysis of the data since all but one of the changes present were away from the mean.

Cattell (1966) discussed two other very difficult problems in regard to the evaluation of change scores. The notions of (1) "ceiling" and "floor" effects, and (2) homeostatic effects cannot be easily taken into account when dealing with personality change score data. Essentially, the first notion proposes that it is increasingly difficult to extend one's scores as he moves toward the ceiling or floor away from a mid-point. Thus, change scores at the outer boundaries should be weighted accordingly. The homeostasis "model is that of a stretched spring, obeying Hooke's law" (Cattell, 1966, p. 367). A change far out from the mean is more important than if it had occurred close to the mean.

These concepts should be most relevant to S-E changes in the present study because the mean S-E score was very high at the start. But translating these concepts into proper transformations for personality change data has not yet been attempted, moreover, these concepts may be too simplistic, and something even more complicated may be occurring.

In retrospect, of the three personality change predictions, one was confirmed, one was partially confirmed, and one was not confirmed. All Ss became more extraverted and neurotic and had a better opinion of their capabilities as measured by their self-image scores. This increase in both self-esteem and neuroticism does not seem congruent in view of a significant negative correlation between these two variables ($r=-.38$, $df=179$, $p<.001$). Morris Rosenberg (1965) and many other researchers have found low S-E generally correlated with anxiety and a host of psychosomatic symptoms. Given the conclusive evidence associating neuroticism and low self-esteem, explanations of these results should analyze the construction of the scales and the testing situations. Possible explanations of the various individual personality changes have been presented.

Cognitive Dissonance

The third part of the present study attempted to study the possible cognitive dissonance created by someone working hard all summer and still not attaining a minimum degree of success. Two seemingly different predictions by Festinger (1957) and Korman (1970) were tested in a field situation.

Specifically, dissonance theorists would generally predict that, providing other avenues of dissonance reduction had been closed, in order to rectify two dissonant cognitions (e.g., I have worked hard; I am unsuccessful), the subject would either increase his liking of the job or company, or decrease his subjective self-rating of himself (self-esteem). On the other hand, Korman's work suggests that an S in the same situation would conclude that he does not particularly like the company or job.

All of the Ss included in the cognitive dissonance analysis had to pass certain criteria before inclusion. This was to insure that the two avenues of dissonance reduction mentioned above would be the primary ones capable of being used. First, all of the Ss must have expended effort (500 hours or more worked, over 1000 calls, and a self-rating of 5 or 6 on the question "I believe that I have worked hard this summer" --higher numbers indicate greater agreement on a 6-point scale. The company average is approximately 600-800 hours worked and 2000-3000 calls made). Second, all Ss must not be returning to sell for the company the next summer, i.e., Ss cannot say, "I will come back next summer and make up for my sorry performance this summer." Third, Ss must have rated their territory as good (a 4, 5, or 6 on the territory scale). Finally, all Ss must have had adequate S-E scores (14 or above on the S-E scale).

After observing the strict controls necessary to eliminate most avenues of dissonance reduction except the ones being studied, a problem arose--the sample size was reduced to zero. This was due in large part to the fact that most of the Ss returning the post-inventory were successful. Relative failure was operationally defined as earning $500 or less. A more lenient criteria for inclusion accepting returning salesmen yielded three Ss in the worked hard, high S-E, non-success category. Their mean ratings of the job and company were 5.7 and 5.3 respectively on a 6-point scale with higher numbers indicating higher ratings. This compares with mean job and company ratings of 5.0 and 5.7 for Ss in the worked hard, high S-E, successful category. It may be that including returning Ss would be acceptible anyway, because of a variation of the preceding self-statement hypothesized for non-successful, returning Ss. This variation is: "I may not have made much money, but this company is so fantastic that I'd work next summer for nothing." But the results still indicate no difference between the job and company ratings for the two crucial categories.

An interesting result that could be interpreted within a cognitive dissonance framework was the significant difference in the ratings of the company and job between Ss who completed the ratings before their delivery period and those that completed them after their delivery period. On a 6-point scale, the average agreement with the statement "I really enjoyed my summer's work" was 5.38 before delivery periods and 4.34 after delivery periods ($t=-2.33$, $df=48$, $p<.05$). Higher numbers represent greater agreement with the statement. The average agreement with the statement "_____ is a great company" was 5.82 before and 4.97 after delivery periods ($t=-2.82$, $df=48$, $p<.01$).

Another possible explanation of these results is that while still working for the company, Ss do not take time to assess independently their feelings about the job and company for several reasons. While still in the selling situation, students are constantly bombarded with positive thoughts about the job and company. Newsletters, sales managers, and crew managers are always talking about how great selling for the company can be, how much fun the job is, and how much money everyone is going to earn. Also, there is pressure from peers to conform and join in the blanket acceptance of the job and company. If one is having slightly negative feelings about selling, he will try to cover these with a facade of enjoyment when he is with a group of other salesmen. It could be that this subtle pressure is strong enough to influence his ratings of the job and company, although extending persuasions about "how he should feel" to answers on a private questionnaire could be precarious reasoning. But, given the demand characteristics (Orne, 1962) of the situation and time during which the post-questionnaire was answered, the high ratings before the delivery period may be better understood.

Conversely then, the lower ratings of the job and company after the delivery period may have resulted from Ss not being in the selling situation, being away from their sales group, maybe being at home or at school, and maybe having a chance to talk with friends about various selling experiences and incorporate their feedback into the ratings.

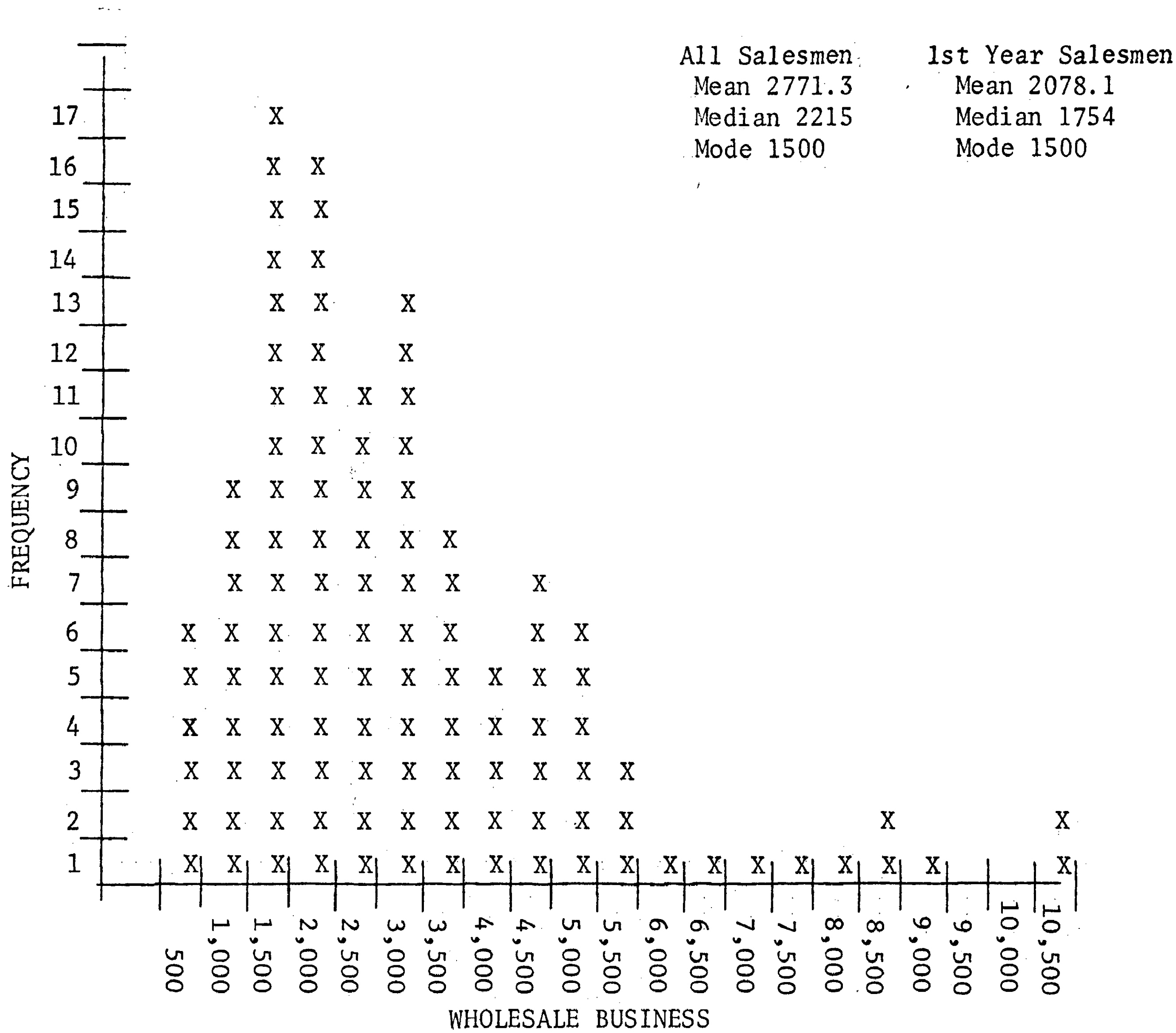
It is doubtful that the ratings simply reflect the relative success attained by the Ss. Each summer, invariably, a few students do not end up with the total amount of sales and profit after delivery period as measured before delivery period for a variety of reasons--some zero or low deposit orders are not deliverable, Ss underestimate the delivery costs, Ss make errors in their bookkeeping, etc. Thus, this important period may color their entire attitude toward the company and their summer of selling. They may feel that the job and company are not as "great" as they had previously thought. By comparing the ratings of those Ss with "good" delivery percentages (80-100) and those with "poor" delivery percentages (0-80), the "delivery period letdown" hypothesis can be partially checked. Dividing the number of books delivered by the number of books ordered yields the delivery percentage. The Ss with good delivery percentages gave the job a rating of 4.44; those with poor percentages rated the job 3.70 ($t=1.01$, $df=24$, n.s.). The company ratings were 5.13 and 4.50 for the good and poor groups respectively ($t=1.17$, $df=24$, n.s.). The trends were in the right direction, but do not seem strong enough to account for the rating of differences.

If, for first-year salesmen, returning or not returning could be a behavioral measure of job satisfaction, then it would seem that job success (financial) was related to job satisfaction. The wholesale business of the 60 first-year salesmen indicating that they would return to sell next summer was significantly greater ($t=2.98$, $df=82$, $p<.01$) than the 24 indicating that they would not return ($\bar{X}s=\$2356$ and $\$1403$). Generally, the students who found the job financially satisfying did return; the others did not return.

The results were mixed and ambiguous concerning the proposed differences that should have arisen by extending Festinger's and Korman's work into the field. The high S-E, non-successful Ss did rate the job and company high, but the more successful an S was, the more likely he was to return to sell the next semmer. Field experimentation was the logical next step for an extension of Korman's work, and at the same time Festinger's theory needed to be experimentally subjected to a wide variety of naturalistic situations. It is in keeping with the exploratory nature of the present study to state that further research is needed before the proposed incongruencies can be resolved in an applicable situation.

