

A Comparative Study of Certain Personality
Traits and Success in Retail Selling

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Chapter 1

Introduction

The many books and articles which have been written about salesmanship within the last thirty years generally agree that success in selling depends largely on personality and very little on intelligence. (1,2,3,4) It is pointed out that selling is a social occupation, involving contact with people rather than with things or ideas.

The early literature on personality and salesmanship merely indicates that the individual who wants to succeed as a salesman has to have a "pleasing" (5,6) or a "winning" (7) personality. The words "pleasing" and "winning" are supposed to include all the tendencies of personality that make for an effective social interaction between the salesman and the customer. A good percentage of these writings may be characterized as nothing more than armchair theorizing in which no effort is put forward to find objective and experimental corroborations for the claims made. (8,9) Personal opinions on salesmanship, supplemented

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1. Griffith, C. R., An Introduction to Applied Psychology, pp.510-511, The Macmillan Co., New York, 1934.
 2. Husband, R. W., Personality Traits of Salesmen, The Journal of Psychology, Vol.1, pp.223-233.
 3. Laird, D. A., What Makes People Buy, McGraw-Hill Book Co., New York, 1935.
 4. Ream, J. M., Ability to Sell, Williams and Wilkins Co., Baltimore, 1924.
 5. Ibid., p.24.
 6. Moss, F. A., Applications of Psychology, pp.330-331, Houghton Mifflin Co., Boston, 1929.
 7. Watson, J. T., et al., Personality in Business, pp.140-200, A. W. Shaw Co., Chicago, 1917.
 8. Ibid., pp.1-140.
 9. Moore, H., Psychology for Business and Industry, p.6, McGraw-Hill Book Co., New York, 1939.

here and there by case histories, which are taken as sufficient evidence of the truth of the beliefs held, are generalized to cover the entire field of successful selling. Since the early nineteen twenties this tendency has fortunately given place to quantitative investigations of the relation between personality and salesmanship.

The reason for the tardiness in studying the relationship between personality and salesmanship objectively is due partly to the fact that the quantitative study of personality in terms of traits only gained scientific sanction with the writings of Allport (1), some eighteen years ago. Since that time the literature on the relationship between personality traits and success in selling has steadily increased. However, the studies of this problem have become somewhat narrow, being limited to a rigorous investigation of a few so-called representative traits, with the exclusion of many others which are perhaps no less important for certain types of selling. Then too, the subjects used for purposes of investigation are drawn from businesses representative of only a few types of selling. They are for the most part insurance salespersons and department store salespersons. (2) And on the basis of findings from such a limited range of sales occupations generalizations are drawn to cover all types of selling.

1. Schelton, C., Topical Summaries of Current Literature: Personality Traits, American Journal of Sociology, Vol.45, pp.234-258.

2. See summaries of studies on the relationship between personality traits and success in selling at the end of chapter 2.

That such generalizations cannot possibly hold true for all types of selling is evidenced by the fact that different capacities are required to sell an insurance policy, a shirt in a department store, or a vacuum cleaner in house-to-house canvassing. While the fundamentals of salesmanship are the same for these types of selling, (1) the extent to which the fundamentals (personality traits) are applied differs with different types of selling. And since personality is in a continual flux (2), being modified, elaborated, and re-shaped by environmental circumstances to meet the demands of specific occupations, it may be concluded that different types of selling demand different amounts of the traits with which every individual is endowed by nature and nurture. Whether, therefore, the same degree of extroversion, dominance, sociability and other personality traits are characteristic of all successful salesmen, as has frequently been contended (3,4), is not a settled question.

Having in mind the possibilities for further investigations of this problem, the following study was undertaken to ascertain the relation between certain personality traits (5) and the selling success of independent retail grocers. The grocers were chosen because they seemed to be the most

1. Tosdal, H. R., Principles of Personal Selling, p.36, McGraw-Hill Book Co., New York, 1925.

2. Laird, D. A., op. cit., pp.161-166.

3. Ibid., pp.161-227.

4. Ream, J. M., op. cit.

5. The traits measured by the Bernreuter Personality Inventory, namely, neurotic tendency, self-sufficiency, introversion-extroversion, dominance-submission, confidence in oneself, and sociability. See Bernreuter, R. G., Manual for the Personality Inventory, Stanford University Press, 1935.

suitable subjects for the undertaking. Studies with department store salespersons and insurance salespersons, for instance, have been made by a number of investigators, (1) but there appear to be no published studies on the problem of the relation between personality traits and selling success of small independent retail grocers.

There was another reason why it was thought that the independent retail grocer would make an ideal subject for the study. Much of the buying from the corner retail grocer is done, not because he is necessarily the best person to buy from, but because he is the nearest. Many of the grocer's food products are sold on the basis of proximity. (2) This fact opens the possibility for almost anyone with sufficient funds to set himself up as a grocer; and it also allows people who are not aggressive, dominant, or socially inclined, to become retail merchants. Whether such "introverts" make a success of their business is to be seen from the following study.

In addition, it was also decided to analyze the individual items of the personality test employed (3) to see whether such an analysis might furnish the basis for the construction of a "successful grocer's personality", distinct from the personalities of other successful salespersons.

1. See summaries of studies on the relationship between personality traits and success in selling at the end of chapter 2.

2. Noal, I. S., Pharmacy as an Occupation, Occupations, Vol.15, No.6, pp.521-527.

3. The Bernreuter Personality Inventory.

Chapter 2

Previous Studies

Of the studies which have been published, dealing with the relation between personality traits and success in selling, those reported by A. F. Dodge (1,2,3) come closest to the present investigation.

Dodge has published three separate studies on the relation between personality and success in selling. The first of these (1) was undertaken, among other things, to find the relation between social dominance and success in selling. The subjects employed consisted of 50 traveling salesmen, 50 retail salesmen, and 54 retail saleswomen. The personality test used to determine the degree of social dominance was the Bernreuter Personality Inventory; while the criteria of success were: (a) three or more years' experience in selling; (b) a minimum of one year's employment in selling with a single employer; and (c) longer experience in selling than in any other occupation in which the subject had previously been engaged. All of the salesmen and saleswomen to whom the Bernreuter Personality Inventory was administered were regarded as successful in their occupation of selling on the basis of the above criteria.

The dominance-submission scores of the three groups of salespeople were found to be as follows: The traveling

1. Dodge, A. F., Social Dominance of Clerical Workers and Sales-Persons, Journal of Educational Psychology, Vol.28, No.1, pp.71-73.

2. _____, Social Dominance and Sales Personality, Journal of Applied Psychology, Vol.22, No.2, pp.132-139.

3. _____, What are the Personality Traits of the Successful Sales-Person?, Journal of Applied Psychology, Vol.22, No.3, pp.229-238.

salesmen obtained a median score of 70. The probable error of the median came to 5.9. The retail salesmen obtained a median score of 56, with a probable error of 10.6. Lastly, the retail saleswomen obtained a median score of 45, with a probable error of 8.4.

Dodge concludes from this study that experienced (successful) traveling salesmen and retail salesmen and saleswomen score fairly high in social dominance. The traveling salesmen score above the retail salesmen. This, Dodge thinks, is to be expected because the traveling salesmen, due to the type of selling in which they are engaged, have to be more aggressive than the retail salesmen. The implication here is that dominance and aggression (extroversion) have a positive correlation. This contention is supported by other psychologists, e.g., Bernreuter. (1)

In spite of the positive relation between dominance and success in selling, however, Dodge cautions against using a high score in dominance as a basis for vocational guidance in business. There are many other, no less important, elements which make for successful selling. High scores in dominance should therefore be considered in conjunction with other traits of personality.

While the length of time in business is an indicator of business success, it is not so good or decisive a criterion as output, earnings, or credit ratings. Fortunately, in a second study of social dominance and personality, (2) Dodge improves upon his criterion by taking the ratings made by the

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1. Bernreuter, R. G., op. cit.
 2. Dodge, A. F., op. cit.

personnel manager and his staff as the criterion of business success. Another reason why Dodge's second study strikes much closer to the heart of the problem is that actual correlations are drawn between personality traits and success in selling. The coefficient of correlation is a much more precise indicator of the degree of relationship than the median.

Then, too, Dodge uses in his second study a group of salespeople who form a much more solid group than did the subjects of his first study. The latter were culled from the ranks of the unemployed, while the subjects of his second study, numbering 75 (41 men and 34 women), were all salespeople employed by one firm, a large department store, and actually selling when the personality test was administered. The personality test used was again the Bernreuter Personality Inventory.

The results of this second study largely corroborate the results obtained in the first study. As a matter of fact, in several instances the median score is higher than it was in the first study. Thus Dodge found that the median score for the best group of salesmen was 100; for the poorest group of salesmen 93.5; for the best group of saleswomen 48; and for the poorest group of saleswomen 17. With one exception, the median score for the poorest group of saleswomen, the median scores in the second study are all higher than they were in the first study.

The indication, on the basis of these scores, is in the direction of higher scores in social dominance for the best salesmen than it is for the poorer salesmen. This also holds true in the case of the best and the poorest groups of sales-

women. To what extent this tendency is significant, however, can only be ascertained by finding the coefficient of correlation between sales success and scores of dominance. Dodge realizes this and proceeds to correlate the scores made by his subjects with respect to the six traits tested by the Bernreuter Personality Inventory, e.g., neurotic tendency, self-sufficiency, introversion-extroversion, dominance-submission, confidence in oneself, and sociability, and business success as indicated by the ratings of the personnel manager and his staff of the department store in which the subjects were employed.

The results of this correlation study are not significant. The correlations between scores in social dominance and sales success were $+.16 \pm .16$ for men, and $+.31 \pm .15$ for women. None of the other correlations between scores on the different personality traits tested by the Bernreuter Personality Inventory and success in selling was any more significant. All that can be said from this study is that there is a positive tendency for successful retail salesmen and women to score higher in social dominance and in some of the other traits, than comparatively unsuccessful retail salesmen and women, but that this tendency is not strong enough to permit any far-reaching conclusions for purposes of vocational selection or guidance.

Thinking that he might obtain a more significant relation between personality and sales success, Dodge next sought to analyze the Bernreuter Personality Inventory in such a way as to record the percentages of "yes", "no", and "?" given by the best and the poorest salesmen and women to the 125 single items in the Bernreuter Personality Inventory. This analysis did away

with the sharply defined traits as advanced by Bernreuter (1) and Flanagan (2), but it left room for general tendencies of personality as implied by the four Bernreuter and the two Flanagan traits, which, Dodge thought, would be specific enough to tell in fairly general terms what a successful salesperson is like.

As a result of this analysis, Dodge found that out of 125 individual items of the Bernreuter Personality Inventory, 62 were indicative of success in selling, i.e., the answers of the successful salesmen to these 62 items were sufficiently different from the answers of the poorest salesmen to these items that they could be used for a rough scoring system. A score of one was given for each answer to an item that agreed with the predominant response of the best salespeople. The relation between these new scores and success in selling proved to be very significant, the correlation being fairly high. There was no overlapping of scores between the best salesmen and poorest salesmen. The scores of the best salespeople ranged from 40 to 49; those of the poorest salespeople from 26 to 39; those of the best saleswomen from 36 to 46; and those of the poorest saleswomen from 26 to 35.

In order to test the validity of the high relation between these new scores and sales success, Dodge administered the 62 items which had proven helpful in selecting the best from the poorest salesmen and saleswomen, to a separate group of salespeople. This control group of subjects was divided into above average, average, and below average salesmen. When

1. Bernreuter, R. G., op. cit.

2. Flanagan, J. C., Factor Analysis in the study of Personality, Stanford University, Stanford University Press, 1935.

the scores of these three groups were correlated with success in selling, it was found that the coefficient of correlation and probable error of the salesmen were $.60 \pm .09$, and the coefficient of correlation and probable error for the saleswomen were $.36 \pm .14$. By improving his scoring scale somewhat, Dodge was able to raise these correlations for salesmen and saleswomen, respectively, to $.71 \pm .07$ and $.39 \pm .14$.

The general outcome of this study, then, indicates that there is a significant relationship between personality and sales success, but that the traits as defined in such personality tests as the Bernreuter Personality Inventory do not represent this relationship. These and similar traits, according to Lorge, (1) have been derived by fiat, and have thus little meaning. The meaning of such traits has to be established by experiment. This matter of specific personality traits, as now defined, seems to be merely another case of putting the cart before the horse, of evolving a principle and then trying to make the facts conform to this principle.