APPENDIX A

DISTRIBUTIONS OF THE TWO CRITERION MEASURES AND THE SIX PERSONALITY VARIABLES IN THE PRESENT STUDY


All Salesmen
Mean 2771.3
Median 2215
Mode 1500
1st Year Salesmen
Mean 2078.1
Median 1754
Mode 1500
FREQUENCY
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8
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10
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16
17
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
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6,500
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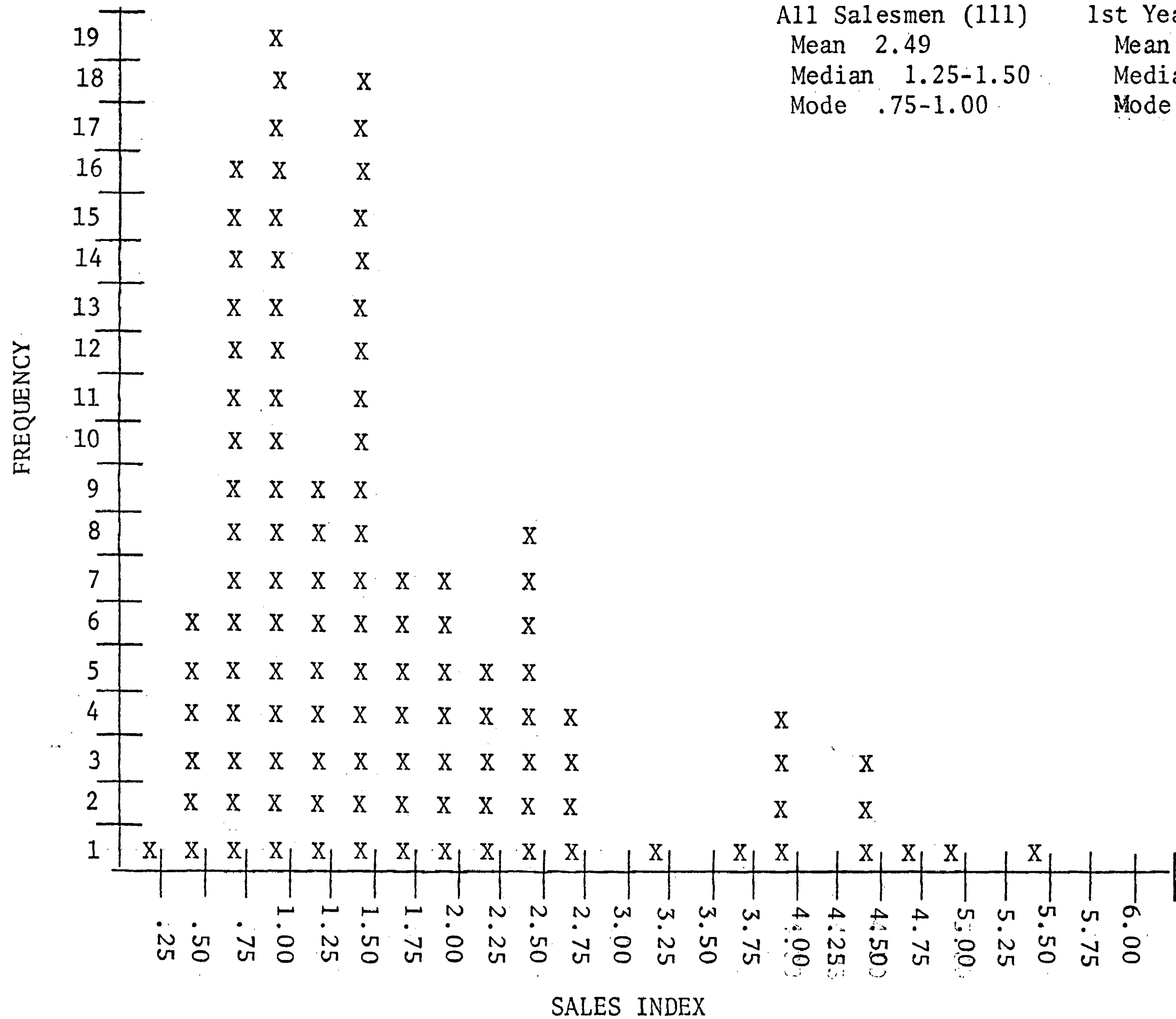
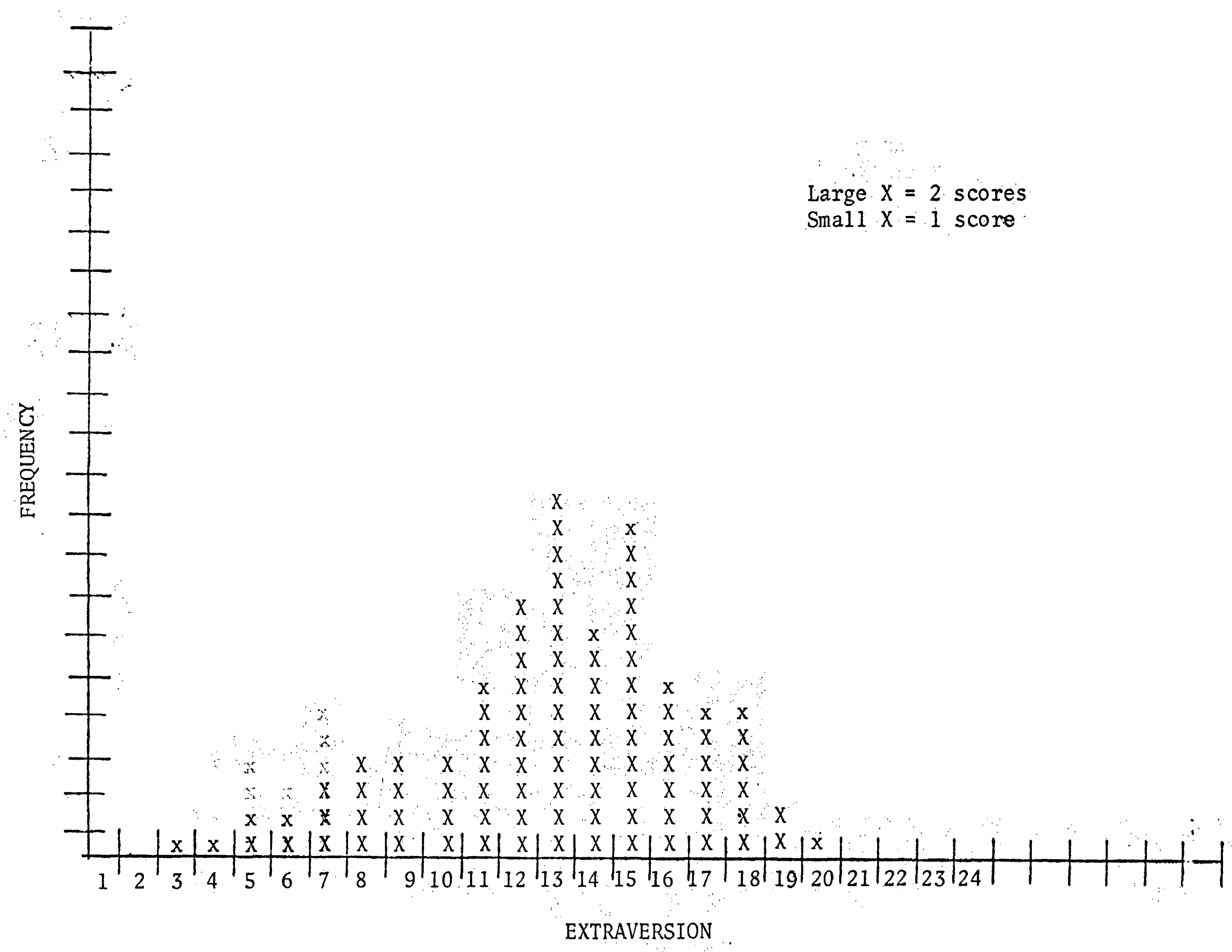
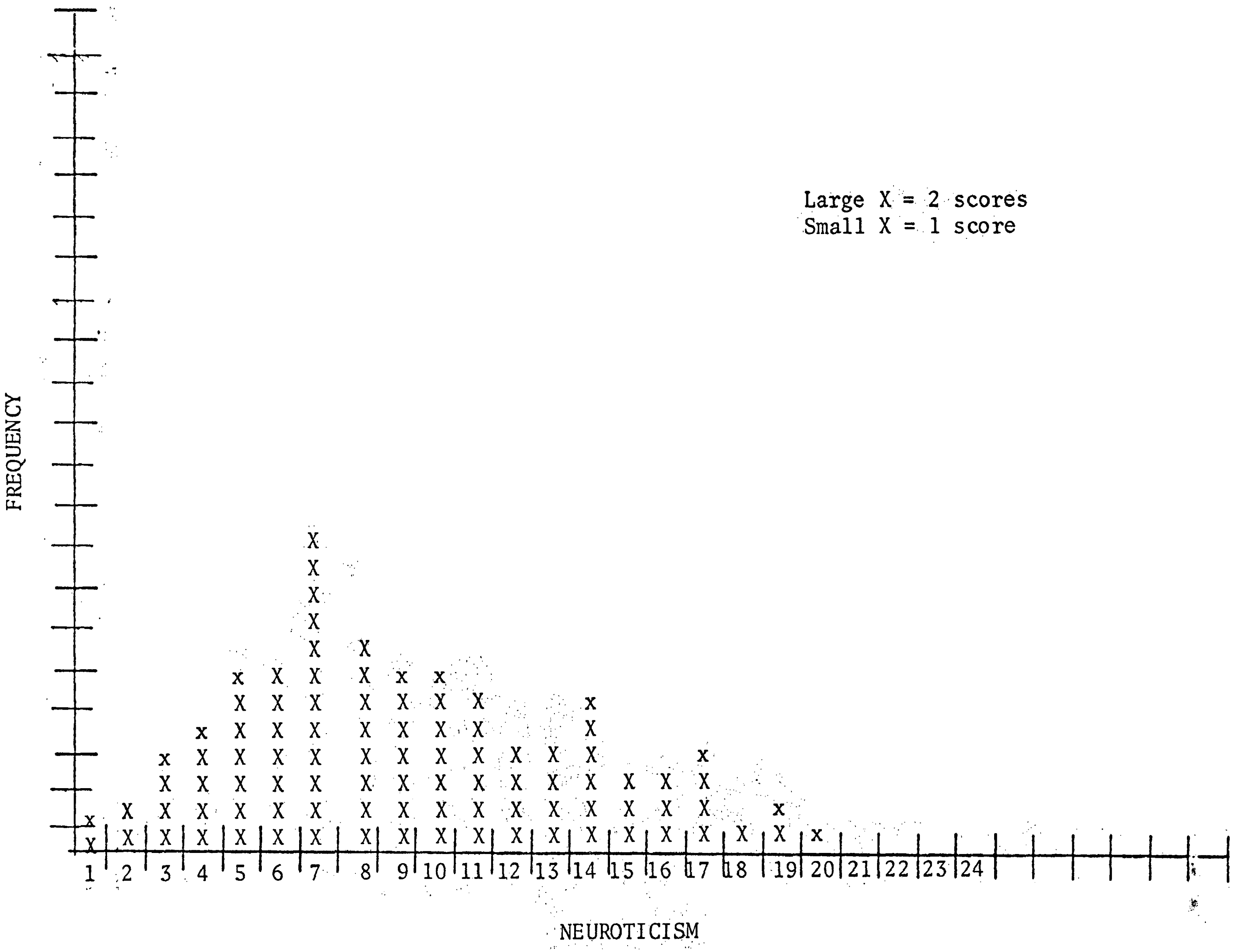
9,500
10,000
10,500
WHOLESALE BUSINESS



All Salesmen (111)
Mean 2.49
Median 1.25-1.50
Mode .75-1.00

1st Year Salesmen
Mean 1.18
Median 1.00
Mode .75-1.00


Large X = 2 scores
Small X = 1 score
FREQUENCY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
EXTRAVERSION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FREQUENCY
NEUROTICISM
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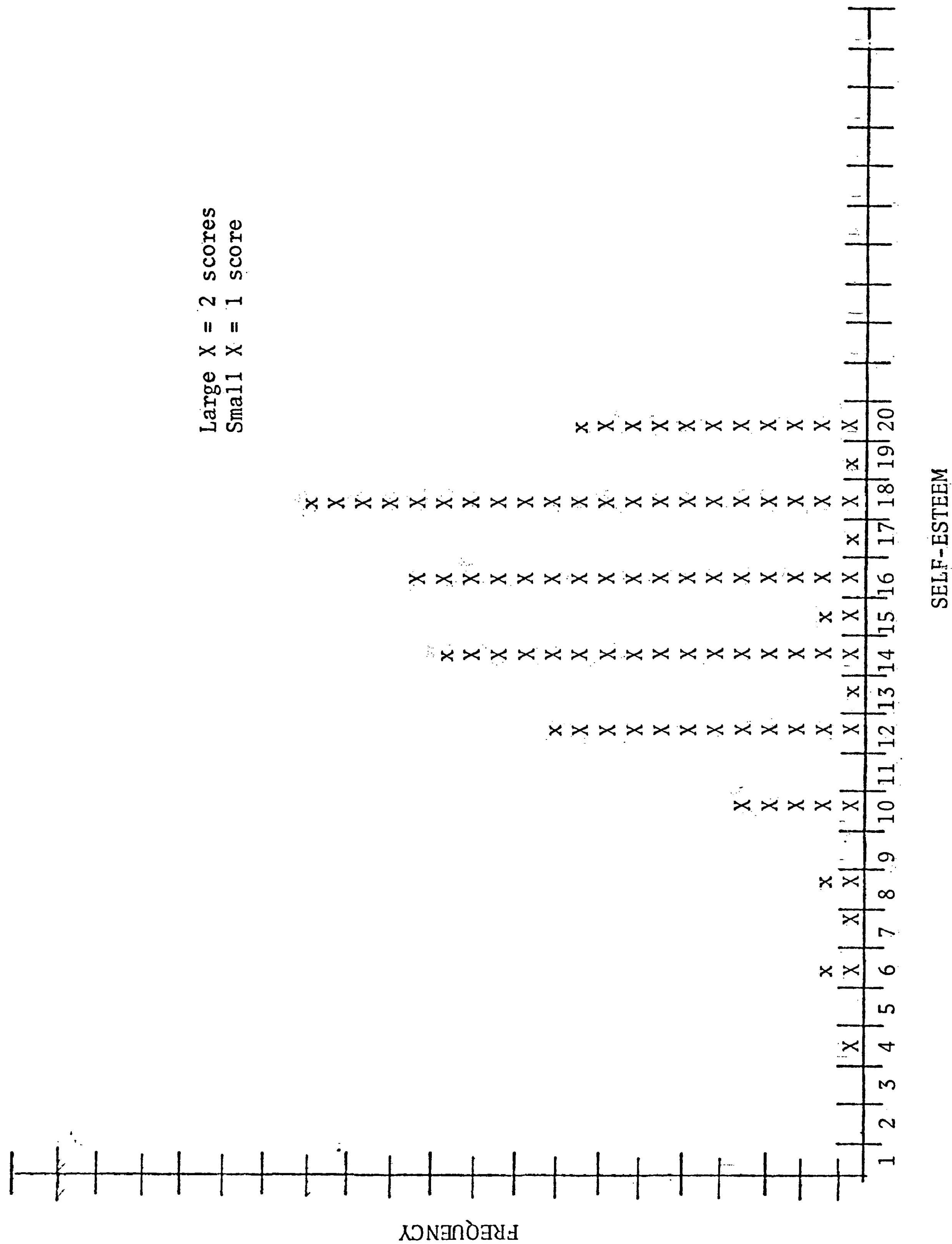
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SELF-ESTEEM
FREQUENCY
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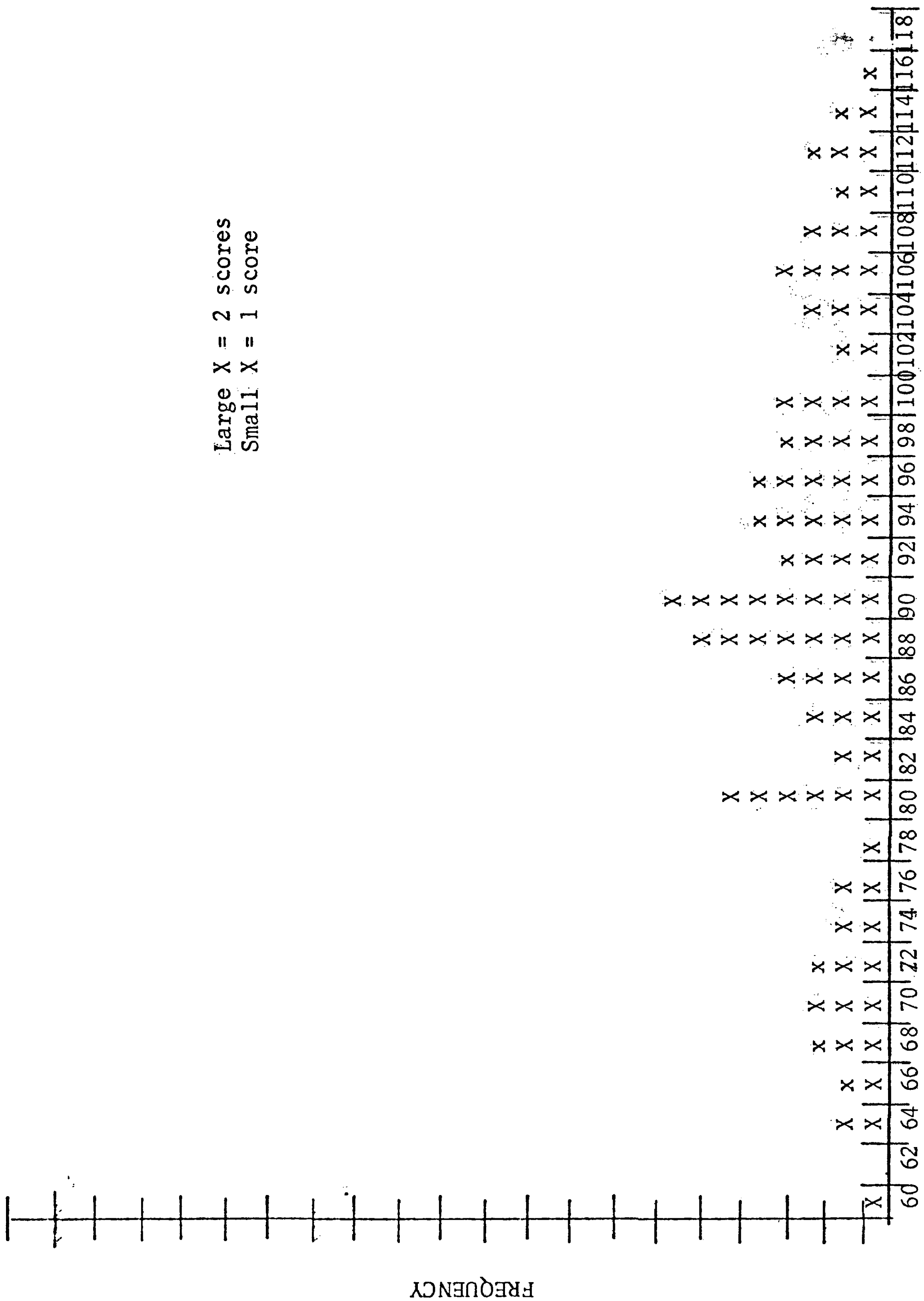
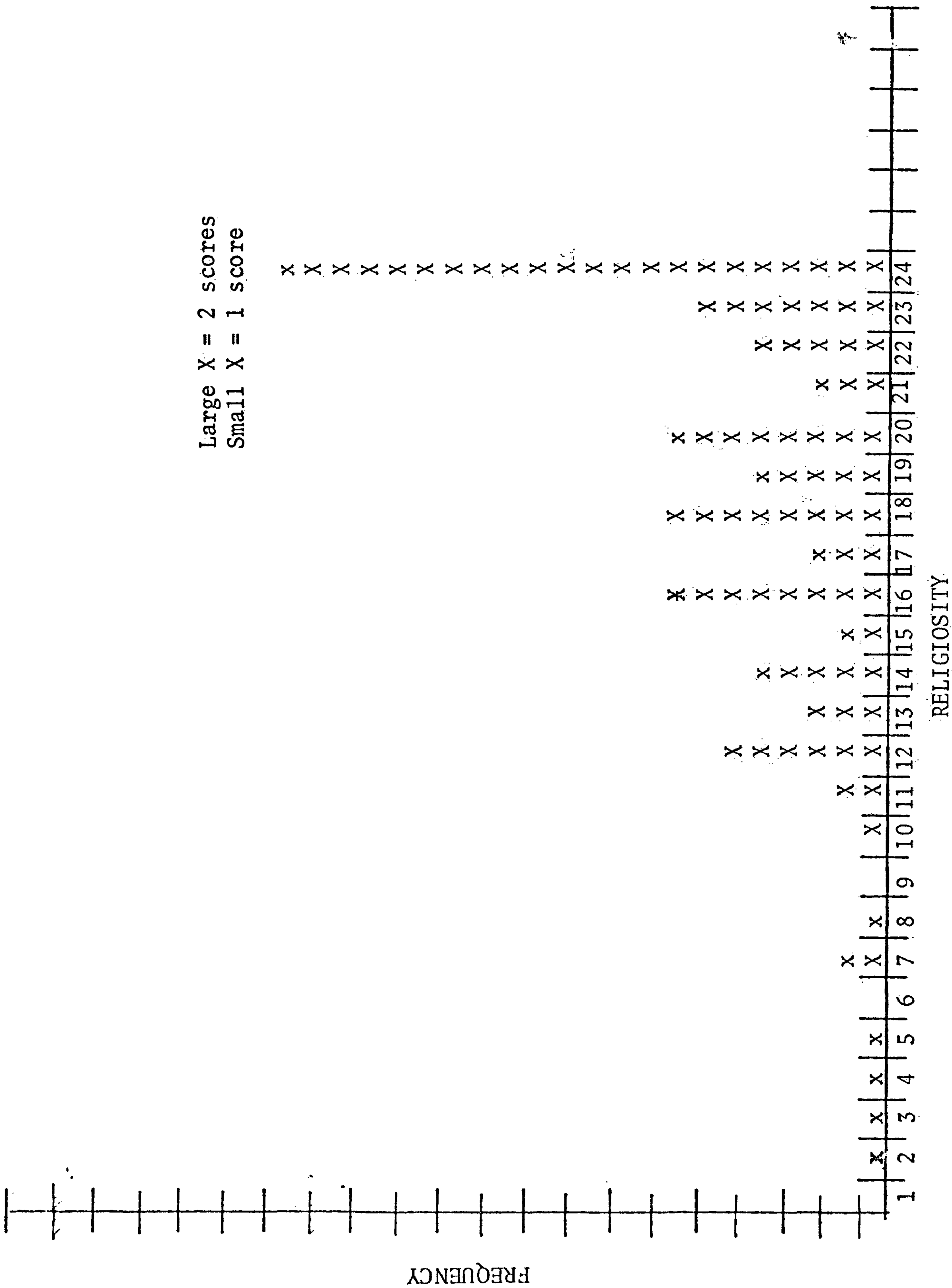

Large X = 2 scores
Small X = 1 score
FREQUENCY
MACHIAVELLIANISM
60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110 112 114 116 118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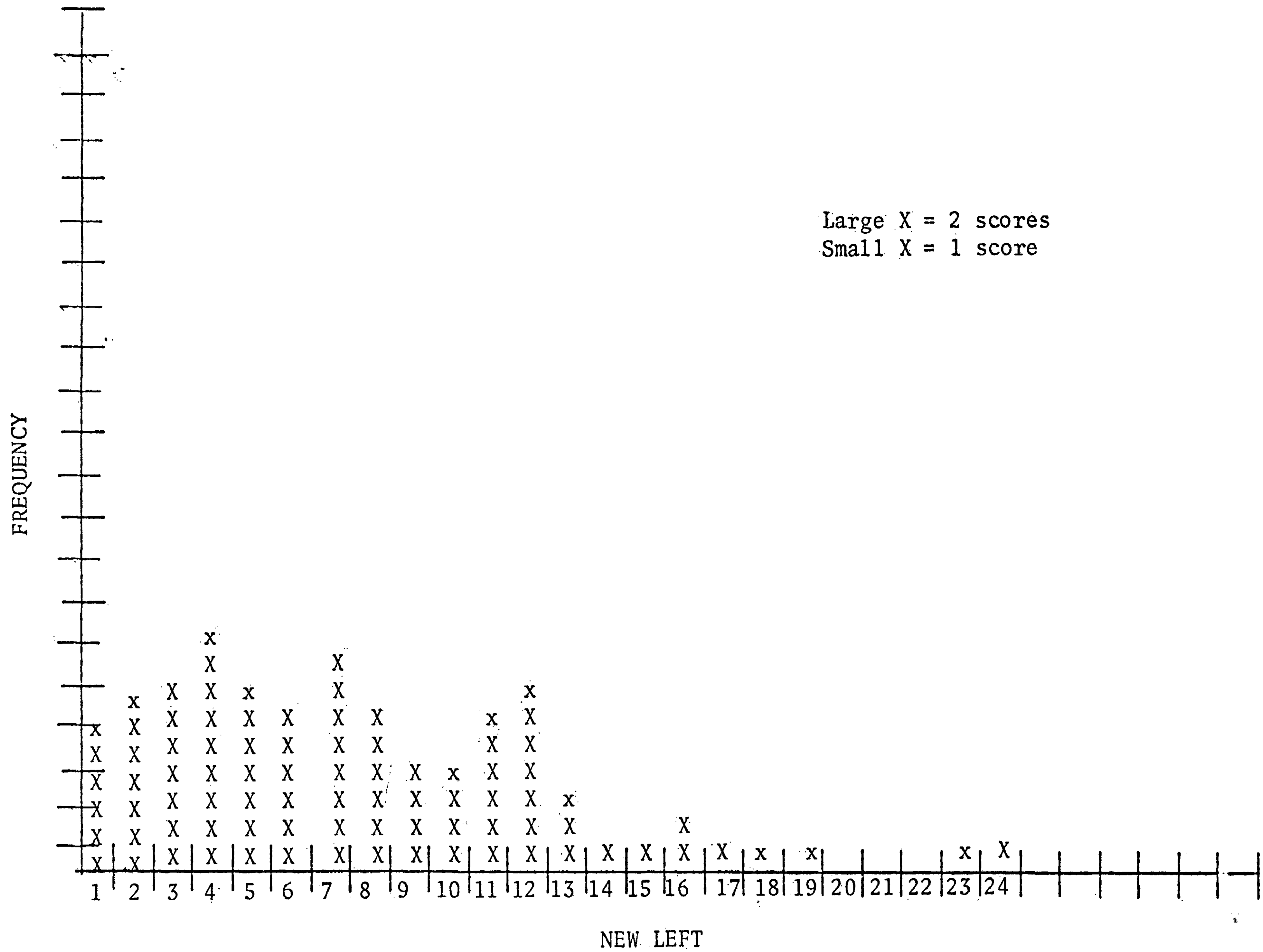
RELIGIOSITY
FREQUENCY