A much more fruitful attempt would therefore lie in the endeavour, already suggested by Link (2), of trying to determine, on the basis of experimentation, not what a successful general personality is, but what a successful specific salespersonality, engineering personality, teaching personality, etc., is. (3) Dodge follows Link's suggestion in this respect,

1. Lorge, I., Personality Traits by Fiat, Journal of Educational Psychology, Vol.26, pp.273-278.

2. Link, H. C., A Test of Four Personality Traits of Adolescents, Journal of Applied Psychology, Vol.20, pp.527-534.

3. I intend to carry this study still further and find whether there are specific types of sales personalities such as, for instance, a successful grocer personality.

and in his third study (1) attempts to find out what the successful sales personality is like. To do this, Dodge tried to find the outstanding traits that characterize the successful salesperson as indicated by the answers to the various items of the Bernreuter Personality Inventory made by the 75 salespersons acting as subjects.

Devising a scoring system similar to the one described in his second study, in accordance with which there was a fairly consistent tendency for the best salesmen to make distinct answers to 41 of the 125 items of the Bernreuter Personality Inventory, Dodge grouped the items in such a manner as to indicate what generalized traits they represented. He succeeded by means of this procedure in selecting the following traits which he thinks characterize the successful salesperson. They are:

- | | |
|------------------------|---------------------------------------|
| 1. Emotional stability | 6. Not self-conscious |
| 2. Self-confidence | 7. Little tendency to talk about self |
| 3. Self-sufficiency | 8. Not resentful of criticism |
| 4. Aggression | 9. Radical and unconventional |
| 5. Sociability | 10. Willing to take responsibilities |

Further studies of the relation between personality and sales success have been reported by Stead (2), Husband (3), Ream (4), Schultz (5), Lovett (6), and Anderson (7). The stu-

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1. Dodge, A. F., op. cit.
 2. Stead, W. H., The Department Store Salesperson, Occupations, Vol.15, No.6, pp.513-515.
 3. Husband, R. W., op. cit.
 4. Ream, J. M., op. cit.
 5. Schultz, R. S., Test-selected Salesmen Are Successful, Personnel Journal, Vol.14, pp.139-142.
 6. Lovett, R. F., and H. Richardson, Selecting Sales Personnel, Personnel Journal, Vol.12, pp.248-253.
 7. Anderson, V. V., Psychiatry in Industry, pp.222-265, Harper and Brothers, New York, 1929.

dy reported by Stead was carried out by the Worker-Analysis Unit of the Occupational Research Program, which is a division of the Occupational Research Program of the U. S. Employment Service. In this study the relation between success in selling and vocabulary, arithmetic reasoning, memory for numbers, clerical aptitude, copying and completion, interests, appearance, personality (emotional stability), and personal data or information was investigated. The criterion of success employed was the objective store personnel record of the salespersons. Two groups of subjects were used, numbering 109 and 153, respectively. These consisted of two samples of salespersons from two large department stores located in different cities. The measurements used in this study were the O'Rourke Survey Test of Vocabulary, the O. R. P. Arithmetic Test, the Taylor Number Copying Test, the O. R. P. Revision of the Trabue Completion Forms, the O. R. P. Interest Questionnaire, the O. R. P. Multiple Choice Personality Test, a Personal Appearance Rating, and an O. R. P. Personal Data Sheet.

Stead reports that on the basis of this study the following results were obtained: It was found that appearance is not sufficiently related to selling success to be of significance. Vocabulary, clerical aptitude, and completion showed a slight positive correlation with success in selling. A multiple correlation of .32 was obtained. With respect to interests it was learned that the successful or better salespersons show greater interest in activities and in people than do the poorer salespersons. The better salespersons also proved to be more stable and better balanced emotionally than the poorer salespersons.

The highest positive correlation proved to be between success in selling and social and economic status, height, job previously held, and education. In the case of education, for instance, it was found that high school education and success in selling correspond very highly. No correlations are given for sales success and social and economic status, height, jobs previously held, and education. The multiple correlation between the combined battery of personality, interests, personal data and success in selling was found to be .65.

Husband undertook a comparative study of sales success and the following factors: neuroticism, self-confidence, self-sufficiency, extroversion, age, experience, and efficiency. As a criterion of sales success he used ratings by superiors. These ratings were based on production records and the superior's general knowledge of the salespersons. Husband used 64 subjects in his study, with men and women equally well represented. The subjects were sales clerks from a number of stores in three different cities. The clerks sold yard goods, drugs, leather goods, dresses, art supplies, jewelry, lingerie, and children's wear. The ages of the sales clerks ranged from 21 to 41, with an average age of 28 years. Only one test was used, the Wisconsin Scale of Personality Traits.

According to this study, the successful salespersons are well balanced emotionally, self-confident, self-sufficient, and extroverted. Age, experience, and efficiency were found to have no direct relation to success in selling.

Ream made a study of success in selling and intelligence, extroversion-introversion, conservatism-radicalism, will-temperament, adaptability, and social intelligence. He chose for his

criterion of success the salesman's production while attending an insurance school (actual selling was compulsory for graduation). The subjects studied consisted of two groups of students of the School of Life Insurance Salesmanship, Carnegie Institute of Technology. Group one consisted of 48 members, while group two consisted of 75 members. The following methods of measurement were used: Bureau of Personnel Test VI (Intelligence - Modification of Army Alpha Test), Downey Will-temperament Test, a social relations test (measuring social intelligence), a meeting objections test (objections encountered in selling) and a prediction test, the C. S. Yoakum and Max Freyd Interest Analysis Test, and a personal history record (age, height, weight, nationality, marital status, dependents, complete record of schooling, complete record of business history with previous selling experience, etc.).

It was found that the personal qualities characterizing the successful insurance salesman are the following: average intelligence, extroversion, fair degree of sociability, adaptability, economic and social conservatism, ready decision, and quick and ready reply to objections. The successful insurance salesmen scored especially high on the following tests: meeting objections, interest analysis, and personal history record.

Schultz, Lovett, and Anderson, working independently with insurance salesmen and department store salespersons, all agree on the basis of their investigations that the most indicative personality traits for success in selling are dominance and extroversion. Of the different factors compared with selling success by these psychologists, dominance and extro-

version were the only two personality traits that showed a consistently high positive relation with success. It must be pointed out, however, that this holds true only of low-cost salesmen. Anderson compared the low-cost and high-cost salespersons of R. H. Macy and Company of New York City with respect to sales success, dominance, and extroversion. He found that 66% of the low-cost group of salespersons were dominant, but that only 45% of the high-cost group of salespersons were dominant. With respect to extroversion and salesmanship, the same tendency was apparent. 54% of the low-cost salespersons were extrovert, 10% introvert, and the remaining 36% ambivert; while only 11% of the high-cost salespersons were extrovert, 49% were ambivert, and 40% were introvert. Anderson's study thus seems to suggest that the degree of extroversion or dominance required for success in selling depends upon the commodity sold. Low-cost salespersons are extroverts and are dominant; while high-cost salespersons are introverts and are submissive.

The studies by Dodge, Husband, Ream, Schultz, Lovett, and Anderson, on the relationship between success in selling and personality traits, are indicative of the work that is being done on this problem. That the problem is an important one for both the theoretical and the applied psychologists is shown by the fact that it has stimulated research for a good many years and will likely continue to do so.

Chapter 3

Measurement

Several methods of ascertaining a salesperson's personality traits have been used, e.g., interviews, letters of recommendation, and personality tests. Of these the personality test seemed most suitable for the present study. It is difficult to get objective results with the interview and the letter of recommendation; whereas the scores made on a personality test can very easily be converted into statistical measures.

The letter of recommendation is always tinged with the subjective element. It usually comes from former employers, friends, or acquaintances, and seeks to extol the good points of the person in question, while hiding the undesirable qualities. It is vague, abounds in generalities, and is not very reliable.

The interview, besides being difficult to summarize in quantitative terms, also carries with it the subjective point of view of the interviewer. Then, too, it demands that the salesperson be present to take the interview. With independent grocers this would be more or less out of the question. Few grocers would co-operate with the examiner to the extent of providing enough of their time for an interview.

With the personality test most of these difficulties disappear. Personality tests measure fairly accurately in an objective manner the traits that we are concerned with. (1) Moreover, personality tests are self-administrative and can be

1. See Bernreuter, R. G., op. cit.

filled out by the salesperson when he has the time. They need not even be filled out completely at one sitting. The salesperson can go back to the test whenever he has a moment or two to spare, and so do the test with little inconvenience to himself. With independent grocers, who need not take the test if they are not inclined to do so, this factor assumes great importance. With sales clerks it is different. As a general rule the salesmanager when asking his staff to fill out a personality test, lets it be known that it is a voluntary matter, that the sales clerk need not fill out the test if he does not want to. But the implied demand to do so is there, nevertheless, and there are few sales clerks who will not comply with the wishes of the salesmanager. To repeat, this implied demand is not present when dealing with independent grocers. The grocers either co-operate with the investigator, or they do not. Approximately two out of three grocers cannot be bothered to take the personality test for one reason or another.

Having decided upon the method to use, it was next important to find a personality test that would not only be highly reliable and well standardized, but would also measure a number of traits (the most representative) at once. With these criteria in mind, the Bernreuter Personality Inventory appeared to be the ideal test to use. (1) The Bernreuter Personality Inventory was devised by Robert G. Bernreuter, and consists of 125 items, which are scored for six different traits. (2) The

1. For a full description, and with respect to the reliability, validity, and norms of the Bernreuter Personality Inventory see Bernreuter, R. G., op. cit.

2. Two of these traits, confidence in oneself and sociability, were prepared by John C. Flanagan from the original 125 items of the Bernreuter Personality Inventory with the help of factor analysis. See Flanagan, J. C., op. cit.

questions are answered "yes", "no", or "?". For each of the questions, for each of the six traits, different weights have been determined statistically, ranging from -8 to +9, in order to give the greatest validity. Bernreuter and Flanagan define these traits as follows:

B1-N. A measure of neurotic tendency. Persons scoring high on this scale tend to be emotionally unstable. Those scoring above the 98 percentile would probably benefit from psychiatric or medical advice. Those scoring low tend to be very well balanced emotionally.

B2-S. A measure of self-sufficiency. Persons scoring high on this scale prefer to be alone, rarely ask for sympathy or encouragement, and tend to ignore the advice of others. Those scoring low dislike solitude and often seek advice and encouragement.

B3-I. A measure of introversion-extroversion. Persons scoring high on this scale tend to be introverted; that is, they are imaginative and tend to live within themselves; Scores above the 98 percentile bear the same significance as do similar scores on the B1-N scale. (1) Those scoring low are extroverted; that is, they rarely worry, seldom suffer emotional upsets, and rarely substitute day dreaming for action.

B4-D. A measure of dominance-submission. Persons scoring high on this scale tend to dominate others in face-to-face situations. Those scoring low tend to be submissive.

F1-C. A measure of confidence in oneself. Persons scoring high on this scale tend to be hamperingly self-conscious and to have feelings of inferiority; those scoring above the 98 percentile would probably benefit from psychiatric or medical advice. Those scoring low tend to be wholeheartedly self-confident and to be very well adjusted to their environment.

F2-S. A measure of sociability. Persons scoring high on this scale tend to be non-social, solitary, or independent. Those scoring low tend to be sociable and gregarious.

The following criteria of success in selling were considered for possible use in this study: First, net annual

1. A high correlation has repeatedly been found between neuroticism and introversion, indicating that these two Bernreuter measures more or less overlap and measure the same thing. For the sake of completeness, it was, nevertheless, decided to work with all six of the Bernreuter Personality traits.

income from the grocery business, worked out on a scaled basis of the amount of money invested. Since the grocers themselves would not furnish the required information, an effort was made to get access to the Dominion and Provincial Income Tax Returns. This venture proved fruitless, and so net annual income as a possible criterion of success had to be abandoned.

Second, length of time in business was regarded as another possible criterion of selling success. But upon closer examination this criterion proved to be almost worthless. Many grocers, apparently, manage to keep in business for a long time, in spite of the fact that they are unable to make ends meet. Income from other sources keeps the business going from day to day. Even an occasional bankruptcy does not dissuade some grocers. They start up again in some other location under the names of their wives or sons and keep on in business. To call such grocers successful or unsuccessful on the basis of the length of time spent in business would be completely untrue.

A third possibility considered for a criterion of success in selling was the ratings of grocers made by wholesalers. But these too appeared to be more or less useless. Personal ratings have come in for so much criticism recently that it was deemed advisable not to use ratings made by wholesalers as a criterion of success if at all avoidable. The subjective element, the halo effect, and similar weaknesses, make the personal rating technique of doubtful value.

By a process of elimination, only two criteria of suc-

cess were left for consideration, credit rating (1) and rating of pecuniary strength. After weighing the pros and cons of these criteria, it was decided that they would do if they could be obtained from a reliable credit agency. With this thought in mind, Dun and Bradstreet were approached. Dun and Bradstreet agreed to co-operate with the investigator, and gave him access to their information. Since these ratings were already compiled (Dun and Bradstreet make an annual compilation of ratings on all business men in the country) no personal interpretation on the part of the investigator could possibly distort the ratings. The objectivity of these ratings can therefore not be doubted. They are based on a wealth of reliable and quantitative information collected by Dun and Bradstreet field workers.

The criteria of success in selling used in this study, then, were general credit rating and rating of pecuniary strength, obtained from Dun and Bradstreet of Canada Ltd., mercantile agency. The credit ratings were good, fair, limited, and poor. Numerically, good credit gets a rating of 1, fair credit a rating of 2, limited credit a rating of 3, and poor credit a rating of 4. In terms of success in selling, good credit characterizes the grocer as very successful, fair credit as successful, limited credit as fairly successful, and poor credit as unsuccessful.

1. Credit rating as a criterion of success was suggested to the investigator by Dr. Cosgrave of the University of Toronto. Dr. Cosgrave also suggested size of store and its location, length of time in business, number of years in same location, ratings on the store from wholesalers, store size five years ago and now, and annual turnover of store, as possible criteria of success. All of these criteria fall within the four different types considered above, and the reason why credit rating and rating of pecuniary strength were chosen is also indicated.

The ratings of pecuniary strength ranged from \$10,000 and more to \$500 and less. In terms of success in selling, the grocer with a pecuniary strength of from \$5,000 to \$10,000 was considered as very successful; the grocer with a pecuniary strength of from \$2,000 to \$5,000 was considered as successful; the grocer with a pecuniary strength of from \$500 to \$2,000 was considered as fairly successful; and the grocer with a pecuniary strength of less than \$500 was considered as unsuccessful. The numerical ratings on the basis of pecuniary strength are as follows: \$5,000 to \$10,000 is given a success rating of 1; \$2,000 to \$5,000 is given a success rating of 2; \$500 to \$2,000 is given a success rating of 3; and less than \$500 is given a success rating of 4.

Chapter 4

Subjects

Since it was decided to use only grocers as subjects in the present investigation, a number of tests had to be discarded because they had been filled out by salesclerks.

In some cases the grocery business was under the joint ownership of several members of the family, i.e., brothers, husband and wife, father and son, or mother and daughter. These family salespersons obviously enjoyed a higher business status than clerks working for a salary. They had their own money invested in the business, and were also engaged in selling. To do justice to these family partners, a few tests filled out by them were included in the final list.

A further curtailment in the number of tests that could be used was made when it was discovered that Dun and Bradstreet were unable to furnish the investigator with ratings of several subjects who were otherwise eligible. Rather than introduce another criterion of success, e.g., rating by wholesalers, it was decided to leave these subjects out.

With the elimination of these two classes of salespersons, 70 subjects remained, who were all bona fide grocers, who had filled the personality test out properly, and for whom success ratings could be obtained. These 70 subjects made up about one-third of the grocers who were approached.

Although a letter of introduction from Dr. H. W. Wright, (1) Professor of Psychology, was used, it was impossible to obtain the co-operation of a number of grocers. This made it difficult

1. See Appendix

to secure as many subjects for the study as were desired. Nevertheless, 70 subjects were considered a fairly good sample, constituting about 10% of the retailers in Winnipeg falling within the category of grocers as defined for purposes of this investigation.

While the sample thus might have been larger, it is not inadequate. Husband (1) used 64 subjects in a similar study; and Dodge (2) used 75. According to Ellis, (3) the conclusions based on a study with less than 30 subjects are only suggestive of what might hold true if a larger number of subjects could be used. The sample, moreover, was chosen arbitrarily from the telephone directory. With the exception of St. Boniface, which was regarded as another city, every section of Greater Winnipeg, including the suburbs, was canvassed. It can therefore be stated that the sample of 70 grocers on which this study is based, is a truly representative group selected at random.

The ages of the 70 subjects ranged from 18 to 65 years with a median age of 40. There were 58 men and 12 women. The items sold by these grocers included canned goods, pastry and bread, fruit and vegetables, candy, magazines and newspapers, cigarettes and tobacco, meats, dairy products, and many other commodities.

The nationalities represented in the group of 70 salespersons were as follows: Hebrew 23, English 19, Scotch 11, Irish 7, Italian 2, French 2, Greek 2, Swedish 1, German 1, Chinese 1, and Belgian 1.

The lack of co-operation on the part of grocers was found

1. Husband, R. W., op. cit.
2. Dodge, A. F., op. cit.
3. Ellis, R. S., *The Psychology of Individual Differences*, pp.102-103, D. Appleton and Co., New York, 1929.

to be due to the following objections:

First, suspicion based on a fear that anything filled out by the grocer might involve him in financial obligations. 31 cases of this nature were encountered. The investigator's standard reply to this objection was that no signature was required of the subject, and without a signature no financial obligations could be incurred. In some cases this response over-ruled the initial objection and the grocer filled out the test.

Another objection to taking the test was that the grocer was too busy and could not spare sufficient time to answer 125 questions. With a number of grocers the investigator managed to overcome this objection by offering to leave the test to be filled out at night or over the weekend. In some other cases it was suggested that the grocer fill out the test by doing a few questions at a time in between serving customers. 46 cases of this nature were encountered.

A third objection raised was that the grocer had only a limited education and doubted whether he could answer all the questions. When it was pointed out that there were no wrong or right answers to the questions, that the test was neither an intelligence test nor an achievement or knowledge test, but a questionnaire based on every day occurrences about which we all have opinions, the grocers complied with the request of the investigator to take the test. 8 cases of this kind were handled satisfactorily.

Some grocers thought the test too personal and objected to taking it for that reason. When the investigator assured these

objectors that no names would be used, that all the answers would be kept strictly confidential, and that the individual answers would be engulfed in a mass of statistical data anyway and would thus be unrecognizable, this objection was to a certain extent overcome. 22 cases of this nature were recorded.

A further objection encountered concerned the language difficulties of the test. Such words as "unconventional", "day-dream", "affected", "motives", "creative", "domineering", "radical", "self-conscious", "manners", "stage fright", "alternate", "apparent", "stimulating", "essential", "solicited", "ambition", "admiration", and "reluctant", were not understood by a few subjects. Of these words "day-dream", "unconventional", "creative", "self-conscious", and "affected" were the worst offenders. To overcome this objection the investigator referred the subject to a dictionary or defined the words himself. The greatest care was observed so that the subjects would not be influenced one way or the other. Bernreuter (1) provides for just such difficulties, and says that it is quite all right to define unknown words to the subject, provided the person administering the test refrains from influencing the subject by doing so. 17 cases of this kind were found.

Some grocers gave no adequate explanation as to why they objected to taking the test, and simply said they could not be bothered. Whenever such a hostile attitude was encountered the investigator did not press the matter and thought it best to thank the grocer for his time and leave. 7 cases of this nature were recorded.

1. Bernreuter, R. G., op. cit.

The worst objectors were those grocers who, after looking over the test casually, sought to find fault with almost every question in it. Fortunately, only 6 such objectors were encountered. In one instance it took the investigator fully two hours to convince the storekeeper of the adequacy of the test.

Several cases of illiteracy were also found. The investigator administered the personality test to one of these grocers, but was forced to discard it, because the subject failed to understand the questions put to him. 3 cases of this kind were encountered.

Most of the salespersons approached were unfamiliar with tests. It was therefore considered best to explain the questionnaire to the subjects in some detail. The directions appearing in the blank were pointed out or read to the grocers. It was further emphasized that the questions should be answered honestly, that thinking over the question and trying to find the best answer would only distort the outcome of the test, and that in all cases the first impression should be put down.

Chapter 5

Results

Tables 1 and 11, and figures 1 and 11 present the distribution of ratings of pecuniary strength and credit ratings

Table 1

Distribution of Ratings of Pecuniary Strength for 70 Grocers Supplied by Dun and Bradstreet

<u>Ratings</u>	<u>Men</u>	<u>Women</u>
1. \$5,000 to \$10,000	7	0
2. \$3,000 to \$5,000	4	0
3. \$2,000 to \$3,000	7	1
4. \$1,000 to \$2,000	11	4
5. \$500 to \$1,000	7	2
6. Less than \$500	22	5
	58	12

Total 70

for 70 grocers; while tables 111 to V111, and figures 111 to V111 present the distribution of scores of 70 grocers for neu-

Table 11

Distribution of Credit Ratings for 70 Grocers Supplied by Dun and Bradstreet

<u>Ratings</u>	<u>Men</u>	<u>Women</u>
1. Good	12	1
2. Fair	21	6
3. Limited	24	2
4. Poor	1	3
	58	12

Total 70

rotic tendency, self-sufficiency, introversion-extroversion, dominance-submission, confidence in oneself, and sociability.

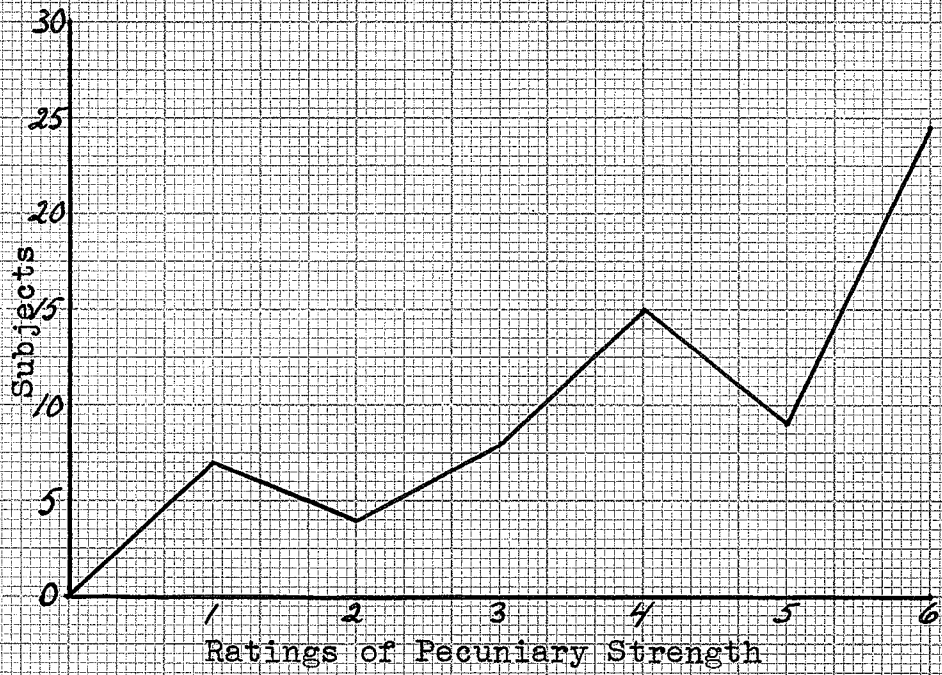


Fig. 1 Distribution of Ratings of Pecuniary Strength for 70 Grocers

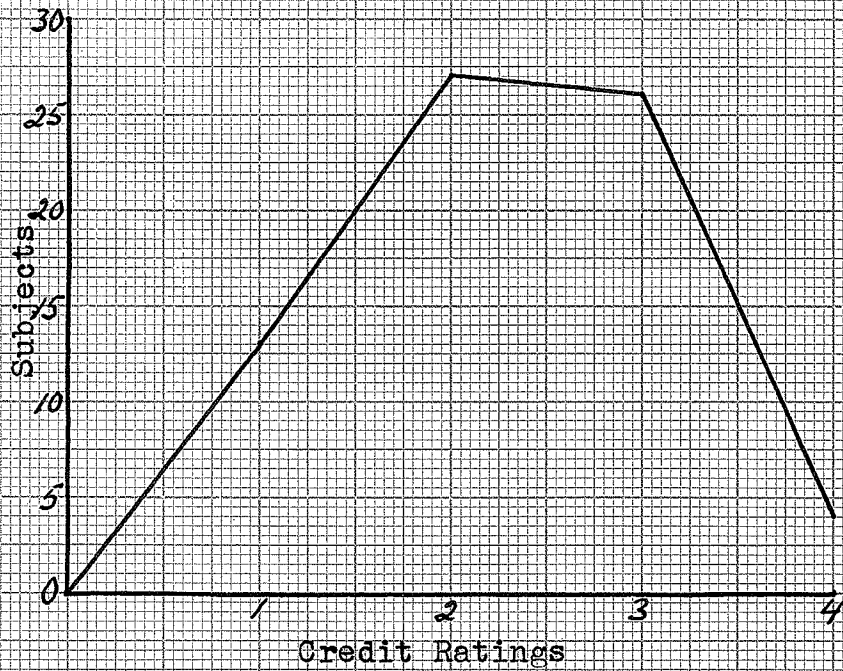


Fig. 2 Distribution of Credit Ratings for 70 Grocers



Table 111

Distribution of 70 Grocers Scored for Neurotic
Tendency by the Bernreuter Personality Inventory