Large X = 2 scores
Small X = 1 score
FREQUENCY
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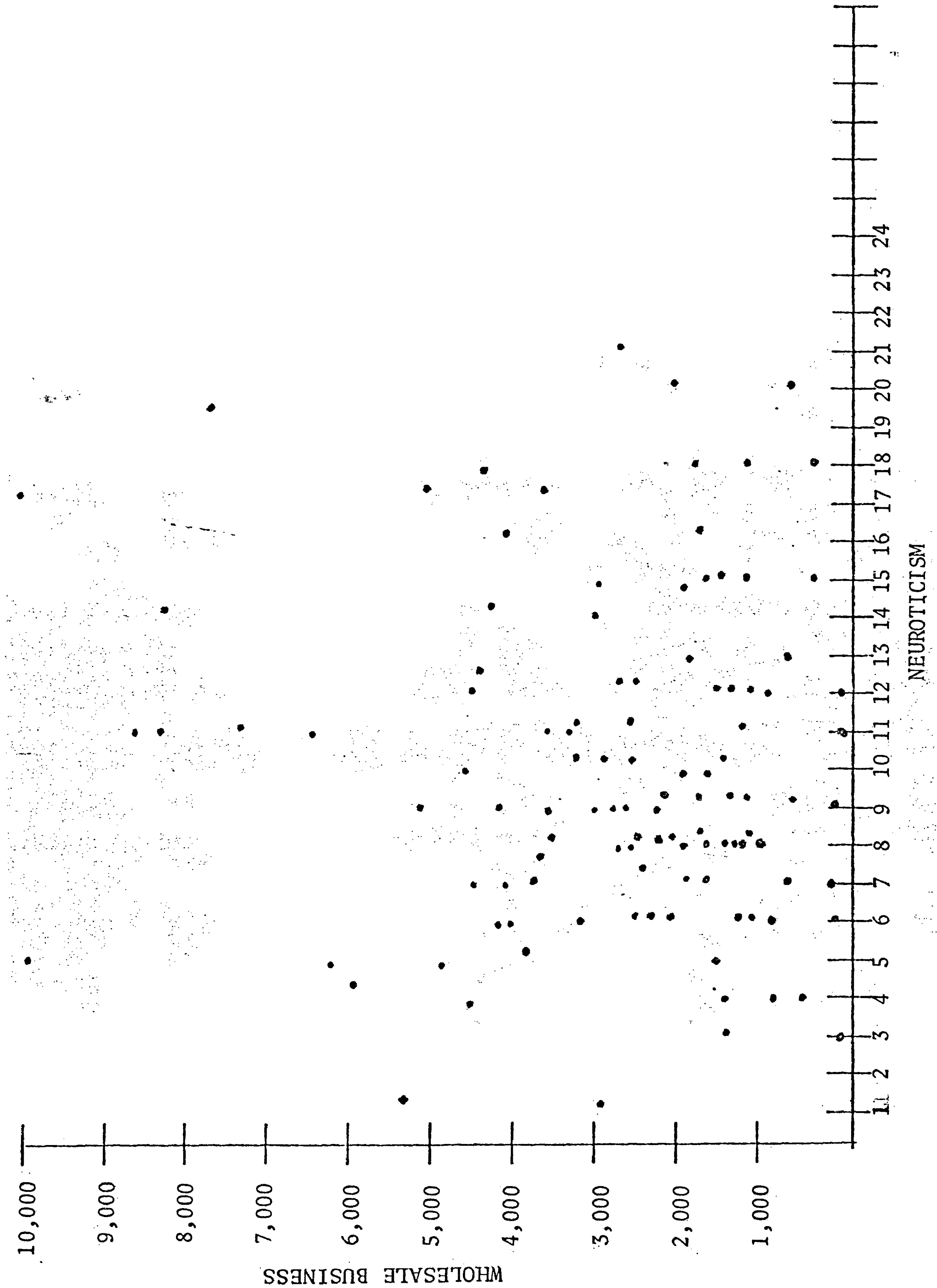
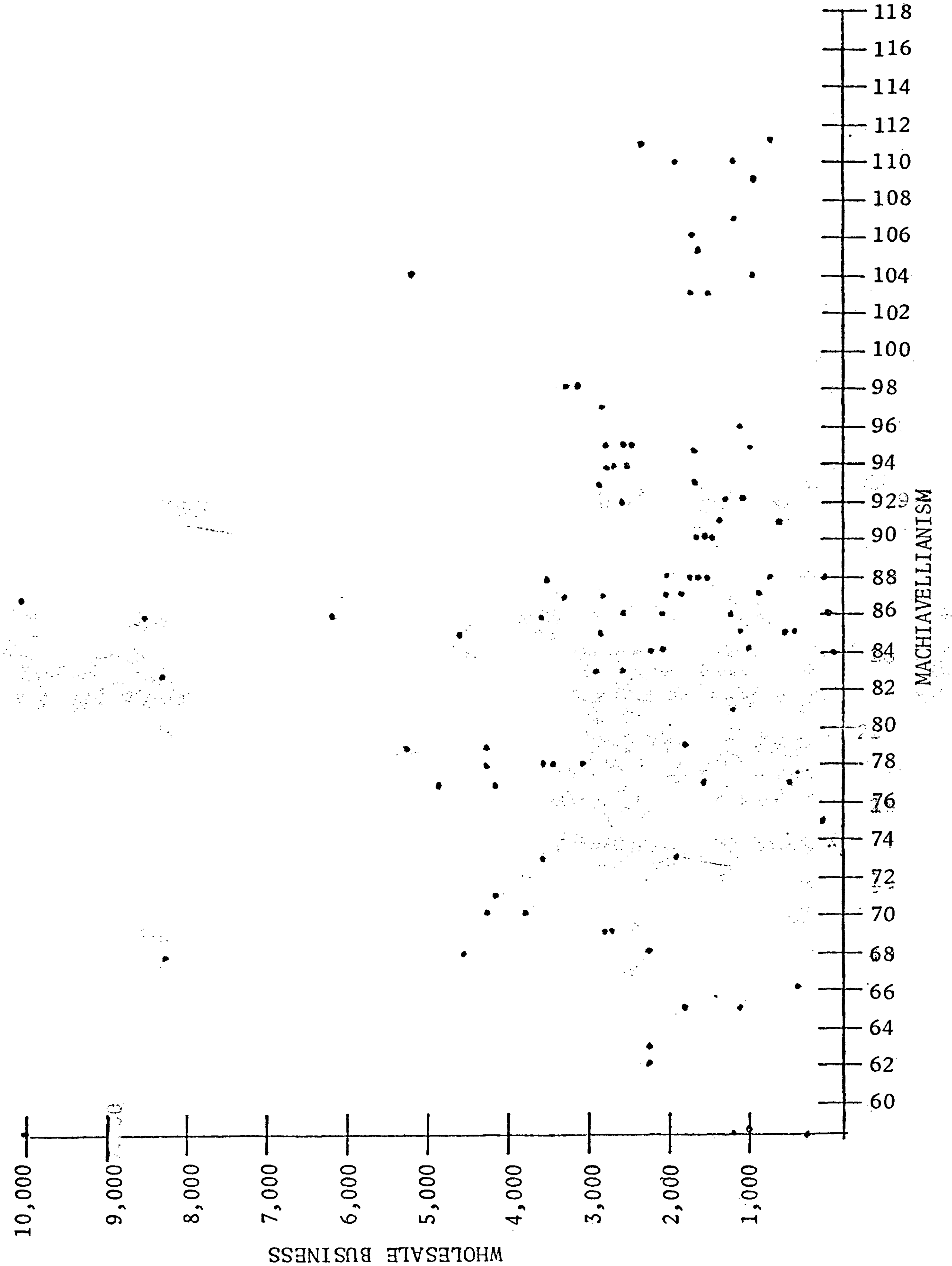
NEW LEFT

APPENDIX B

SCATTER-PLOTS FOR THE FOUR MAIN PERSONALITY VARIABLES VERSUS THE TWO CRITERION MEASURES


WHOLESALE BUSINESS
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
NEUROTICISM
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24


MACHIAVELLIANISM
118
116
114
112
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108
106
104
102
100
98
96
94
92
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88
86
84
82
80
78
76
74
72
70
68
66
64
62
60
WHOLESALE BUSINESS
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
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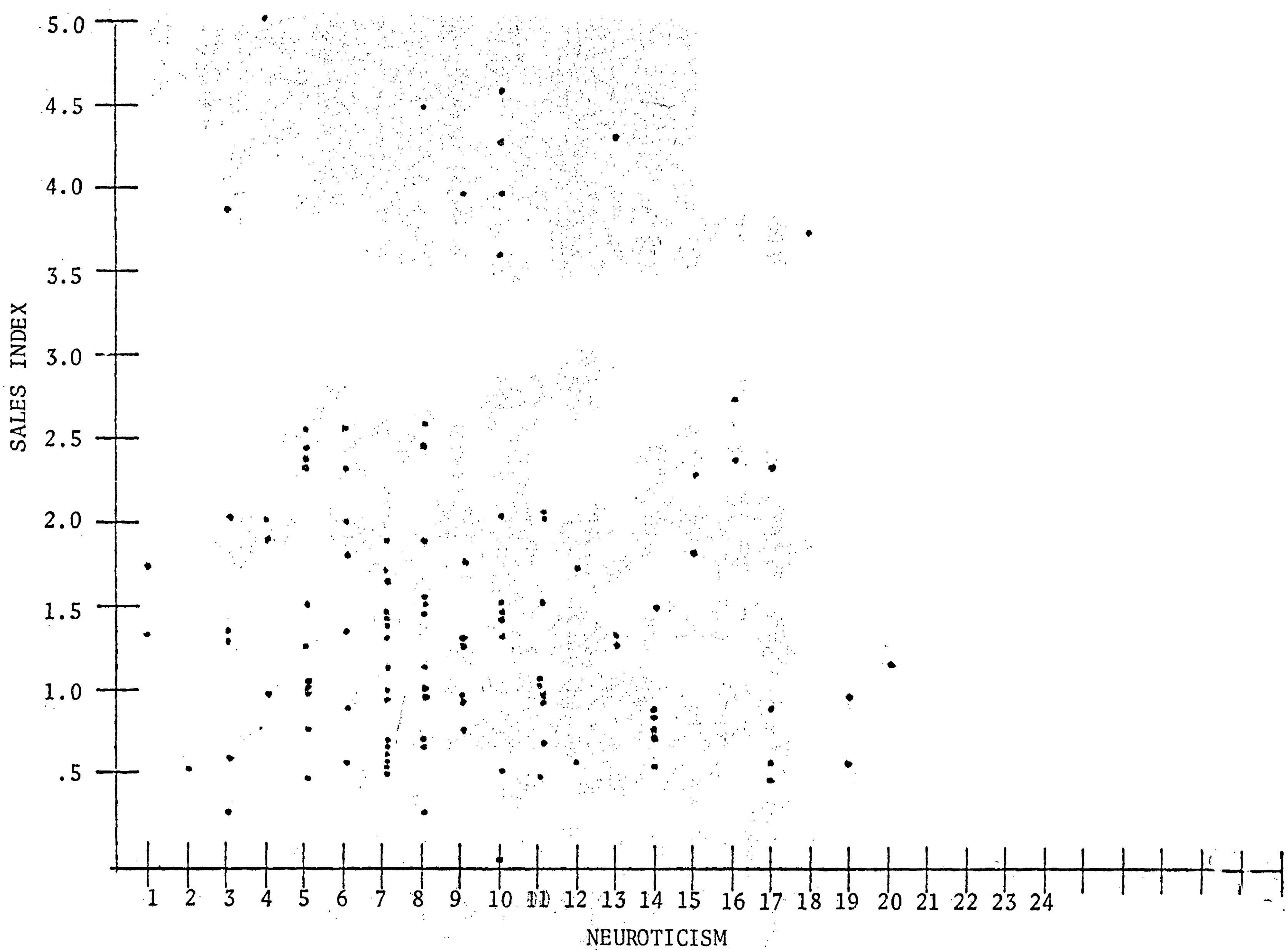
SALES INDEX
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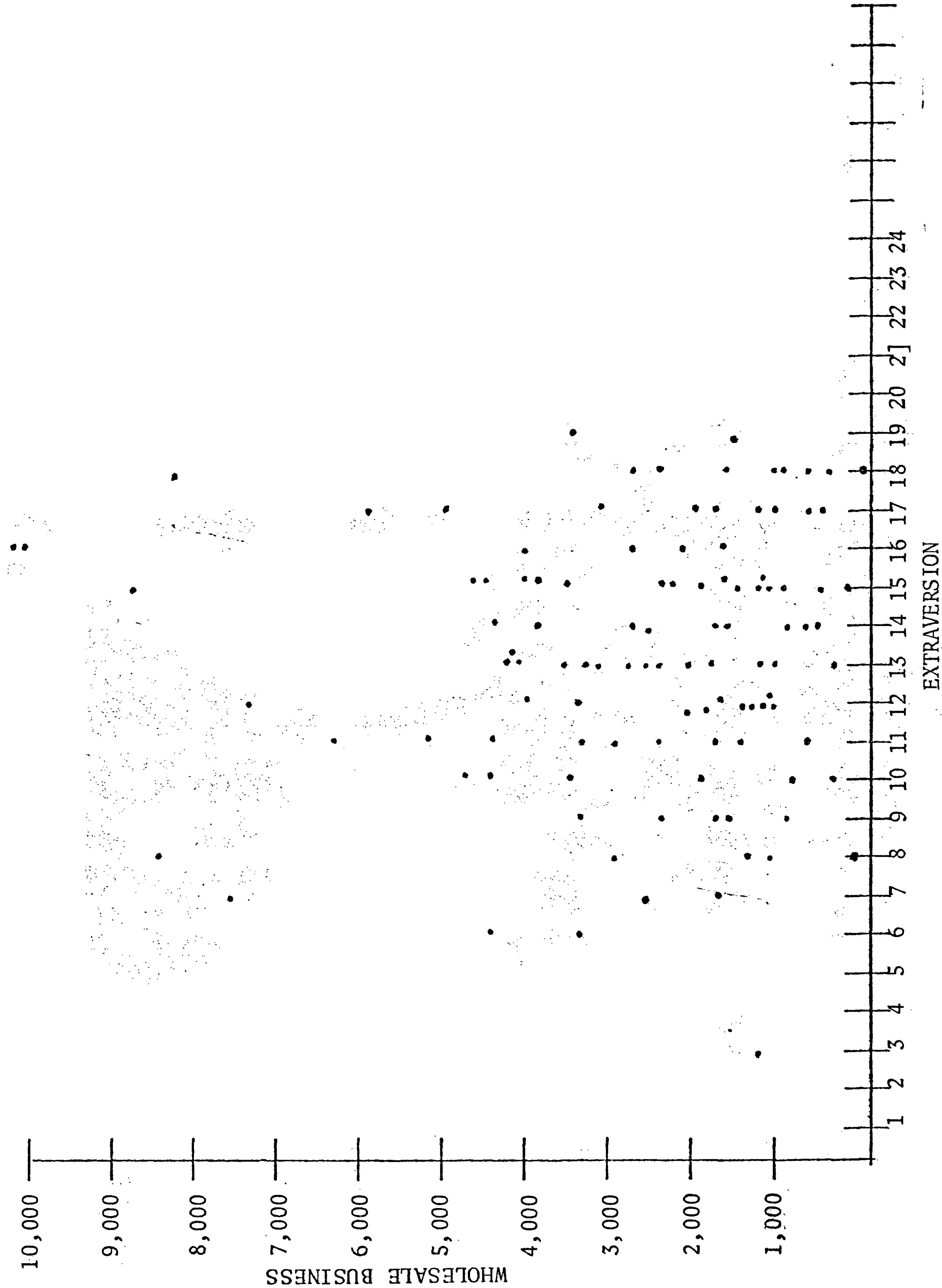
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
NEUROTICISM