<u>Personality Scores</u>	<u>Men</u>	<u>Women</u>
160 to 169	0	1
150 to 159	1	0
140 to 149	1	0
130 to 139	0	0
120 to 129	1	0
110 to 119	0	0
100 to 109	0	1
90 to 99	0	0
80 to 89	0	1
70 to 79	3	0
60 to 69	3	1
50 to 59	0	0
40 to 49	3	0
30 to 39	1	1
20 to 29	0	1
10 to 19	2	0
0 to 9	1	0
-10 to -1	2	1
-20 to -11	6	0
-30 to -21	3	0
-40 to -31	1	0
-50 to -41	1	0
-60 to -51	1	2
-70 to -61	1	0
-80 to -71	3	0
-90 to -81	1	1
-100 to -91	2	0
-110 to -101	4	1
-120 to -111	2	0
-130 to -121	1	1
-140 to -131	2	0
-150 to -141	6	0
-160 to -151	1	0
-170 to -161	2	0
-180 to -171	2	0
-190 to -181	0	0
-200 to -191	0	0
-210 to -201	1	0
	<hr/>	<hr/>
	58	12
	<hr/>	<hr/>
Total	70	

Table 1V

Distribution of 70 Grocers Scored for Self-Sufficiency by the Bernreuter Personality Inventory

<u>Personality Scores</u>	<u>Men</u>	<u>Women</u>
100 to 109	1	0
90 to 99	1	0
80 to 89	3	0
70 to 79	3	1
60 to 69	1	0
50 to 59	5	1
40 to 49	4	2
30 to 39	4	2
20 to 29	7	1
10 to 19	6	0
0 to 9	3	0
-10 to -1	4	0
-20 to -11	0	2
-30 to -21	3	0
-40 to -31	3	1
-50 to -41	2	2
-60 to -51	1	0
-70 to -61	3	0
-80 to -71	2	0
-90 to -81	1	0
-100 to -91	1	0
	<hr/>	<hr/>
	58	12
	<hr/>	<hr/>
Total	70	

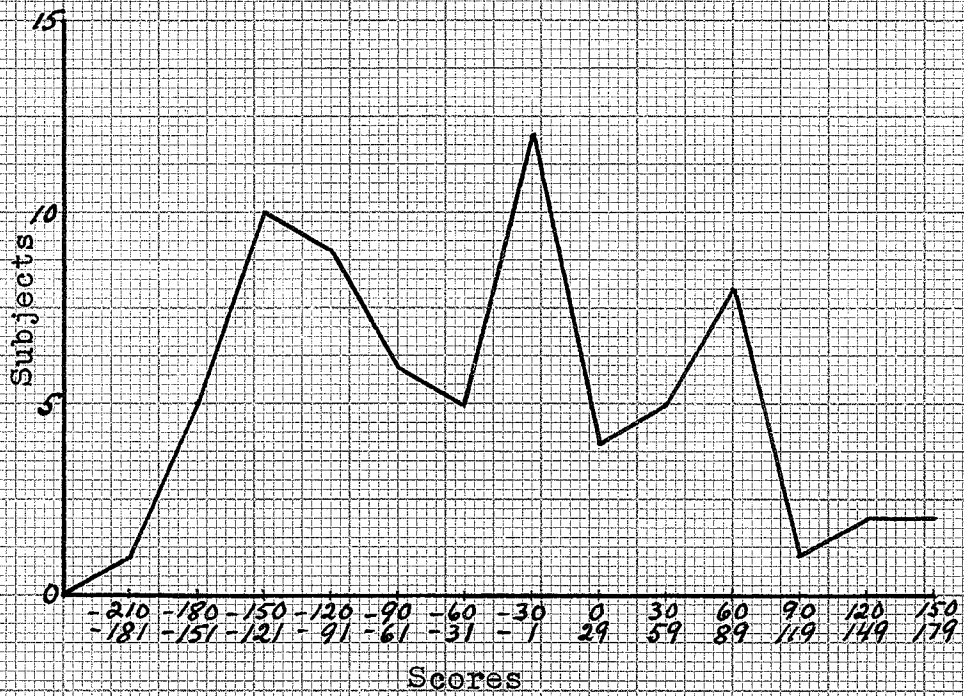


Fig. 3 Distribution of Scores for Neurotic Tendency for 70 Grocers

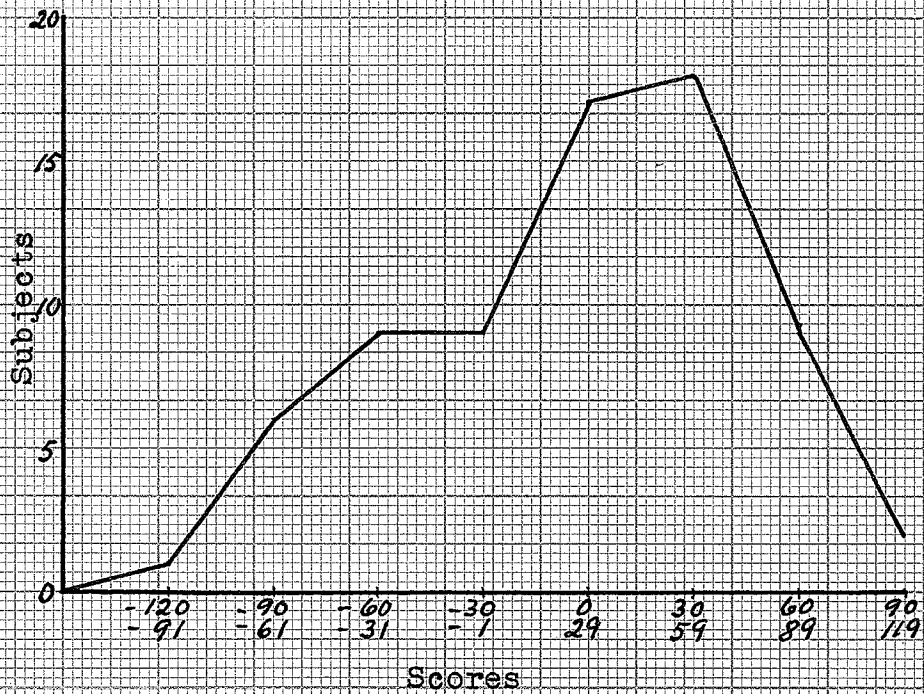


Fig. 4 Distribution of Scores for Self-Sufficiency for 70 Grocers

Table V

Distribution of 70 Grocers Scored for Introversion-
Extroversion by the Bernreuter Personality Inventory

<u>Personality Scores</u>	<u>Men</u>	<u>Women</u>
110 to 119	1	0
100 to 109	0	0
90 to 99	1	1
80 to 89	0	0
70 to 79	1	1
60 to 69	0	2
50 to 59	4	0
40 to 49	3	0
30 to 39	1	0
20 to 29	3	1
10 to 19	2	1
0 to 9	1	0
-10 to -1	7	1
-20 to -11	1	2
-30 to -21	3	0
-40 to -31	3	1
-50 to -41	3	0
-60 to -51	4	1
-70 to -61	8	1
-80 to -71	2	0
-90 to -81	4	0
-100 to -91	5	0
-110 to -101	0	0
-120 to -111	0	0
-130 to -121	0	0
-140 to -131	1	0
	<hr/>	<hr/>
	58	12
	<hr/>	<hr/>

Total 70

Table VI

Distribution of 70 Grocers Scored for Dominance-Submission by the Bernreuter Personality Inventory

<u>Personality Scores</u>	<u>Men</u>	<u>Women</u>
150 to 159	1	0
140 to 149	0	0
130 to 139	2	0
120 to 129	0	0
110 to 119	3	0
100 to 109	4	0
90 to 99	3	0
80 to 89	2	2
70 to 79	3	1
60 to 69	3	1
50 to 59	2	1
40 to 49	2	0
30 to 39	4	1
20 to 29	4	0
10 to 19	5	1
0 to 9	3	1
-10 to -1	6	0
-20 to -11	3	0
-30 to -21	0	0
-40 to -31	3	1
-50 to -41	0	1
-60 to -51	2	0
-70 to -61	0	0
-80 to -71	1	0
-90 to -81	0	1
-100 to -91	0	0
-110 to -101	1	0
-120 to -111	0	1
-130 to -121	1	0
	<hr/>	<hr/>
	58	12
	<hr/>	<hr/>

Total 70

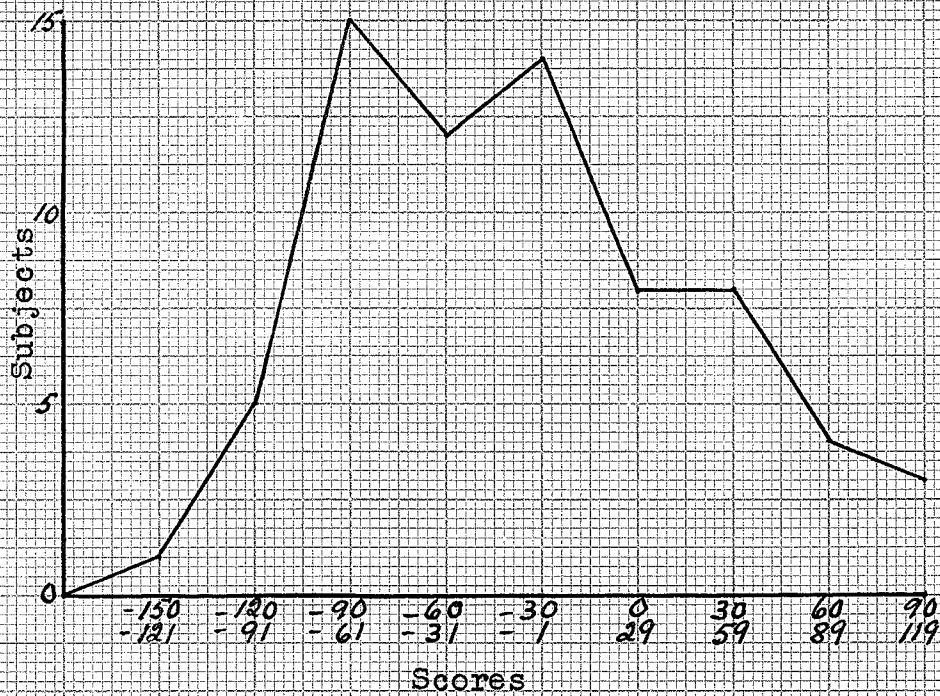


Fig. 5 Distribution of Scores for Introversion-Extroversion for 70 Grocers

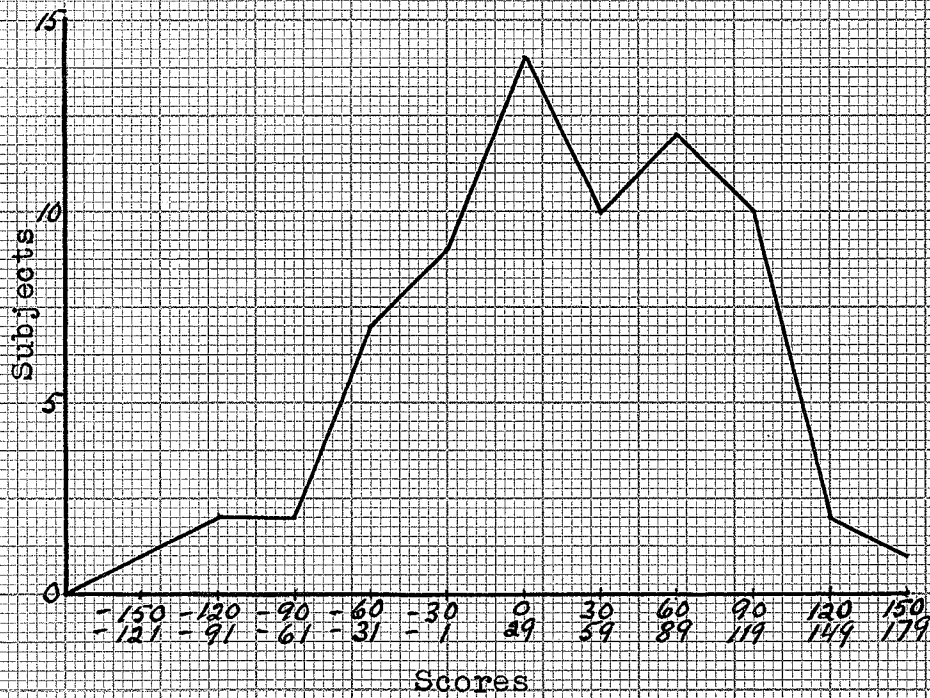


Fig. 6 Distribution of Scores for Dominance-Submission for 70 Grocers



Table V11

Distribution of 70 Grocers Scored for Confidence
in oneself by the Bernreuter Personality Inventory

<u>Personality Scores</u>	<u>Men</u>	<u>Women</u>
230 to 239	0	1
220 to 229	0	0
210 to 219	2	0
200 to 209	0	0
190 to 199	0	0
180 to 189	1	0
170 to 179	0	0
160 to 169	0	0
150 to 159	0	0
140 to 149	0	0
130 to 139	0	0
120 to 129	0	1
110 to 119	2	0
100 to 109	2	1
90 to 99	3	0
80 to 89	0	2
70 to 79	2	0
60 to 69	3	1
50 to 59	3	1
40 to 49	1	0
30 to 39	1	0
20 to 29	1	0
10 to 19	3	0
0 to 9	2	1
-10 to -1	2	0
-20 to -11	3	0
-30 to -21	2	1
-40 to -31	0	1
-50 to -41	2	0
-60 to -51	1	0
-70 to -61	3	0
-80 to -71	2	0
-90 to -81	3	0
-100 to -91	1	1
-110 to -101	2	1
-120 to -111	2	0
-130 to -121	1	0
-140 to -131	4	0
-150 to -141	1	0
-160 to -151	2	0
-170 to -161	0	0
-180 to -171	1	0
	<hr/>	<hr/>
	58	12
	<hr/>	<hr/>

Total 70

Table VIII

Distribution of 70 Grocers Scored for Sociability by the Bernreuter Personality Inventory

<u>Personality Scores</u>	<u>Men</u>	<u>Women</u>
70 to 79	0	1
60 to 69	1	1
50 to 59	2	0
40 to 49	3	0
30 to 39	3	0
20 to 29	3	1
10 to 19	4	0
0 to 9	1	4
-10 to -1	5	2
-20 to -11	3	0
-30 to -21	3	0
-40 to -31	8	1
-50 to -41	8	1
-60 to -51	6	1
-70 to -61	0	0
-80 to -71	2	0
-90 to -81	1	0
-100 to -91	2	0
-110 to -101	1	0
-120 to -111	0	0
-130 to -121	1	0
-140 to -131	1	0
	<hr/>	<hr/>
	58	12
	<hr/>	<hr/>
Total		70

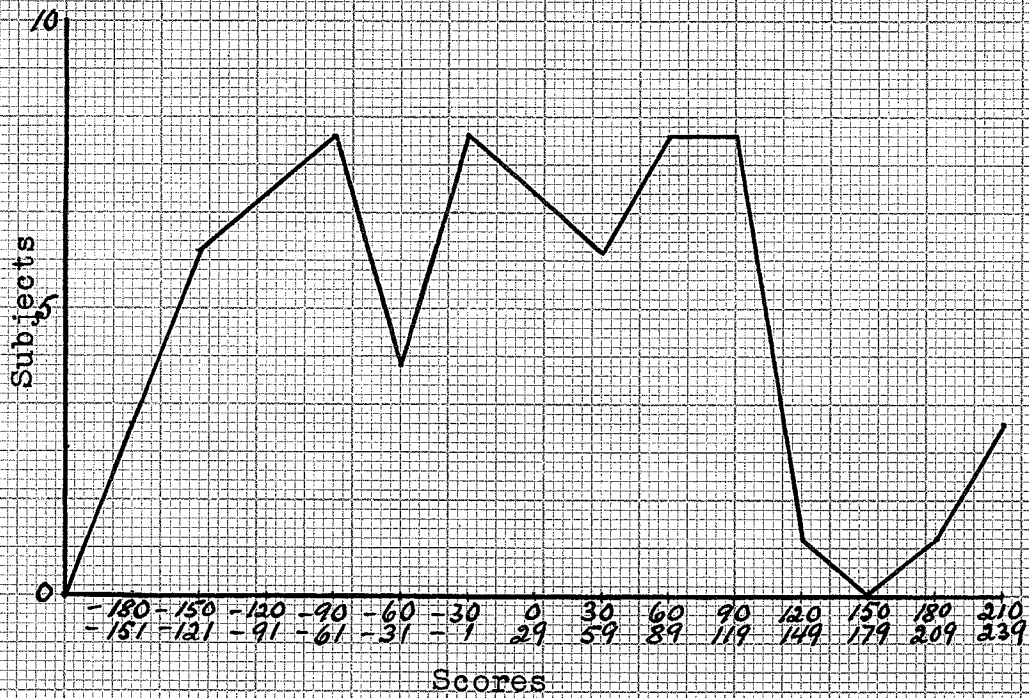


Fig. 7 Distribution of Scores for Confidence in oneself for 70 Grocers



Fig. 8 Distribution of Scores for Sociability for 70 Grocers



An analysis of these tables and figures brings out a number of interesting facts. Tables 1 and 11 and figures 1 and 11 indicate the degree of success in selling for 70 grocers. On the basis of ratings of pecuniary strength as a criterion of sales success, we get a decidedly skewed distribution. According to ratings of success, as interpreted on page 20, 38.5% of the subjects are considered unsuccessful, 34.2% fairly successful, 17.1% successful, and only 10% very successful.

With credit rating as a criterion of sales success, the distribution is less skewed, but it falls off very sharply at the lower end of the scale. In this case we have only 5.7% of the grocers characterized as unsuccessful; 37.1% are considered fairly successful; 38.5% are successful; and 17.1% are very successful.

It is difficult to determine which one of these two criteria is the better. There is a fairly high positive correlation between them, as will become evident further on in this study. This, plus the fact that Dun and Bradstreet base their success reports of merchants on both criteria, should be sufficient proof of their value, in spite of the differences apparent in our distributions.

Table 111 and figure 111, showing the distribution of scores for neurotic tendency, indicate that men salespersons are better balanced emotionally than women salespersons. 72.4% of the male scores fall between average emotional stability and high emotional stability; whereas only 50% of the female scores fall between these two points.

When the scores within the two sexes are compared, we find that 72.4% of the male salespersons are more or less well balanced emotionally; while 27.6% are less well balanced. In the case of the female salespersons 50% are fairly well balanced emotionally; while 50% are less well balanced.

The total range of scores for men salespersons is also larger than for women salespersons. The scores obtained by the men range from -210 to +159; while the scores obtained by the women range from -130 to +169. This would seem to indicate that there is a greater variability of neurotic tendency in men salespersons than in women salespersons.

Table 1V and figure 1V present a decidedly different picture from that shown in table 111 and figure 111. The striking fact in table 1V and figure 1V, containing the scores for self-sufficiency, is the narrow scatter of the scores. They range from -100 to +100 in the case of men salespersons, and -50 to +70 in the case of women salespersons. The men show again a greater variability in self-sufficiency scores than do the women.

While wide variability in the case of neurotic tendency scores was somewhat affected by a few extreme cases, this is not true for self-sufficiency scores. The distribution curve for the self-sufficiency scores, although skewed, is mono-modal, while the distribution curve for neurotic tendency scores is multi-modal.

Of the men salespersons 65.5% are more or less self-sufficient, while 34.5% lack self-sufficiency. Of the women salespersons only 58.3% show a tendency toward self-sufficiency,

and 41.7% lack self-sufficiency. As a group, both men and women grocers seem thus to be fairly self-sufficient. This fact is well indicated in figure IV. Most of the self-sufficiency scores fall between -30 and +119.

The scores for introversion-extroversion, shown in table V and figure V, present a fairly normal distribution, with most of the scores falling between -120 and +59. The range of scores is somewhat wider than in the case of self-sufficiency scores, but this is due again to a few extreme cases. The scores for men salespersons range from -140 to +119; while the scores for women salespersons range from -70 to +99, indicating a larger variability in introversion-extroversion scores for men salespersons.

Male grocers as a group are extrovert with 70.6% of the scores falling along the extrovert side of the scale, and with only 29.4% of the scores falling along the introvert side of the scale. With the women salespersons there is no difference. An equal number, 6 or 50%, fall on the introvert side and the extrovert side. The distribution curve of introversion-extroversion scores, presented in figure V, is lightly bi-modal, but there is very little skewness.

The scores for dominance-submission, presented in table VI and figure VI, range from -130 to +159 for male grocers, and from -120 to +89 for female grocers. The difference in variability between the sexes, with respect to dominance-submission scores, is maintained, with the male grocers showing greater variability. 70.6% of the male grocers fall on the



dominance side of the scale, while only 29.4% fall on the submissive side of the scale. This tendency also holds true with the women salespersons of whom 66.6% fall on the dominance side of the scale and only 33.4% fall on the submissive side of the scale.

As a group, then, grocers seem to be fairly dominant. This fact is well evidenced by the distribution curve of dominance-submission scores presented in figure VI. This distribution is definitely skewed towards the dominance side of the scale. Most of the scores fall between -90 and +149.

Scores for confidence in oneself, shown in table VII and figure VII, have the widest scatter of all the scores so far presented. Both in the case of men and women salespersons this scatter is due to a few extreme cases. In the case of male grocers, the scores range from -180 to +219; while in the case of female grocers they range from -110 to +239. With the elimination of three cases from both the male and female groups of salespersons, the range of scores would be narrowed down respectively to -180 to +119, and -110 to +89.

The distribution curve for scores of confidence in oneself, presented in figure VII, is very oddly shaped. It is a multi-modal curve, with most of the scores piling up between -150 and +119. If the curve were smoothed it would undoubtedly take on the shape of a bell. 55.1% of the scores of male grocers show confidence in oneself, while 44.9% fall on the self-consciousness side of the scale. Of the women grocers 66.6% are more or less confident in themselves, while only 33.4% show decided traces of self-consciousness. Thus it would seem

that the women grocers as a group are less self-conscious than the male grocers.

The range of scores for sociability, presented in table VIII and figure VIII, is somewhat the same as that for self-sufficiency scores, although the distribution is quite different. The scores for male grocers range from -140 to +69, while the scores for female grocers range from -60 to +79. The male salespersons show greater variability in their scores of sociability than do the female grocers.

70.6% of the male grocers are sociably inclined, while 29.4% are non-sociable. In the case of the women salespersons 58.3% are sociably inclined, while 41.7% are non-sociable. The distribution curve of sociability scores, presented in figure VIII, indicates that most of the scores pile up between -90 and +89. It is a mono-modal curve, and gives a good indication of the type of distribution that would be obtained with a large number of subjects.

Irrespective of success in selling, then, grocers as a group are fairly well balanced emotionally, quite self-sufficient, slightly extrovert (ambivert would perhaps be more characteristic), fairly dominant, not particularly self-conscious, and somewhat sociable.

However, when the grocers are segregated on the basis of their success ratings, the above characterizations are found not to hold true for both successful and unsuccessful salespersons. Tables IX to XIV present the median scores of six separate groupings of our subjects for the personality traits studied, and indicate the differences in personality make-up of successful and unsuccessful grocers.