WHOLESALE BUSINESS
10,000
9,000
8,000
7,000
6,000
5,000
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3,000
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EXTRAVERSION
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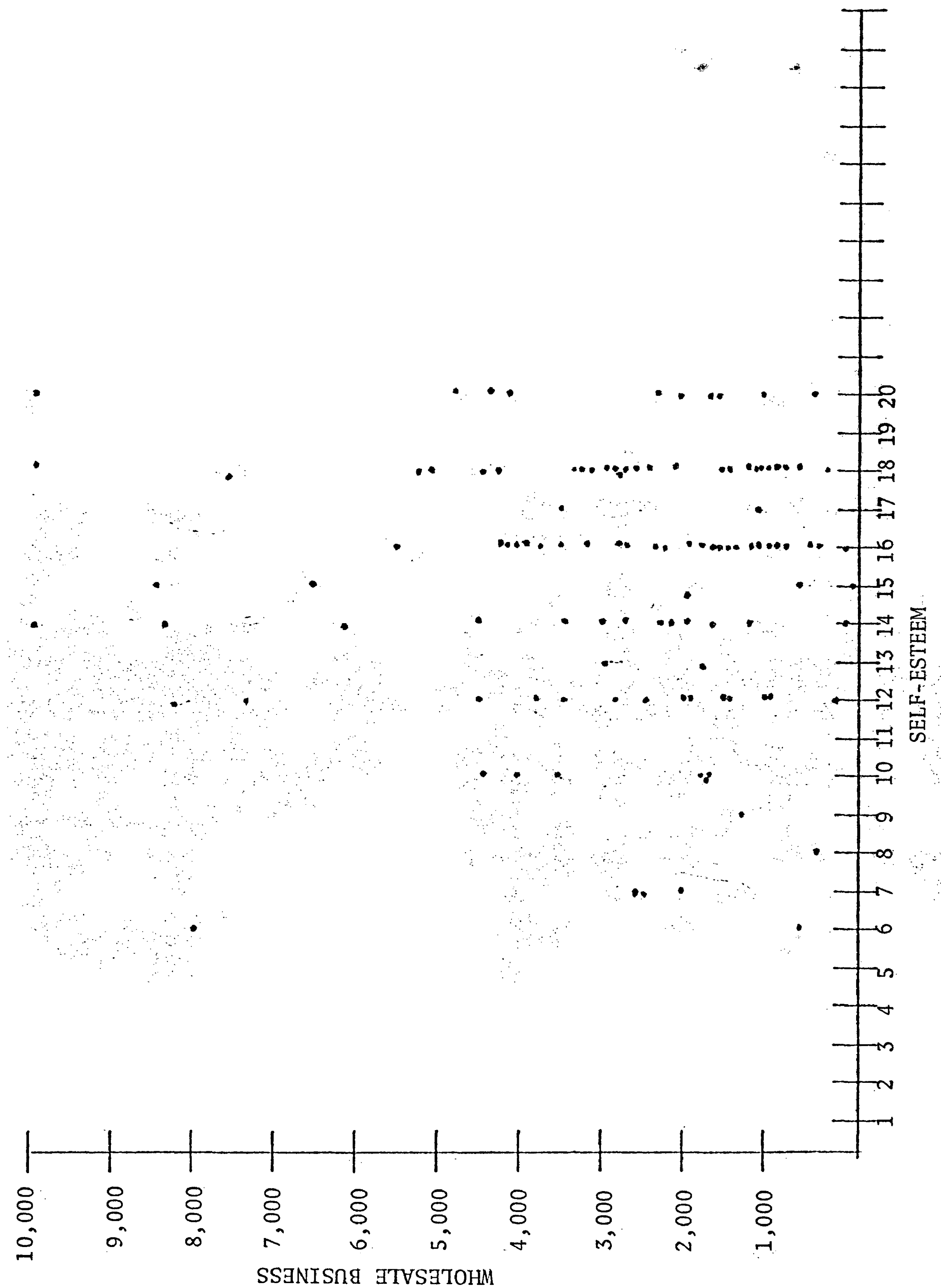

WHOLESALE BUSINESS
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SELF-ESTEEM
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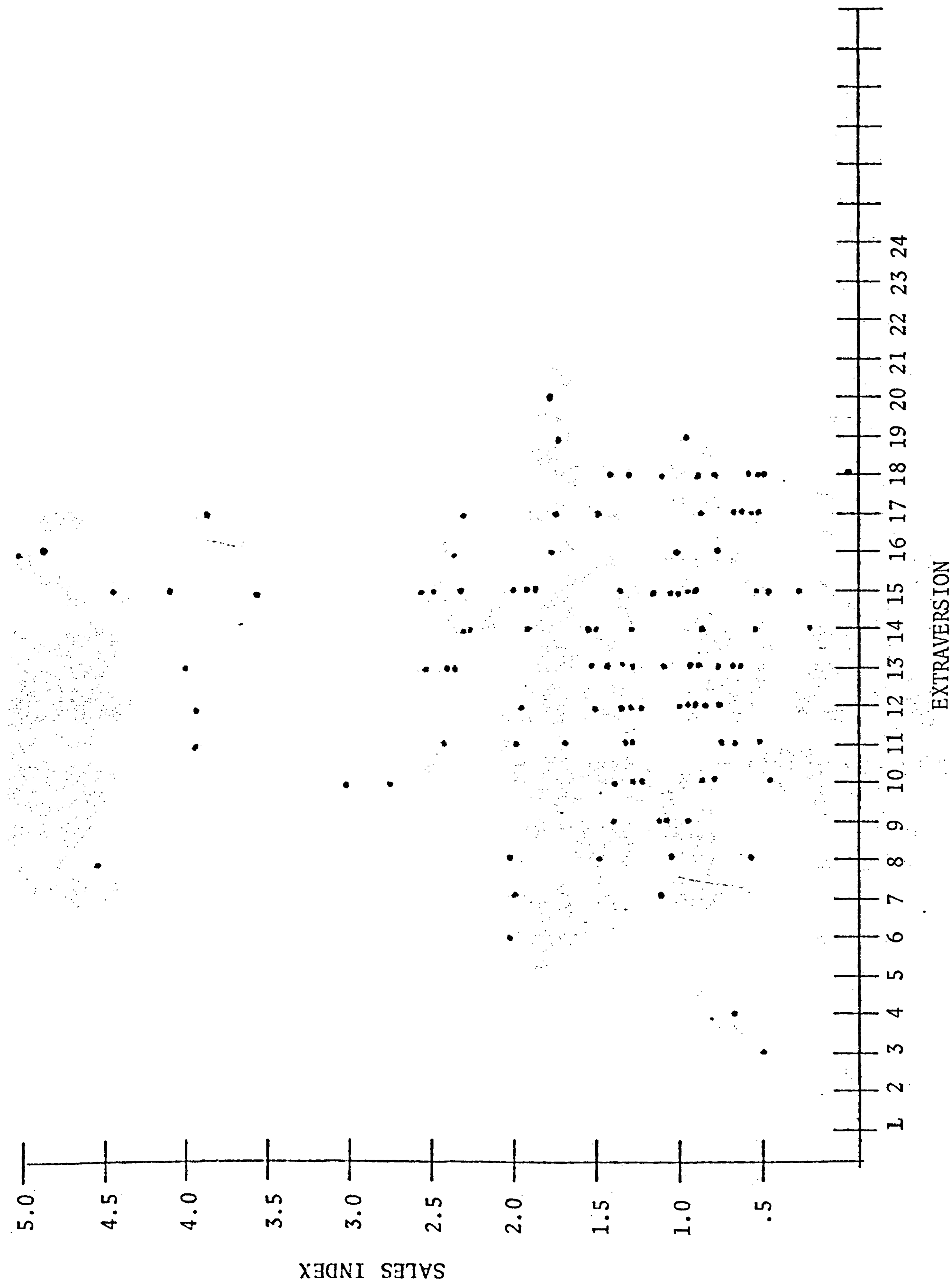
SALES INDEX
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EXTRAVERSION
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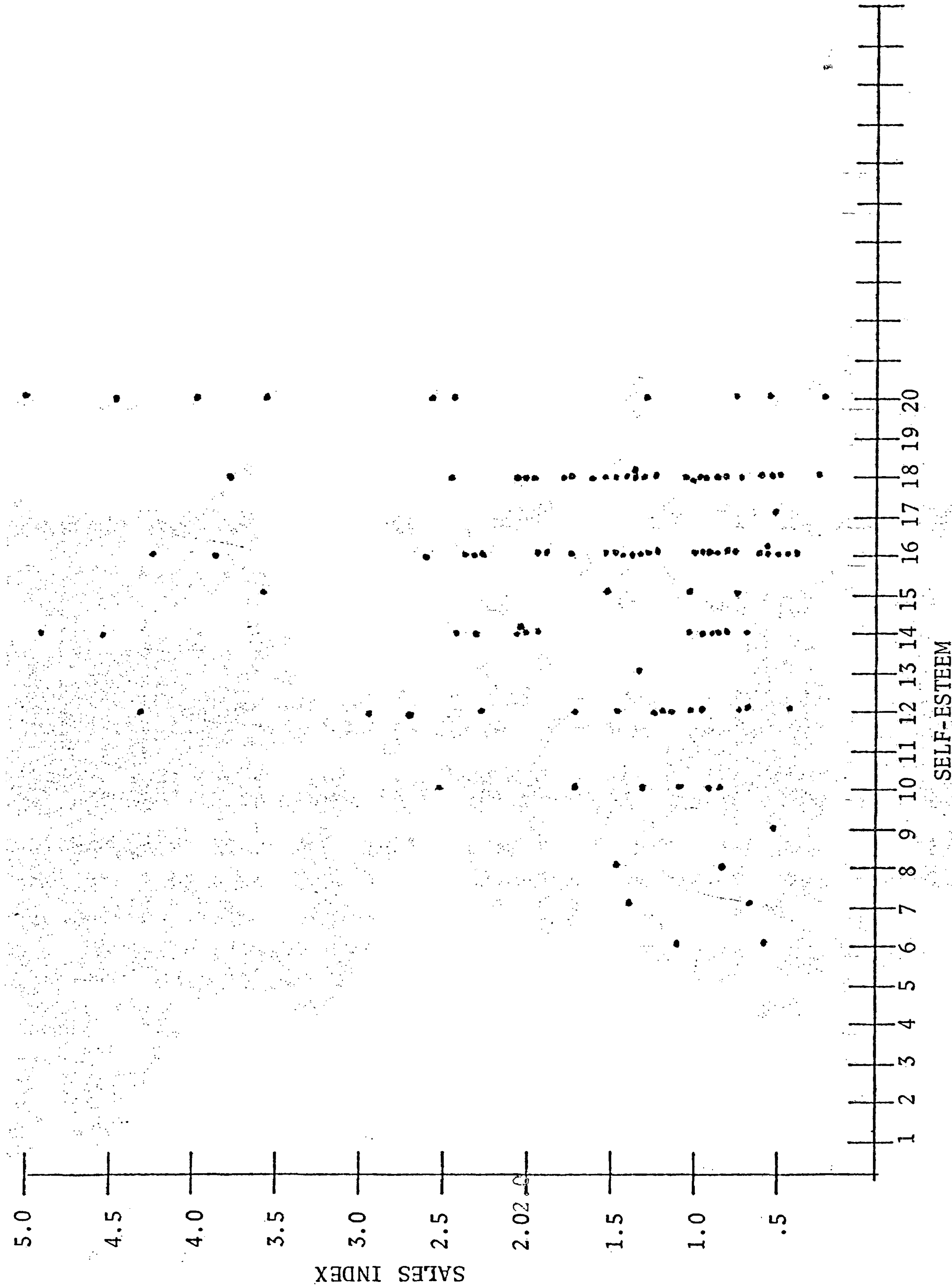
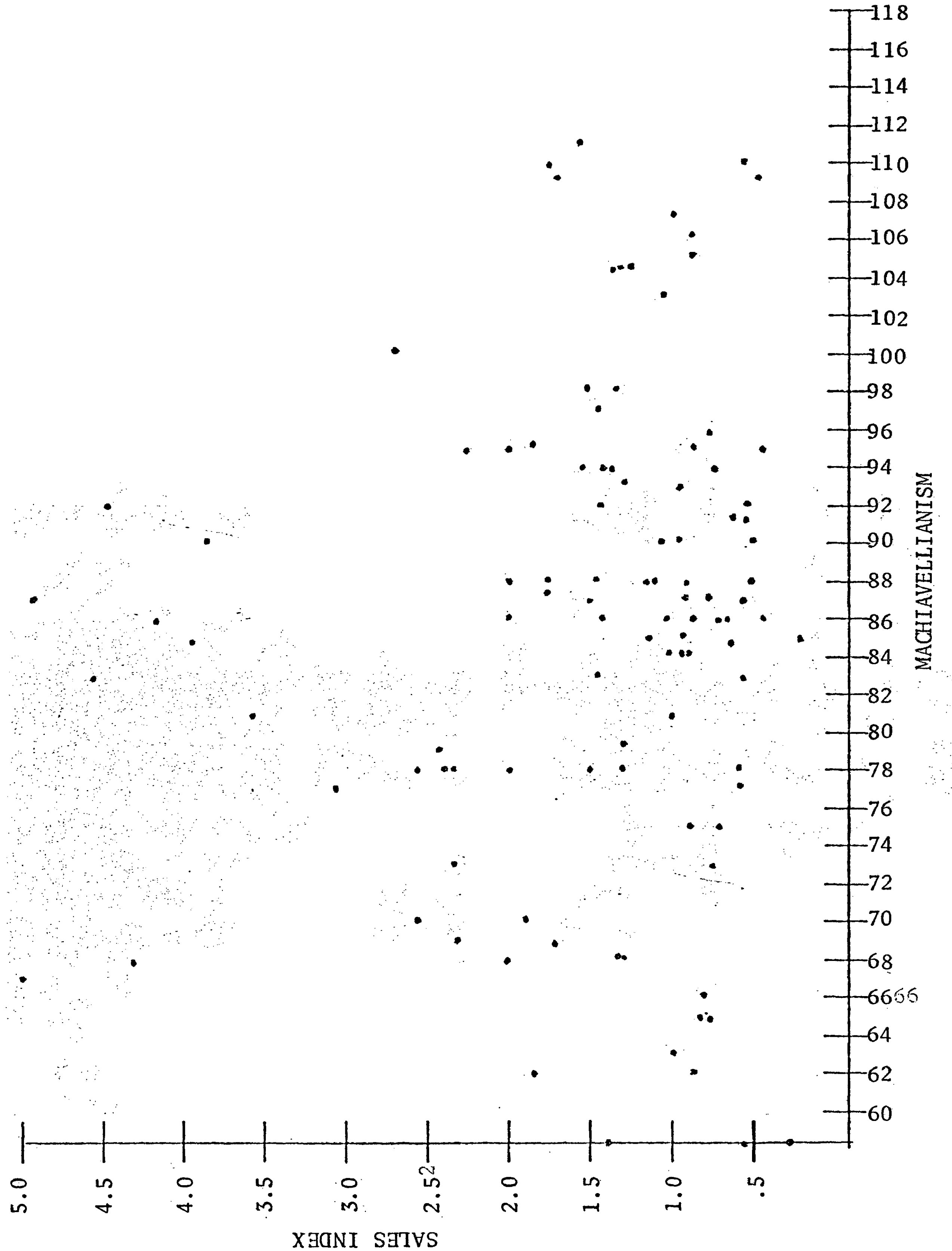

SALES INDEX
SELF-ESTEEM


MACHIAVELLIANISM
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SALES INDEX
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APPENDIX C

CONPARISON OF ROSENBERG'S AND THE PRESENT STUDY'S SELF-ESTEEM DATA

		Self-Esteem						
Percentage of Sample in Each Category	Rosenberg	High	1	2	3	4	5	Low
	Present Study (Transformed Scores)	16.6	28.0	25.5	16.1	8.6	4.0	1.2
		35.6	21.5	31.1	5.6	2.8	1.7	1.1

APPENDIX D

AN ITEM ANALYSIS OF ALL QUESTIONS ADMINISTERED ON THE PRE-INVENTORY

Subjects were divided into Upper and Lower sales groups on the basis of wholesale business. The upper 20 and lower 20 Ss constituted the upper and lower 25 percent of the 85 first-year salesmen. Both the Upper and Lower groups were divided into groups of 10 Ss each in order to cross-validate any findings.

The number of Ss responding "Yes" or agreeing with an item is given in the box under the item. The number of Ss responding "No" would be obtained by subtracting the number responding "Yes" from 10.

Only one item out of the 95 administered approached significance in discriminating between the upper and lower sales groups. Fifteen Ss in the upper sales group answered "Yes" to item 11; only 8 in the lower answered "Yes" (corrected χ^2=3.68, p<.10). It is interesting to note that this particular item was "Do you suddenly feel shy when you want to talk to an attractive stranger?"

The entire item analysis follows.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
UPPER 20	A (10)	7	7	8	6	9	7	6	3	7	0	6	9	7	7
	YES B (10)	9	7	3	4	10	7	9	3	2	0	9	6	3	7
LOWER 20	A (10)	8	7	9	7	9	4	9	3	5	0	2	9	8	9
	YES B (10)	6	3	6	4	10	7	4	3	3	1	6	7	7	7

		15	16	17	18	19	20	21	22	23	24	25	26	27	28
UPPER 20	A (10)	0	3	9	7	10	3	3	5	5	6	9	5	4	6
	YES B (10)	3	2	7	7	8	6	6	4	5	4	9	1	5	8
LOWER 20	A (10)	1	3	10	7	8	5	6	3	6	2	6	5	8	8
	YES B (10)	0	2	10	7	7	5	2	3	2	4	9	2	6	7

		29	30	31	32	33	34	35	36	37	38	39	40	41	42
UPPER 20	A (10)	8	7	6	4	3	7	1	3	2	1	6	3	3	7
	YES B (10)	5	5	6	2	2	8	0	4	4	3	9	2	3	6
LOWER 20	A (10)	3	7	7	2	8	9	2	5	3	0	8	4	2	7
	YES B (10)	5	3	5	3	2	10	0	7	6	1	9	4	3	6

		43	44	45	46	47	48	49	50	51	52	53	54	55	56
UPPER 20	A (10)	0	2	0	5	2	6	10	3	1	2	2	4	0	5
	YES B (10)	1	0	0	3	1	8	9	3	2	1	5	4	1	4
LOWER 20	A (10)	3	3	1	4	4	9	9	3	1	2	8	6	4	3
	YES B (10)	0	0	1	7	4	8	7	3	1	2	6	5	1	4

		57	58	59	60	61	62	63	64	65	66	67	68	69	70
UPPER 20	A (10)	2	6	5	9	9	7	8	2	9	5	4	8	8	2
	YES B (10)	0	5	8	8	7	6	8	3	10	6	5	6	10	0
LOWER 20	A (10)	2	5	8	7	7	5	7	1	9	7	2	6	8	0
	YES B (10)	1	3	6	9	8	4	8	5	9	5	3	4	10	1

		71	72	73	74	75	76	77	78	79	80	81	82	83	84
UPPER 20	A (10)	10	9	6	6	2	9	6	8	4	3	8	7	6	0
	YES B (10)	9	8	7	6	5	9	7	10	1	1	7	6	9	4
LOWER 20	A (10)	8	8	5	6	3	6	3	8	4	4	8	4	8	1
	YES B (10)	10	8	7	7	1	8	5	8	8	2	9	3	9	1

		85	86	87	88	89	90	91	92	93	94	95			
UPPER 20	A (10)	5	5	4	6	3	8	6	10	8	4	1			
	YES B (10)	4	3	6	9	2	9	6	10	8	4	1			
LOWER 20	A (10)	5	6	3	4	2	8	8	8	8	6	0			
	YES B (10)	4	0	5	7	0	9	6	10	10	5	1			

APPENDIX E

THE FOUR RELIGIOSITY QUESTIONS FROM THE RADICALISM-CONSERVATISM SCALE--FORM A (COMREY AND NEWMEYER, 1965) USED IN THE PRESENT STUDY

1. Every child should have religious instruction.
2. God exists in the form in which the Bible describes him.
3. This country would be better off if religion had a greater influence in daily life.
4. All people alive today are descendants of Adam and Eve.

APPENDIX F

THE FOUR QUESTIONS FROM THE NEW LEFT SCALE USED IN THE PRESENT STUDY

1. If people worked hard at their jobs, they would reap the full benefits of our society.
2. The bureaucracy of American society makes it impossible to live and work spontaneously.
3. There are legitimate channels for reform which must be exhausted before attempting disruption.
4. "The Establishment" unfairly controls every aspect of our lives, we can never be free until we are rid of it.