Table 1X

Median Scores for Neurotic Tendency of 70 Grocers Rating (1) Very Successful, Successful, Fairly Successful, Unsuccessful, and (2) Above Average and Below Average in Success

<u>Success Ratings</u>	No. of subjects in groups with success based on ratings of pecuniary strength	No. of subjects in groups with success based on <u>credit ratings</u>	<u>Neurotic Tendency</u>	
			Median scores of groups with success based on ratings of pecuniary strength	Median scores of groups with success based on <u>credit ratings</u>
Very Successful	7	12	-21	-22.5
Successful	12	28	-128.5	-53.5
Fairly Successful	24	26	-19.5	-17.5
Un-Successful	27	4	-43	-80
Total No.	70	70		
Above Average	19	40	-103	-43.5
Below Average	51	30	-21	-30.5
Total No.	70	70		

Table X

Median Scores for Self-sufficiency of 70
 Grocers Rating (1) Very Successful, Successful,
 Fairly Successful, Unsuccessful, and (2) Above Average
and Below Average in Success

<u>Success Ratings</u>	No. of subjects in groups with success based on ratings of pecuniary strength	No. of subjects in groups with success based on <u>credit ratings</u>	<u>Self-sufficiency</u>	
			Median scores of groups with success based on ratings of pecuniary strength	Median scores of groups with success based on <u>credit ratings</u>
Very Successful	7	12	8	15
Successful	12	28	45	33.5
Fairly Successful	24	26	27.5	11
Un-Successful	27	4	12	37
Total No.	70	70		
Above Average	19	40	27	27.5
Below Average	51	30	16	12.5
Total No.	70	70		

Table XI

Median Scores for Introversion-Extroversion of 70 Grocers Rating (1) Very Successful, Successful, Fairly Successful, Unsuccessful, and (2) Above Average and Below Average in Success

<u>Success Ratings</u>	No. of subjects in groups with success based on ratings of pecuniary <u>strength</u>	No. of subjects in groups with success based on <u>credit ratings</u>	<u>Introversion-Extroversion</u>	
			Median scores of groups with success based on ratings of pecuniary <u>strength</u>	Median scores of groups with success based on <u>credit ratings</u>
Very Successful	7	12	-36	-20
Successful	12	28	-52.5	-33
Fairly Successful	24	26	-10	-16
Un-Successful	27	4	-20	-40
Total No.	70	70		
Above Average	19	40	-52	-31
Below Average	51	30	-12	-21.5
Total No.	70	70		

Table X11

Median Scores for Dominance-Submission of 70
 Grocers Rating (1) Very Successful, Successful,
 Fairly Successful, Unsuccessful, and (2) Above Average
and Below Average in Success

<u>Success Ratings</u>	No. of subjects in groups with success based on ratings of pecuniary strength	No. of subjects in groups with success based on <u>credit ratings</u>	<u>Dominance-Submission</u>	
			Median scores of groups with success based on ratings of pecuniary strength	Median scores of groups with success based on <u>credit ratings</u>
Very Successful	7	12	25	23.5
Successful	12	28	80.5	39
Fairly Successful	24	26	36	16.5
Un-Successful	27	4	20	75.5
Total No.	70	70		
Above Average	19	40	45	37
Below Average	51	30	36	18.5
Total No.	70	70		

Table Xl11

Median Scores for Confidence in Oneself of 70
 Grocers Rating (1) Very Successful, Successful,
 Fairly Successful, Unsuccessful, and (2) Above Average
and Below Average in Success

<u>Success Ratings</u>	No. of subjects in groups with success based on ratings of pecuniary strength	No. of subjects in groups with success based on <u>credit ratings</u>	<u>Confidence in Oneself</u>	
			Median scores of groups with success based on ratings of pecuniary strength	Median scores of groups with success based on <u>credit ratings</u>
Very Successful	7	12	-20	15
Successful	12	28	-91	-8
Fairly Successful	24	26	22.5	2
Un-Successful	27	4	-16	-67
Total No.	70	70		
Above Average	19	40	-62	1.5
Below Average	51	30	7	-14.5
Total No.	70	70		

Table XLV

Median Scores for Sociability of 70
 Grocers Rating (1) Very Successful, Successful,
 Fairly Successful, Unsuccessful, and (2) Above Average
and Below Average in Success

<u>Success Ratings</u>	No. of subjects in groups with success based on ratings of pecuniary <u>strength</u>	No. of subjects in groups with success based on <u>credit ratings</u>	<u>Sociability</u>	
			Median scores of groups with success based on ratings of pecuniary <u>strength</u>	Median scores of groups with success based on <u>credit ratings</u>
Very Successful	7	12	-9	-14
Successful	12	28	-13	-8.5
Fairly Successful	24	26	-22	-32
Un-Successful	27	4	-25	-1
Total No.	70	70		
Above Average	19	40	-9	-9.5
Below Average	51	30	-25	-28.5
Total No.	70	70		

A separation of our subjects into four groups, namely, very successful, successful, fairly successful, and unsuccessful salespersons, fails to differentiate the grocers on the basis of their relative degree of success in selling. The median scores, as presented in tables LX to XLV, show little consistency in their rise or fall with increasing success.

But when these success groupings are reduced in number, and the subjects are rated as above or below average in sales-success, the median scores actually indicate the existence of a relationship between success in selling and the Bernreuter and Flanagan personality traits.

According to these median scores, then, the following conclusions may tentatively be drawn: As a group successful salespersons are well balanced emotionally, slightly self-sufficient, fairly dominant, somewhat extrovert, not very self-conscious, and not very sociable. The outstanding difference apparent between successful grocers and undifferentiated grocers is that the former are much less sociable than the latter. This is a rather odd finding, in view of the fact that a salesperson is supposed to be more interested in people than in things or ideas.

The median scores presented in tables LX to XLV are drawn from success groupings based on two different criteria of success, namely, rating of pecuniary strength and credit rating. While there is some difference in the median scores on this account, the difference is slight and, with one exception (confidence in oneself), the relationship of the median scores for above and below average groupings on the basis

of the two criteria, is not disturbed. On the whole, therefore, there exists a fairly high positive relation between the two criteria of success.

A comparison on the basis of median scores or any other group relationship, has been severely criticized, and so we must not lay too much weight upon our findings. It has been charged that the differences found in group comparisons may be of no significance, and may merely reflect sampling errors. Then again these differences, it is held, may be due to differences in sex, age, social-economic status, or nationality. These factors are seldom isolated or kept under control in a comparative study. Thirdly there is the difficulty of interpreting differences between means, averages, or medians. How large should the difference be in order to have any significance or value? Moreover, group comparisons at best only indicate the existence of a relationship. The degree of this relationship remains a mystery. To circumvent all these shortcomings of the method of group comparisons, the adoption of the correlation technique is urged. (1)

Notwithstanding the above criticisms, it was thought advisable to use the method in this study for a preliminary comparison of success in selling with the Bernreuter and Flanagan personality traits. A further comparison of these variables by means of the correlation technique brought out the coefficients of correlation presented in table XV.

1. Paterson, D. G., *Physique and Intellect*, pp.284-285, The Century Co., New York, 1930.

Table XV

Coefficients of Correlation between Neurotic Tendency, Self-Sufficiency, Introversion-Extroversion, Dominance-Submission, Confidence in Oneself, Sociability, and Success in Selling for 70 Grocers

<u>Correlation</u> <u>Between</u>	On the basis of Rating of Pecuniary Strength as Criterion of <u>Success</u>	On the basis of Credit Rating as Criterion of <u>Success</u>
Neurotic Tendency and Success in Selling	-.08±.08	-.009±.08
Self- Sufficiency and Success in Selling15±.0814±.08
Introversion- Extroversion and Success in Selling	-.05±.08	-.01±.08
Dominance- Submission and Success in Selling16±.0814±.08
Confidence in Oneself and Success in Selling07±.08	-.02±.08
Sociability and Success in Selling	-.15±.08	-.10±.08

From a strictly statistical point of view, none of these coefficients of correlation has any significance. Our highest coefficient (between dominance-submission and success in selling) is only twice its probable error. To be of any value, a correlation should be at least four times its probable error. Psychologists like Donald Paterson (1) are very decided about this point, and would not tolerate any modification of present statistical ruling. There are other psychologists, however, who are no less sincere than Paterson, e.g., Allport and Vernon (2), but who in their investigations stress the significance of coefficients of correlation which are smaller than four times their probable error.

In view of such a state of indecision, it is difficult to be clear about the value of correlations which are not large, but which nevertheless show a positive or negative relationship between two variables, however small this relationship may be. The present investigator does not take sides with respect to this controversial subject, and therefore draws conclusions upon the correlations obtained which will do justice to both sides, but which at the same time must be regarded as only tentative, awaiting further investigations.

On the basis of a more liberal point of view with respect to the significance of the size of correlations, the following conclusions may be drawn: As a group successful grocers are fairly well balanced emotionally, quite self-sufficient, slightly extrovert, somewhat dominant, self-confident, and non-sociable. On the whole, it seems that successful grocers as a

1. Paterson, D. G., op. cit.

2. Allport, G. W., and Vernon, P. E., *Studies in Expressive Movement*, The Macmillan Co., New York, 1933.

group rate very much average on the Bernreuter and Flanagan personality traits.

There is, of course, always the possibility that the personality traits measured by the Bernreuter Personality Inventory, may have been chosen by fiat as suggested by Lorge (1), and not really represent the personality tendencies generally understood under those traits. Link (2), and Dodge (3) think that the question raised by Lorge is not merely a theoretical one, and that it needs investigation. If this charge is true of the Bernreuter Inventory, there may be a significant relationship between personality as measured by the Bernreuter test and success in selling groceries, in spite of the fact that from a strictly statistical point of view such a relationship is not indicated by any of the six Bernreuter and Flanagan scores.

In order to test this possibility, the investigator analyzed the personality inventories of the best and the poorest groups of grocers, item by item. He found that of the 125 items in the Bernreuter Personality Inventory, 29 called forth a response from the best group of grocers that differed from the prevailing responses given by the poorest group of grocers. (4) Following Dodge (5), a scoring scale was devised in accordance with which a score of 1 was given for every response to

1. Lorge, I., op. cit.

2. Link, H. C., op. cit.

3. Dodge, A. F., op. cit.

4. A 20% difference between the number of responses of the best group of grocers and the poorest group was considered the lowest difference in percentage indicating a reliable tendency for the better salesmen to react differently to items from the poorer salesmen.

5. Dodge, A. F., op. cit.

an item which agreed with the predominant response given to the item by the best group of grocers. The results obtained from the use of this new scoring system are shown in table XVI.

Table XVI

Personality Scores as Measured by an Experimental Scoring Method

<u>Best Salesmen</u>	<u>Poorest Salesmen</u>
24	19
23	19
23	18
23	18
23	17
21	17
20	17
20	17
19	16
19	16
17	16
-	15
-	15
-	15
-	15
-	14
-	13
-	13
-	12
-	12
-	11
-	10
-	10
-	8
-	7
-	6

Since the personality inventories of the best group of grocers were used to construct our experimental scoring scale, a fairly high correlation between these scores and selling success is to be expected. (1) The scores for the best salesmen, as presented in table XVI, range from 24 to 17; while the scores for the poorest salesmen range from 19

1. The correlation proved to be .79±.04.

to 6. (1) A small degree of overlapping is indicated, but this is not sufficiently large to disturb the fundamental difference between the two series of scores.

To check the reliability of the apparent relationship between these new scores and sales success, the personality inventories of the subjects not included in the best and poorest groups of grocers, were subjected to our new scoring method. Table XVll shows the personality scores obtained by the use of this scoring method for above average, average, and below average grocers. The success status of the grocers belonging to the third group, after the best salesmen and poorest salesmen had been eliminated, was based on rating of pecuniary strength. The use of this criterion of success made it very easy to divide the third group of our subjects into average, above, and below average salespersons.

Table XVll

Personality Scores as Measured by an Experimental Scoring Method

<u>Above Average Salesmen</u>	<u>Average Salesmen</u>	<u>Below Average Salesmen</u>
24	22	22
24	20	18
19	19	17
18	18	17
15	18	17
15	17	16
13	16	14
12	13	12
-	13	9
-	12	-
-	12	-
-	11	-
-	10	-
-	9	-
-	8	-

1. There was one exception to this range. One of the personality inventories from the poorest group of grocers re-

Table XVll indicates a slight difference in scores between the three groups of salespeople, but the overlapping is too extensive to indicate a significant relationship between these personality scores and success in selling. This fact is further substantiated by the correlation obtained between the scores in table XVll and success in selling, which was only $.19 \pm .11$. (1)

The 29 items from the Bernreuter Personality Inventory which proved to be slightly indicative of a relation between personality scores and success in selling, were next grouped with respect to the personality traits which they most nearly represented. In every case the items supporting a given trait were arranged in a table, and are found in tables XVlll to XXV. The number which the items get in the Bernreuter Inventory are listed in an ascending order; the favored response made to these items by the best group of salespersons (i.e., "yes" or "no") is shown; and the personality scores made by the five different groups of subjects on the basis of our experimental scoring system, are presented in terms of the per cent of the group giving the favored response. In order to abstain from continually repeating what the items indicative of a given personality tendency are, they are listed below the table to which they belong.

gistered a score of 26. Since this score would have distorted unduly the relationship between the two series of scores, it was thought best to leave it out.