APPENDIX G

DATA FOR EACH SUBJECT RETURNING SCORABLE INVENTORIES

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion Pre-	Extraversion Post-
1	10,111	4.86	3	4	5	7,000	6	16	19
2	10,017	5.50	2	6	6	6,000	6	16	20
3	8,360	4.61	2	6	4	3,500	6	8	13
4	6,655	3.64	2	5	6	4,000	5	15	16
5	6,155	2.01	1	4	6	4,000	5	11	15
6	5,267	2.44	1	5	6	3,500	5	11	21
7	4,910	3.16	2	6	5	3,500	5	10	17
8	4,641	2.16	3	1	5	4,000	4	6	12
9	4,564	2.53	1	5	6	2,500	5	15	20
10	4,168	2.60	2	6	6	2,500	6	13	19
11	4,607	2.04	3	6	6	3,000	6	15	18
12	4,196	2.58	2	6	6	2,400	5	15	19
13	4,183	2.37	1	6	6	2,500	6	16	16
14	4,603	3.93	2	5	5	3,000	5	11	16
15	4,187	1.99	3	6	6	2,000	5	12	17

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
1	16	20	14	18	89	96	24	13	703	2080	Yes
2	4	9	20	12	69	80	24	16	743	1820	Yes
3	10	17	14	12	85	100	21	9	814	1814	Yes
4	10	7	15	18	83	108	23	12	877	1826	Yes
5	4	12	14	16	88	86	24	10	943	3068	Yes
6	8	6	18	20	81	84	19	2	868	2155	Yes
7	4	6	20	16	79	92	24	9	850	1556	Yes
8	11	11	14	18	123	100	12	15	731	2153	No
9	6	11	10	16	107	100	13	3	879	1802	Yes
10	5	8	16	16	72	76	18	2	667	1602	Yes
11	3	6	18	20	70	96	20	3	931	2259	Yes
12	8	7	20	20	79	80	20	3	871	1628	Yes
13	5	6	16	16	116	88	12	2	912	1766	Yes
14	9	10	20	18	87	100	11	5	683	1171	Yes
15	6	8	18	16	80	92	24	4	807	2102	No

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
1	16	20	14	18	89	96	24	13	703	2080	Yes
2	4	9	20	12	69	80	24	16	743	1820	Yes
3	10	17	14	12	85	100	21	9	814	1814	Yes
4	10	7	15	18	83	108	23	12	877	1826	Yes
5	4	12	14	16	88	86	24	10	943	3068	Yes
6	8	6	18	20	81	84	19	2	868	2155	Yes
7	4	6	20	16	79	92	24	9	850	1556	Yes
8	11	11	14	18	123	100	12	15	731	2153	No
9	6	11	10	16	107	100	13	3	879	1802	Yes
10	5	8	16	16	72	76	18	2	667	1602	Yes
11	3	6	18	20	70	96	20	3	931	2259	Yes
12	8	7	20	20	79	80	20	3	871	1628	Yes
13	5	6	16	16	116	88	12	2	912	1766	Yes
14	9	10	20	18	87	100	11	5	683	1171	Yes
15	6	8	18	16	80	92	24	4	807	2102	No

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
1	16	20	14	18	89	96	24	13	703	2080	Yes
2	4	9	20	12	69	80	24	16	743	1820	Yes
3	10	17	14	12	85	100	21	9	814	1814	Yes
4	10	7	15	18	83	108	23	12	877	1826	Yes
5	4	12	14	16	88	86	24	10	943	3068	Yes
6	8	6	18	20	81	84	19	2	868	2155	Yes
7	4	6	20	16	79	92	24	9	850	1556	Yes
8	11	11	14	18	123	100	12	15	731	2153	No
9	6	11	10	16	107	100	13	3	879	1802	Yes
10	5	8	16	16	72	76	18	2	667	1602	Yes
11	3	6	18	20	70	96	20	3	931	2259	Yes
12	8	7	20	20	79	80	20	3	871	1628	Yes
13	5	6	16	16	116	88	12	2	912	1766	Yes
14	9	10	20	18	87	100	11	5	683	1171	Yes
15	6	8	18	16	80	92	24	4	807	2102	No

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
1	16	20	14	18	89	96	24	13	703	2080	Yes
2	4	9	20	12	69	80	24	16	743	1820	Yes
3	10	17	14	12	85	100	21	9	814	1814	Yes
4	10	7	15	18	83	108	23	12	877	1826	Yes
5	4	12	14	16	88	86	24	10	943	3068	Yes
6	8	6	18	20	81	84	19	2	868	2155	Yes
7	4	6	20	16	79	92	24	9	850	1556	Yes
8	11	11	14	18	123	100	12	15	731	2153	No
9	6	11	10	16	107	100	13	3	879	1802	Yes
10	5	8	16	16	72	76	18	2	667	1602	Yes
11	3	6	18	20	70	96	20	3	931	2259	Yes
12	8	7	20	20	79	80	20	3	871	1628	Yes
13	5	6	16	16	116	88	12	2	912	1766	Yes
14	9	10	20	18	87	100	11	5	683	1171	Yes
15	6	8	18	16	80	92	24	4	807	2102	No

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion	
								Pre-	Post-
16	3,447	1.28	1	6	5	2,000	6	9	16
17	3,631	1.43	1	6	6	2,200	5	10	18
18	3,384	1.25	1	6	6	1,500	6	12	18
19	3,194	1.57	1	5	5	1,000	3	13	10
20	3,098	1.49	1	6	6	2,100	6	8	17
21	2,847	1.22	1	6	6	1,500	3	13	15
22	2,894	.67	1	5	6	1,200	3	4	13
23	2,743	.76	1	6	6	2,000	5	13	18
24	2,719	1.55	1	6	6	2,500	6	14	18
25	2,560	.67	1	5	5	1,400	6	11	11
26	2,550	1.44	1	6	6	2,000	5	9	15
27	2,280	2.36	2	5	3	3,000	3	13	17
28	2,215	1.30	1	6	6	--	5	14	16
29	1,914	.74	1	6	6	1,250	6	11	17
30	1,897	1.71	2	2	2	--	3	11	16

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
16	10	16	18	16	80	88	20	6	938	2,688	No
17	10	12	16	18	88	120	20	4	813	2,539	Yes
18	13	12	12	18	107	96	12	8	824	2,701	Yes
19	8	12	18	18	89	88	21	24	784	2,029	No
20	14	15	18	20	80	84	18	9	846	2,085	Yes
21	20	18	12	18	87	100	24	4	909	2,337	Yes
22	7	10	18	20	85	84	24	7	836	4,289	Yes
23	8	12	18	20	96	96	13	6	924	3,593	Yes
24	11	15	18	20	96	84	13	4	654	1,751	Yes
25	11	4	7	20	88	92	11	10	793	3,849	Yes
26	8	12	12	12	85	96	20	6	752	1,766	Yes
27	5	14	20	14	113	120	12	15	483	965	No
28	9	6	16	18	70	84	19	2	745	1,706	Yes
29	7	17	20	16	75	100	24	0	898	2,594	Yes
30	12	13	12	8	112	100	17	12	758	1,112	No

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion	
								Pre-	Post-
31	1,720	1.15	1	2	6	800	2	9	8
32	1,756	.94	1	6	6	258	5	9	14
33	1,747	.85	1	6	6	1,500	5	17	18
34	1,677	.79	1	3	3	--	5	12	17
35	1,502	.97	1	4	6	900	4	19	20
36	1,608	.56	1	2	4	500	2	15	16
37	1,464	1.35	1	5	6	700	5	12	16
38	1,313	.54	1	6	6	500	4	17	19
39	1,190	.51	1	2	6	500	-	17	21
40	1,262	1.01	1	2	5	300	4	15	18
41	1,389	1.12	1	3	5	1,500	5	8	14
42	1,118	.94	1	3	1	0	5	12	19
43	1,152	.52	1	5	4	500	5	3	6
44	1.095	.74	1	6	6	200	5	18	17
45	1,072	.40	1	5	5	1,000	3	13	14

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
31	11	16	10	8	92	88	22	8	811	1,492	Yes
32	9	11	10	20	95	100	19	5	709	1,874	Yes
33	6	13	14	20	108	84	24	3	825	2,062	Yes
34	14	16	16	12	107	84	18	11	723	2,117	Yes
35	4	7	18	18	92	84	23	7	743	1,555	Yes
36	7	11	20	18	79	88	24	12	778	2,858	No
37	7	14	16	20	71	84	21	11	512	1,084	No
38	2	4	9	20	93	88	20	4	846	2,429	Yes
39	7	12	16	18	94	100	24	6	734	2,350	Yes
40	7	11	18	18	109	98	19	13	532	1,253	No
41	11	12	12	16	105	112	17	8	655	1,239	Maybe
42	5	14	18	18	87	84	22	6	494	1,186	No
43	10	10	17	16	112	116	11	8	765	2,211	Yes
44	14	14	12	18	98	92	22	7	733	1,484	Yes
45	17	17	12	10	97	116	22	4	846	2,689	No

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion	
								Pre-	Post-
46	1,030	.88	1	6	6	400	6	18	20
47	930	1.37	1	6	6	600	4	10	16
48	944	1.24	2	6	6	300	6	18	20
49	706	.60	1	3	4	700	4	18	19
50	---			6	6	2000	4	8	17
51	1,632	1.19	1	1	4	2000	2	7	11
52	2,809	1.75	1					16	
53	1,719	.83	1					14	
54	410	.78	1					10	
55	2,480	1.40	1					13	
56	8,579	4.25	3					15	
57	912	.46	1					9	
58	3,264	1.53	1					12	
59	2,177	1.12	1					15	
60	3,814	2.26	1					14	

MASTER DATA SHEET (CONT)

S	Neuroticism Pre-	Neuroticism Post-	Self-Esteem Pre-	Self-Esteem Post-	Machiavellianism Pre-	Machiavellianism Post-	Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
46	7	11	18	18	86	88	24	1	654	1,167	Yes
47	3	7	18	20	64	88	17	8	332	678	Yes
48	5	12	18	12	106	116	24	12	363	761	Yes
49	12	8	18	20	93	100	12	11	501	1,184	No
50	12	15	14	18	63	88	24	3	---	---	---
51	7	8	6	8	90	112	3	9	673	1,370	Yes
52	16	10	16		71		24	1	603	1,602	Yes
53	17		10		97		8	12	576	2,076	Yes
54	14		8		68		16	3	219	525	No
55	7		16		94		24	7	751	1,1773	Yes
56	10		15		88		19	7	800	2,018	No
57	11		16		111		21	11	810	1,984	Yes
58	8		16		100		16	7	673	2,134	Yes
59	5		14		86		22	6	416	1,951	Yes
60	15		12		97		19	10	708	1,687	Yes

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion Pre-	Extraversion Post-
61	3,078	1.36	1					13	
62	4,209	2.37	3					14	
63	4,077	1.37	1					13	
64	2,218	1.09	1					16	
65	3,517	1.70	1					19	
66	2,873	1.76	2					20	
67	8,269	4.31	1					18	
68	2,540	1.42	1					18	
69	882	.54	1					11	
70	1,130	.99	1					12	
71	1,038	4.45	1					15	
72	3,419	2.38	1					13	
73	1,754	1.29	1					12	
74	4,507	2.72	2					10	
75	1,181	.76	1					12	

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
61	9		13		100		16	12	692	2,264	No
62	17		16		81		18	17	830	1,776	Yes
63	13		10		93		13	11	797	2,972	No
64	5		18		65		18	2	782	2,041	No
65	7		10		90		18	7	828	2,073	Yes
66	9		18		89		12	17	786	1,635	Yes
67	13		12		70		21	2	688	1,918	Yes
68	7		7		96		16	12	764	1,795	Yes
69	19		16		90		16	5	721	1,634	Yes
70	8		16		83		18	0	545	1,140	Yes
71	8		20		94		20	5	92	233	No
72	16		14		80		18	13	646	1,434	Yes
73	15		20		105		15	8	614	1,362	Yes
74	16		12		102		13	8	802	1,654	Yes
75	5		16		67		24	0	459	1,555	No

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	____ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion Pre-	Extraversion Post-
76	7,364	3.92	3					12	
77	2,859	1.38	1					11	
78	1,558	1.20	1					15	
79	5,760	3.81	3					17	
80	1,864	1.30	1					12	
81	2,044	.91	1					12	
82	1,181	.87	1					13	
83	1,068	.58	1					8	
84	886	.59	1					17	
85	30	.11	1					18	
86	5,185	1.73	2					17	
87	1,406	.49	1					18	
88	2,884	1.35	1					18	
89	2,051	1.45	1					17	
90	581	.26	1					14	

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
76	10		12		102		16	7	682	1,879	Maybe
77	10		16		99		18	1	755	2,072	Yes
78	8		12		90		18	1	615	1,297	Yes
79	3		16		92		23	3	697	1,511	No
80	6		16		81		24	5	620	1,431	No
81	19		12		89		16	5	667	2,245	Yes
82	11		14		88		24	0	454	1,365	Yes
83	7		18		53		24	4	811	1,831	No
84	6		6		89		11	12	360	1,492	No
85	10		15		88		19	7	136	278	No
86	1		18		106		24	7	1566	3,000	No
87	14		18		92		23	11	777	2,848	Yes
88	1		18		95		22	9	781	2,135	Yes
89	7		8		90		24	9	799	1,412	Yes
90	8		20		87		20	2	632	2,194	No

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion	
								Pre-	Post-
91	3,854	1.88	2					15	
92	7,529	3.75	3					9	
93	166	.44	1					15	
94	2,050	.92	1					15	
95	2,058	.68	1					13	
96	239	.68	1					13	
97	501	.58	1					17	
98	3,118	1.67	1					11	
99	406	.32	1					15	
100	2,439	2.07	1					7	
101	3,629	2.30	3					15	
102	2,810	2.31	2					17	
103	1,634	.91	1					15	
104	1,824	.77	1					10	
105	2,579	1.87	1					14	

MASTER DATA SHEET (CONT)

S	Neuroticism Pre-	Neuroticism Post-	Self-Esteem Pre-	Self-Esteem Post-	Machiavellianism Pre-	Machiavellianism Post-	Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
91	4		16		72		16	6	704	2,050	Yes
92	18		18		147		13	23	763	2,007	Yes
93	5		16		88		23	23	242	[illegible],379	No
94	8		14		86		19	4	817	2,221	No
95	7		15		88		19	7	646	3,048	Yes
96	8		12		77		24	24	133	352	No
97	17		16		87		18	0	388	868	Yes
98	7		14		111		14	13	829	1,872	Yes
99	3		18		60		24	7	550	1,282	Yes
100	10		18		97		24	6	645	1,180	Yes
101	6		16		75		24	1	710	1,578	No
102	5		14		71		24	1	548	1,218	Yes
103	9		16		90		22	5	723	1,804	Yes
104	14		14		89		18	13	815	2,378	Yes
105	7		16		97		23	0	719	1,377	Yes