1. All coefficients of correlation obtained by the investigator were computed on the basis of rank. Since this method is made use of by Dodge in a similar study to ours (see elsewhere for Dodge, A. F.), it was considered sufficiently accurate for this study.

Table XVlll

Extent to which the Better Grocers are less Moody, less subject to Worry, and Better Balanced Emotionally than are the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
10	No	63	100	73	88	88
49	No	72	62	46	66	37
71	No	63	25	20	44	33
73	No	72	62	66	66	40
115	No	54	75	60	77	74

10. Are you easily discouraged when opinions differ from your own?

49. Do you often experience periods of loneliness?

71. Do you experience many pleasant or unpleasant moods?

73. Does some particularly useless thought keep coming into your mind to bother you?

115. Are you often in a state of excitement?

Table XLX

Extent to which the Better Grocers are more Self-Sufficient and more Self-Confident than are the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
22	No	63	62	40	66	37
69	No	72	50	46	22	44
89	No	45	37	26	22	14
93	No	81	50	80	88	52
112	Yes	81	62	60	33	52

22. Are you slow in making decisions?

69. Do you often find that you cannot make up your mind until the time for action has passed?

89. Do you like to get many views from others before making an important decision?

93. Do you have difficulty in making up your mind for yourself?

112. Do you prefer making hurried decisions alone?

Table XX

Extent to which the Better Grocers are more Aggressive than the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
15	Yes	81	75	46	44	55
95	Yes	63	75	73	88	88

15. Do you usually object when a person steps in front of you in a line of people?

95. Would you 'have it out' with a person who spread untrue rumors about you?

Table XXI

Extent to which the Better Grocers are more Sociable than the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
28	No	90	50	73	66	70
35	Yes	81	37	53	44	52
44	No	90	87	46	55	59
59	No	54	25	13	11	22
83	No	54	50	26	55	14
118	No	72	75	46	55	40

28. Are you very talkative at social gatherings?

35. Would you dislike any work which might take you into isolation for a few years, such as forest ranging, etc.?

44. Have books been more entertaining to you than companions?

59. Do you find it difficult to speak in public?

83. Does your ambition need occasional stimulation through contact with successful people?

118. Do you keep in the background at social gatherings?

Table XX11

Extent to which the Better Grocers are less Self-Conscious than the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
12	No	90	75	46	77	66
42	No	72	62	26	22	50

12. Do you blush very often?

42. Do you get stage fright?

Table XX111

Extent to which the Better Grocers are more desirous of telling others about their good or bad fortune than are the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
53	Yes	72	75	53	66	52
100	No	54	12	20	22	14

53. Do you find that telling others of your own personal good news is the greatest part of the enjoyment of it?

100. Do you prefer to be alone at times of emotional stress?

Table XX1V

Extent to which the Better Grocers are more desirous of associating with younger people than are the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
7	Yes	63	50	40	44	25

7. Do you prefer to associate with people who are younger than yourself?

Table XXV

Extent to which the Better Grocers are more sought after for advice than are the Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
67	Yes	100	87	86	55	77

67. Do people ever come to you for advice?

Table XXVI

Questions the Responses to which did not sufficiently Differentiate between the Better and Poorer Grocers

<u>Item Number</u>	<u>Favored Response</u>	<u>Per cent of Group giving favored Response</u>				
		<u>Best Group</u>	<u>Above Average Group</u>	<u>Average Group</u>	<u>Below Average Group</u>	<u>Poorest Group</u>
13	No	90	50	73	44	59
17	No	90	62	53	77	55
18	Yes	63	37	60	33	40
109	No	63	75	20	33	40
111	No	54	100	66	100	74

13. Do athletics interest you more than intellectual affairs?

17. Are you much affected by the praise or blame of many people?

18. Are you touchy on various subjects?

109. Do you get as many ideas at the time of reading a book as you do from a discussion of it afterward?

111. Have you been the recognized leader (president, captain, chairman) of a group within the last five years?

On the basis of item analysis then we find that in comparison with the less successful men, the successful grocers are:

1. Less moody, less subject to worry, and better balanced emotionally;
2. More self-sufficient and more self-confident;
3. More aggressive or dominant;
4. More sociable;
5. Less self-conscious;
6. More desirous of telling others about their good or bad fortune;
7. More desirous of associating with younger people;
8. And more sought after for advice.

However, since these conclusions are based on a correlation of only $.19 \pm .11$, between personality and success in selling, nothing more than the indication of a tendency may be attributed to them.

Chapter 6

Discussion

The intimations of Lorge (1) and Link (2), to the effect that specific vocational or occupational personalities exist, are not borne out by our investigation of the relationship between certain personality traits and success in selling. On the contrary, the successful grocer appears to be a person with a normal, average personality. There are, of course, individual cases which veer off to one or the other of the extreme ends of the personality trait scales. Thus we find, for example, that some successful grocers are decided introverts, while others are decided extroverts. But on the whole, successful grocers as a group may be characterized as average individuals with respect to their personality inventories.

While very little relationship exists between success in selling and one or the other of the dichotomies into which personality tendencies are classified, there does exist a relationship between success in selling and the middle regions of personality dichotomies. Thus, for example, while the personality scores of successful grocers do not correlate highly with either introversion or extroversion, they show a very high relationship with ambiversion, as indicated by our results. It is this discovery of a relation between success in selling and the middle region of the personality tendencies dealt with in the Bernreuter Personality Inventory, that furnishes the positive finding of this study.

With respect to neurotic tendency, we find that Stead (3),

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1. Lorge, I., op. cit.
 2. Link, H. G., op. cit.
 3. Stead, W. H., op. cit.

Husband (1), and Dodge (2), reporting investigations undertaken with department store clerks, come to the conclusion that successful clerks are much better balanced emotionally than are the less successful ones. To what extent this is true is not indicated by either Stead or Husband. Stead supplies only a multiple correlation of .32 for a number of personality traits and success in selling. Even if this correlation had been obtained between neurotic tendency and success in selling, it would still be regarded as far from significant by any one adhering to a strict statistical interpretation of the value of low coefficients of correlation. Moreover, since Stead does not report any probable errors, it is questionable whether his readers will grant as much significance to his findings as he does himself.

Husband gives no correlations at all. He bases his conclusions on differences of scores obtained respectively by good salesclerks and poor salesclerks. In the case of neurotic tendency, this difference amounts to only 20 points. True, this difference probably indicates a tendency for successful clerks to be better balanced emotionally than are less successful clerks, but it is doubtful whether the tendency is statistically significant.

Dodge finds a positive relation between emotional stability and success in selling on the basis of item analysis. His correlation between personality scores obtained on the basis of an experimental scoring system (3) and success in selling came to $.60 \pm .09$ for men and $.36 \pm .14$ for women. By an improvement of

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1. Husband, R. W., op. cit.
 2. Dodge, A. F., op. cit.
 3. Ibid.

this scoring technique Dodge managed to raise the correlation to $.71 \pm .07$ for men and $.39 \pm .14$ for women. These correlations are significant, but one wonders whether the new scoring system, based on the scores of the successful clerks, is not the real reason for the high correlations. Dodge's experimental scoring method needs further corroboration by other experimenters to put it on a reliable footing. In any event, when this investigator used Dodge's item analysis technique with grocers, he obtained a correlation of only $.19 \pm .11$ between the experimental personality scores of grocers and success in selling.

When we consider the coefficients of correlation between the personality scores of grocers and their success ratings with respect to neurotic tendency, we must conclude that successful grocers are not better balanced emotionally than are unsuccessful grocers. To be sure, there is a small tendency in the direction of emotional stability, but this tendency is so small that for practical purposes it might as well be regarded as nonexistent. The correlations obtained for neurotic tendency by the investigator on the basis of two independent criteria of success were $-.08 \pm .08$ and $-.009 \pm .08$; the median scores for successful and unsuccessful grocers, respectively, were -103 and -21, and -43.5 and -30.5. 72% of the male salespersons and 50% of the female salespersons registered scores on the emotional stability side of the scale; while only 27.6% of the male salespersons, and 50% of the female salespersons registered scores on the emotional instability side of the scale. This tendency was also supported by the item analysis of the personality inventories of successful and less successful grocers.

But the point remains that, in spite of such a consistent indication of the presence of a positive relation between success in selling and emotional stability, the relation is so small that it really has no meaning. Consequently, we must conclude that the successful grocer is as well balanced emotionally as the average person. It would seem then that the Bernreuter Personality test has a prognostic value. As far as grocers are concerned, and as far as degree of neurotic tendency is a factor in success, the Bernreuter test may be used to advantage as a vocational test for grocers in selecting those individuals whose neurotic percentiles range around 50.

According to Dodge (1) and Husband (2), the successful salesclerk is more self-sufficient and more self-confident than the unsuccessful salesclerk. Dodge comes to this conclusion on the basis of item analysis, discussed above; while Husband arrives at it by comparing the personality scores made by the best fifth, the best 40%, and the lowest fifth of his subjects. Our findings, while supporting this tendency, indicate again how insignificant the relation between self-confidence, self-sufficiency and success in selling really is. The correlations obtained by the investigator, on the basis of two criteria of success, are $.15 \pm .08$ and $.14 \pm .08$. Since these correlations are not even twice their probable errors, little weight can be attached to them. A comparison between self-sufficiency, self-confidence and success in selling, on the basis of differences in percentage, differences in median scores, and differences in percentage brought out by item analysis, while maintaining the consistency of a tendency for successful grocers to be more self-sufficient and more self-

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1. Dodge, A. F., op. cit.
 2. Husband, R. W., op. cit.

confident than relatively unsuccessful grocers, is no more significant than the correlations obtained. 65.5% of the men salespersons and 58.3% of the women salespersons fall on the self-sufficiency side of the scale. (1) The median scores for self-sufficiency on the basis of the two criteria are 27 and 27.5 for the above average salesmen, and 16 and 12.5 for the below average salespersons. On the basis of item analysis this tendency is also confirmed by 5 of the 29 items segregated from the 125 in the Bernreuter Personality Inventory, which seemed to differentiate between grocers on the basis of success ratings.

However, in spite of this apparent tendency for successful grocers to be more self-sufficient and more self-confident than less successful grocers, we must conclude as we did in the case of neurotic tendency, that the successful grocer is neither very self-sufficient nor completely lacking self-sufficiency, neither very confident in himself nor completely lacking in self-confidence. As a matter of fact, the successful grocer rates average with respect to self-sufficiency and self-confidence. That this should be the case is not surprising. While there are certain vocations and occupations in which possession of an extreme degree of a certain personality trait seems to be indicative of success (e.g., successful professors are often regarded as introverts, and successful administrators as extroverts) by far the largest number of vocations demand an average personality. The social environment of any one person, regardless of what his occupation may be, is so varied that at times it demands the exhibition of, for example, a considerable degree of domi-

1. It should be kept in mind that our first comparison in

nance, while at other times it calls for submission. It is no wonder, therefore, that in an occupation such as retailing, where the retailer meets almost every type of person, a moderate degree of dominance and submission would be most effective in success in selling. There are buyers who need to be directed (the investigator has witnessed many a sales situation in which the grocer had to make decisions for the customer); but there are others who know what they want, and a certain degree of submission on the part of the storekeeper gets the best results. Since the successful grocer rates average on all of the personality traits considered in this study, he is given the ability to fluctuate between the two extremes of the traits, and by keeping a happy mean, insures success for himself and satisfaction to his customer.

The logician cannot object to our generalization that, since the personality scores of successful grocers neither correlate highly with one or the other of the two dichotomies of the personality traits considered and success in selling, the success ratings of our grocers must show a positive relation with the "mean" personality tendencies, i.e., the personality scores clustering about the average. On the basis of a quantitative or scalar definition of personality traits, our conclusion would be the only alternative that could be taken. (1)

terms of percentages was not made on the basis of success ratings, but was merely a comparison of the per cent of subjects falling on the positive or negative side of a given personality trait scale.