MASTER DATA SHEET

S	Wholesale Business	Sales Index	Years Worked For Company	Enjoyed Work	______ Is A Great Company	Estimated Money Saved	Territory Rating	Extraversion	
								Pre-	Post-
106	2,193	1.88	1					15	
107	1,242	1.38	1					15	
108	4,157	.94	1					13	
109	1,860	.76	1					16	
110	182	2.09	1					8	
111	543	.62	1					14	
112	750	1.54	1					14	

MASTER DATA SHEET (CONT)

S	Neuroticism		Self-Esteem		Machiavellianism		Religion	New Left	Hours Worked	Calls Made	Returning Next Summer
	Pre-	Post-	Pre-	Post-	Pre-	Post-					
106	8		14		64		20	1	477	1,167	Yes
107	3		18		60		24	0	470	903	Yes
108	11		16		73		24	7	987	4,424	Yes
109	9		16		67		24	4	869	2,449	Yes
110	11		14		90		17	6	63	87	No
111	3		16		79		22	7	377	870	Yes
112	5		15		113		23	7	170	488	No

MASTER DATA SHEET
Prework Data On Students Who Quit

S	Extraversion	Neuroticism	Self-Esteem	Machiavellianism	Religion	New Left
113	16	7	15	59	23	4
114	13	11	12	90	13	11
115	14	9	18	56	24	5
116	13	15	4	98	23	3
117	13	6	18	64	18	2
118	15	11	12	99	21	1
119	7	2	10	80	14	12
120	16	6	20	65	23	16
121	13	10	16	99	24	4
122	10	3	16	83	24	4
123	16	13	10	86	24	11
124	17	12	14	88	15	8
125	8	19	12	106	19	16
126	15	9	20	89	20	8
127	13	18	4	80	24	7

MASTER DATA SHEET
Prework Data On Students Who Quit

S	Extraversion	Neuroticism	Self-Esteem	Machiavellianism	Religion	New Left
128	13	16	14	73	24	0
129	9	13	12	106	18	6
130	16	13	14	95	21	8
131	7	4	16	80	23	2
132	12	7	20	69	24	1
133	15	7	16	95	6	3
134	5	13	18	67	16	1
135	19	14	14	99	7	14
136	10	4	18	81	14	0
137	11	14	14	101	24	4
138	14	15	14	88	2	10
139	13	6	18	75	23	2
140	11	7	18	87	21	6
141	16	14	12	91	20	3
142	13	9	18	104	22	7

MASTER DATA SHEET
Prework Data On Students Who Quit

S	Extraversion	Neuroticism	Self-Esteem	Machiavellianism	Religion	New Left
143	14	12	18	104	15	9
144	7	4	14	96	24	6
145	15	9	12	68	24	16
146	13	7	18	106	22	11
147	5	6	14	99	11	3
148	18	8	12	110	24	7
149	16	8	20	93	15	14
150	5	5	14	76	24	1
151	19	11	14	84	24	3
152	13	1	20	74	24	1
153	12	7	18	113	18	4
154	8	14	8	58	24	11
155	14	17	18	95	18	12
156	12	5	14	92	19	19
157	13	10	18	80	23	12

MASTER DATA SHEET
Prework Data On Students Who Quit

S	Extraversion	Neuroticism	Self-Esteem	Machiavellianism	Religion	New Left
158	17	12	16	107	14	5
159	12	6	20	83	23	2
160	13	12	14	93	24	10
161	11	2	16	83	22	0
162	11	8	20	77	23	3
163	12	10	14	53	24	8
164	7	15	12	106	11	12
165	16	6	18	110	20	4
166	12	14	6	89	10	5
167	18	16	10	91	23	2
168	12	16	12	111	19	9
169	13	15	14	94	15	12
170	15	17	14	103	7	18
171	9	13	16	104	24	3
172	14	7	18	85	12	11

MASTER DATA SHEET
Prework Data On Students Who Quit

S	Extraversion	Neuroticism	Self-Esteem	Machiavellianism	Religion	New Left
173	13	17	20	99	23	4
174	12	12	16	101	5	10
175	15	9	20	87	18	5
176	6	16	10	103	24	10
177	15	9	14	69	16	4
178	14	7	20	73	19	7
179	14	2	20	65	24	5

APPENDIX H

DESCRIPTION OF THE COMPANY AND ITS SUMMER SELLING PROGRAM

The Southwestern Company of Nashville, Tennessee is unique in that it only sells during the summer through college students. The company was founded in 1868 and has followed this mode of operation ever since. It has expanded rapidly during the 60's and now employs over 4,000 students every summer.

It has never used a selection system in hiring students, but instead, has always believed that salesmanship is learned and can be effectively taught. To some extent the Horatio Alger concept still dominates company policy, and reality has not belied it. Each summer students come from vastly different backgrounds and environments, are taught basic selling principles, and are sent out into the world to survive a summer of door-to-door selling. Their general success has been phenomenal and warrants a description of the Southwestern program.

The management of the company is largely in the students' hands. Southwestern practices Theory Y rather than Theory X management (McGregor, 1967). Theory Y management recognizes the importance of Maslow's (1965) need system and attempts to incorporate the individual's needs into the corporate enterprise. Theory Y assumes that people can achieve their own goals best by directing their own efforts toward organizational directives. For this reason management is accomplished through participation and consultation. Theory Y does <u>not</u> involve the abdication of management, the absence of leadership, or the lowering of standards (McGregor, 1967).

Conversely, Theory X management assumes responsibility for all organizing, and people fit the needs of the organization. Theory X management is founded on the implicit beliefs that the average man is by nature indolent, lacks ambition, prefers to be led, is self-centered, indifferent to organizational needs, is gullible and not very bright (McGregor, 1967).

It is necessary to distinguish Southwestern as a Theory Y company because this makes a difference in the types of salesmen it selects and trains. Maslow (1965) has stated that:

> A good Theory Y salesman today would certainly be more aware of his ties to his enterprise, more identified with it, more identified with the people in it. I think he would have a self-image more as a kind of ambassador or representative of the whole enterprise than as a lone wolf; who simply pursues his own interests, or even as an intermediary between the enterprise and the customer. Certainly the elements of manipulation would be less in the Theory Y salesman. For various reasons this would be so, but probably the most important one would be that the best kind of Theory Y salesmanship comes much closer to complete honesty and candor than does Theory X type salesmanship. This is on the grounds that any enterprise which wishes to endure over a long period of time and to remain in a healthy and growing state would certainly want a nonmanipulative, trusting relationship with its

> customers rather than the relationship of the quick fleecing, never to see them again [p. 231].

The last part of Maslow's statement is very important for Southwestern, because each successive summer students return to an area where students have sold before, probably the previous summer. Thus, there is not an endless pool of prospective customers to be duped, swindled, or cheated; customers must be approached with long-range goals in mind. In addition to any ethical considerations, then, Theory Y salesmanship is also pragmatically based.

A familiarization with the two preceding theories will help in understanding Southwestern's organizational structure and work policy. All salesmen are recruited by returning students, sometimes with the help of a sales manager who works full-time for the company. Each returning student recruits his "crew" and receives a percentage of their wholesale business, in addition to his personal sales. This is just one of the personal incentives for a student to set and achieve his own goals.

All students participate in a sales school during the first week of the summer. They are taught the basics of selling door-to-door, and the motivation to do the job well is instilled through various well known speakers. The quality of the products is demonstrated and all salesmen come to trust the product, identify with it, and are proud of it (they are justified in this pride).

Next, the steps of the sale are explained in detail. It is generally conceded that there are five parts of any door-to-door sale: the (1) pre-approach, (2) approach, (3) set-up, (4) demonstration, and (5) close. The pre-approach involves obtaining information about upcoming prospects. This is usually obtained from neighbors. It is always better to approach a home armed with as much information about the occupant as possible--their name as a very minimum.

Over the years the company has evolved fairly specific procedures for all parts of the sale. The approach is no exception. There are two general styles used in the approach: (1) the informal and (2) the formal. The informal approach may be: "Hi Mrs. (Mr.) Jones, I'm just another one of those old salesmen. What do ya'll do to them around here? Shoot them? Mind if I come in?" If the prospect objects to letting in the salesman, there are answers to all objections. In fact it may be that the salesman has an advantage over the prospect, because he knows both what he and the prospect will say, she probably knows neither.

The formal approach may be: "Hi Mrs. (Mr.) Jones, I'm __________, and I've been calling on some of the church people in the neighborhood. Ya'll do go to __________, don't you? I've already talked to several members of your church--the Smiths, Jones, and Browns. May I come in?" The informal approach works by disarming the prospect before they can build up hostility to the "intruder"; the formal approach works by associating yourself with the prospects' friends and church (A knows B, C knows B; therefore A feels he knows C).

The set-up is a very brief period when the salesman attempts to relax the prospect, and obtain information that will aid him in presenting his demonstration (e. g., what church they attend, do they teach Sunday School, ages and number of children, etc.). The demonstration should flow smoothly from the set-up after the prospect has become interested in seeing your product. Often, before demonstrating, the salesman will read from his order book a list of 50-100 names of people who have bought from him. This further increases his credibility and the positive association between previous buyers that the prospect knows and the salesman.

The salesman is continually assessing the prospect's interest and attention, and he may decide at any point in the sale that to continue would be a waste of time. However, if once into the demonstration the prospect still expresses interest, the salesman will use all the selling techniques he has been taught. McMurry (1961) likens the demonstration to the act of seduction. The salesman may use his voice to create an almost hypnotic effect on the prospect. He is attempting to relate his product to the prospect's strongest need at that moment, whatever it may be. During the demonstration the salesman is not creating a need but cultivating already existing needs.

A good salesman sells by asking questions. The questions will be designed to elicit positive responses. Once the prospect has responded positively to any question, however insignificant it may be, it will be easier for them to respond affirmatively to the question of whether to buy or not. Also questions actively involve the prospect in the demonstration. The prospect actually participates in selling themselves.

The demonstration "pitch" is for the most part a word-for-word rendition of the company supplied sales talk. Every year first-year salesmen try to improve upon the "canned" sales talk supplied by the company and at that point their sales begin to drop. However, salesmen should modify the talk so that it sounds like them.

The last part of the sale, the close, is the most important part of the sale. In fact, many sales experts have said that the ABC's of selling are Always Be Closing. A salesman can perform the other parts of the sale beautifully, but if he cannot close he will not earn a dime. Almost as important as the procedures of the close itself is knowing <u>when</u> to close. For each selling situation there is an optimal moment to close, a moment when the prospect is most likely to sign on the dotted line. It may be at the beginning of the demonstration, or it may not be until minutes after, but many salesmen have "talked themselves out of a sale" because they did not recognize the optimal closing moment. Closing is simply getting the prospect to make a decision--Yes or No. Hopefully, by now, the salesmen has made it as easy as possibly for them to make an affirmative decision. Therefore the salesman will not fear making the prospect abandon their indecisiveness, because he knows that the law of averages will make him succeed, if he has laid the stage effectively.

The good salesman expects and even wants objections, because often a solid answer to an objection disarms the prospect, and it is now necessary for him to buy. Again the salesman may have the advantage because he knows not only what he will say, but also every possible objection that can be raised. The answers are supplied by the company, but as McMurry (1961) has pointed out:

> If he has been properly trained, he will have been exposed to every conceivable objection so that none will take him by surprise and disrupt his presentation. He will know the correct answer to each resistance. Hence, just as the actor may engage in a sparkling and scintillant dialogue on the stage, none of which is original, so the company representative is enabled to give brilliant answers to the questions and objections his prospect may raise. He can thus be the complete master of the situation without having originated any of his brilliant line himself [p. 119].

One technique the good salesman always uses in his close is to give the prospect a choice between something or something; never something or nothing. For example: "Would you rather have the black cover or the white cover, Mrs. Jones?", "Would you rather get your book today or wait until the end of the summer, Mrs. Jones?", and "Would you rather put 15 dollars down or just 10, Mrs. Jones?" There are many other techniques of closing that are too numerous to mention here, but suffice it to say for now that the close is the most important part of the sale. Many persons can be great conversationalists, but to be a great salesman demands an effective close.

After sales school, the students go to their territory and spend the entire summer in one city or county rooming with one or two other students. With on-the-job training, and weekly sales training--motivation booster sessions, the students are adequately equipped to do well. By company doctrine only the following of company instructions and long hours stand between the student and success. The present study did not find any strong evidence to the contrary, although, additional studies are needed to answer the many still unanswered questions about selling. It remains a worthwhile endeavor because of its link to general human behavior:

> There is no man who is not in some degree a merchant; who has not something to buy or something to sell.
>
> --Samuel Johnson (1709-1784)

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