1. The investigator has the assurance of Professor R. C. Lodge that this conclusion is logically valid. The argument is as follows: All successful grocers have a certain degree of the personality tendencies considered in this study. Since by experimental proof successful grocers are neither introverts, for example, nor extroverts, they must fall somewhere along the

Until lately there has been an almost unanimous agreement among laymen and psychologists alike, that extroversion and success in selling are highly correlated. The 1920's saw the highest development of this attitude. Aggression was regarded as the keynote of successful selling. The depression has seen to some extent a reversal of this attitude. When money no longer circulated so freely as during the 1920's, and the buying power of a large percentage of the population was drastically reduced, the high pressure salesman found himself unpopular. It was realized by business firms that a steady market for a product entails more than highpowered salesmanship, that in many cases restraint is the better course to follow, and that introversion also has its place in effective salesmanship.

This keynote was especially sounded by the discoveries of Anderson (1). In an investigation with department store clerks at Macy's in New York, Anderson found that while the low-cost salesclerks were to a certain extent extroverted, the high-cost salesclerks were to a certain extent introverted. This seemed a startling discovery, but looking at Anderson's findings from a logical point of view, there does not seem to be much strangeness in them. The sale of low-cost articles is usually based on the psychological principle of suggestion, and suggestion has to be initiated either by the written or the spoken word. Advertising, of course, takes care of much of this suggestion, but a certain degree of it is left to the sales-

the middle of the personality scale; and since ambiversion denotes average in the case of the introversion-extroversion trait, successful grocers must be ambivert.

1. Anderson, V. V., op. cit.

man. The prospective customer has to be shown the wares for sale, and urged to buy, very often on a moment's notice. Consequently, the extroverted person, provided he is not too aggressive and shows a certain amount of tact, manages much better than the introverted person in stimulating the customer in favor of an article, usually leading to an eventual sale.

High-cost articles, on the other hand, are not bought on the spur of the moment and suggestion is of little use in effecting a sale. In this case a logical presentation of the reasons why the prospective buyer should buy an article must be presented. And this the introvert can do better than the extrovert, because the former deals more with ideas than the latter, with the result that he is a more successful salesman when it comes to selling high-cost articles, than is the extrovert. It would seem from the findings of Anderson that, in the case of a salesperson who sells high-cost and low-cost articles, ambiversion would be the ideal personality tendency for the salesman to possess.

As far as grocers are concerned, Anderson's findings do not apply, for grocers sell mostly low-cost articles. According to Anderson's findings, grocers should be fairly extrovert. Our findings, however, show that while grocers do show a leaning towards extroversion, this leaning is not sufficiently pronounced to be of much account. Our correlations for introversion-extroversion and success in selling came to only $-.05 \pm .08$ and $-.01 \pm .08$. The median scores for above average and below average grocers, and the differences in percentage of responses made by the best and the poorest grocers to items 15 and 95 of the Bernreuter Personality Inventory, also support this

endency. The median scores for the above average group were -52 and -31, and for the below average group -12 and -21.5; the differences in percentage of responses made by the best group and the poorest group of grocers to items 15 and 95 were 26 and 25, respectively. These results indicate that successful grocers are neither introvert nor extrovert, but ambivert.

Anderson's findings have not as yet been paralleled by findings of a similar nature. The studies reviewed in chapter two of this investigation, those reported by Dodge (1), Husband (2), Ream (3), Schultz (4), and Lovett (5), all support the contention that extroversion and success in selling are highly correlated. Since, however, few correlations are given, and conclusions are often drawn on the basis of group comparisons, the degree of this relationship between success in selling and extroversion is not determined. Then too, the studies referred to above were made with department store clerks or insurance salesmen, types of selling which undoubtedly do require more of the extrovert attitude than is essential for the grocery business. On the whole, there are as yet too few quantitative studies on the relationship between success in the various types of selling and extroversion to warrant a final conclusion.

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1. Dodge, A. F., op. cit.
 2. Husband, R. W., op. cit.
 3. Ream, J. M., op. cit.
 4. Schultz, R. S., op. cit.
 5. Lovett, R. F., op. cit.

The extent to which dominance contributes to sales success seems to depend largely upon the type of selling under consideration. Dodge (1), for instance, found that successful traveling salesmen are more dominant than successful department store salespersons. The median score for the traveling salesmen in Dodge's investigation proved to be 70; while the median score for department store salespersons came to 56 for the men and 45 for the women. In his second study (2), Dodge obtained a correlation of $.16 \pm .16$ for men, and $.31 \pm .15$ for women salesclerks between the personality scores procured on the Bernreuter Personality Inventory and success in selling. Regarding this as a negligible relationship between dominance and sales success, Dodge proceeded to analyze the personality inventories of his subjects item by item, with the result that he managed to segregate a number of items which seemed to differentiate the successful from the unsuccessful salesclerks on the basis of the amount of dominance possessed by them. However, the difference in the per cent of responses to items indicative of dominance was not large enough to warrant the use of high ratings in dominance for purposes of predicting success in selling, and Dodge cautions against placing more weight upon these findings than would be statistically permissible.

Schultz (3) and Lovett (4) also report finding a positive relation between dominance and success in selling. This finding is supported by Anderson's (5) results in a study with de-

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1. Dodge, A. F., op. cit.
 2. Ibid.
 3. Schultz, R. S., op. cit.
 4. Lovett, R. F., op. cit.
 5. Anderson, V. V., op. cit.

partment store clerks at Macy's. It is only the successful low-cost salespersons, however, who show an appreciable amount of dominance. Thus, while 66% of the low-cost group of successful salespersons are dominant, only 45% of the high-cost group of successful salespersons show the same tendency. With high-cost salespersons there is, therefore, a slight leaning towards submission; not enough of a leaning, however, to characterize successful high-cost salespersons as submissive. It is much more to the point to regard successful high-cost salespersons as average in their ratings of dominance-submission.

Our own correlations between dominance and success in selling came to $.16 \pm .08$ and $.14 \pm .08$. Since, however, even the highest of these two coefficients of correlation is only twice its probable error, they cannot be taken seriously. The median scores for the above average group of grocers proved to be 45 and 37, and for the below average group 36 and 18.5. The difference in per cent of favored responses given to items 15 and 95 (these two items seemed to distinguish between successful and unsuccessful grocers on the basis of the amount of dominance exhibited) by the best group of grocers and the poorest group of grocers were found to be 26 and 25, respectively.

The conclusion on the basis of these findings, with respect to the relationship between dominance and success in selling, must again be largely negative. While there is a tendency for successful grocers to "dominate others in face-to-face relationships", it is only a tendency and has to be regarded as such. It is much more fruitful to regard successful grocers as average in their ratings of dominance-submission. There are occasions

when the successful grocer dominates others in a situation of social interaction. He becomes their "leader" and, in a sense, rules over them. A subtle suggestion concerning the purchase of an article by a customer often exhibits the storekeeper's power over his customer, with the result that the latter is, in a manner of speaking, mesmerized into purchasing the article.

On other occasions the successful grocer exhibits submission in the sales situation. There is an interchange of ideas between the storekeeper and his customers, but it is the latter who dominate the situation. There are customers who are desirous of purchasing certain definite articles in a store, and no amount of suggestion will change their mind. The storekeeper soon realizes that the best policy to follow with such people is to be submissive, to gratify their wishes and let them dominate the sales situation. A customer who will not return to a store run by a man who is consistently dominant, will become a steady customer of a storekeeper who has sufficient prudence to know when to be dominant and when to be submissive.

Does the successful grocer have confidence in himself? Yes, according to our results he has, but not any more than the average person. Our correlations between confidence in oneself and success in selling came to $.07 \pm .08$ and $-.02 \pm .08$. The median scores for the above average group of grocers amounted to -62 and 1.5 , and for the below average group of grocers 7 and -14.5 . The difference in the per cent of favored responses to items 12 and 42, which seem to distinguish between the two groups of grocers on the basis of self-confidence, proved to be 24 for item 12, and 22 for item 42.

These findings favor a moderate view in respect to the relationship existing between confidence in oneself and success in selling. Successful grocers are slightly self-confident, and to that extent less self-conscious. But such a conclusion does not do justice to the issue. Looking at this problem from a common sense point of view, we must realize that confidence in oneself is born of achievement. This achievement need not be an all around achievement in different fields of endeavour, as has been shown by Gardner Murphy. (1) The achievement may be restricted to a single field or even to a sub-field of a larger unit of activity. The confidence in oneself that comes from doing a job better than it can be done by many others, enhances the growth of ego-status and causes the spread of this self-confidence to other fields in which our efforts are mediocre. On occasions, however, this self-confidence is not strong enough to prevent us from exhibiting a certain degree of self-consciousness when we have to perform in situations which are not sufficiently familiar to us and ⁱⁿ which we feel ill at ease.

Successful grocers, although slightly on the self-confidence side of the scale, must be regarded as average in this tendency. The successful grocer gets a pecuniary rating of anywhere from \$3,000 to 10,000. In comparison with large scale business, the successful grocer's achievement is not powerful enough or sufficiently far-reaching to provide him with the self-confidence and self-assurance that is frequently exhibited by the big business man. Consequently, while a grocer may be quite

1. Murphy, G., Murphy, L. B., and Newcomb, T. M., Experimental Social Psychology, Harper and Brothers, New York, 1937.

successful in a limited way, his success will lead to only a moderate degree of self-confidence. There are many situations, which being strange to the successful grocer, will evoke feelings of self-consciousness, because his achievement in the grocery business can never be big enough to overcome and master the situations that foster self-consciousness. In view of these limitations, imposed upon the successful grocer by the type of his business, it is not surprising that he should rate average in self-confidence.

Dodge (1) and Husband (2) found a positive relation between self-confidence and success in selling. Both investigators agree, however, that this relationship is small. Dodge obtained a correlation between these two factors which proved far short of having statistical significance. By means of item analysis, Dodge managed to raise this relationship somewhat, but not sufficiently to justify, without reservation, the conclusion that successful salespersons are decidedly self-confident. Husband substantiates Dodge's findings, and concludes that successful salesclerks may be characterized as self-confident. But the relationship, although present, is too small to warrant far-reaching conclusions. Husband is aware of this fact and does not stress his conclusions unduly.

A rather unusual finding of this study is that successful grocers are slightly non-sociable. It has long been regarded as an established fact that successful salespersons of any type rank high in sociability. It has been taken for granted that

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1. Dodge, A. F. op.cit.
 2. Husband, R. W., op. cit.

effective salesmanship is based to a certain extent on the ability to get along well with people, and talk freely and fluently. Perhaps this conception of salesmanship is too narrow and does not apply to all types of selling. It certainly does not seem to apply as far as the grocery business is concerned. The fact that the small grocer is more independent than many other types of salespersons, may have something to do with the tendency for the successful grocer to be somewhat non-sociable. Since he is the proprietor of his own business, and is thus his own boss; and since he is both buyer and seller, the successful grocer may feel, unconsciously of course, that he need not be as concerned about his customers as the department store clerk has to be. And if there is not a pressing need to be sociable, the successful grocer may neglect to cultivate this personality tendency, with the result that he rates non-sociable.

Another factor that probably has something to do with the comparative non-sociability of the successful grocer is that many grocers, and among them successful ones, engage in the grocery business at a fairly late time in life. Our mean age for grocers was 40 years, with quite a number of grocers ranging in the fifties and sixties. It was found that the best group of grocers have a median age higher than the median age of the whole group of grocers irrespective of their success ratings; while the poorest group of grocers have a median age below that of the whole group. The grocery business is looked upon as a comparatively easy way of making a living. It is sometimes a means of escape from the vicissitudes of a job, which a man cannot endure simply because he is inclined to be unsociable and wishes to be on his own.

The correlations between sociability and success in sel-

ling obtained by the investigator came to $-.15 \pm .08$ and $-.10 \pm .08$. The median scores for the above average group of grocers were -9 and -9.5, and for the below average group of grocers -25 and -28.5. The differences in per cent of the favored response to items 28, 35, 44, 59, 83, and 118, which seemed to distinguish the successful from the unsuccessful grocers on the basis of amount of sociability exhibited, made by the best and the poorest groups of grocers were 20, 29, 31, 40, and 32, respectively.

These findings seem to contradict each other. On the basis of the correlation procedure we get a negative relation between sociability and success in selling; while on the basis of group comparisons, as indicated by the median scores of above average and below average grocers, and the differences in per cent of favored response to items 28, 44, 59, and 118, made by the best and the poorest groups of grocers, we obtain a positive relation between sociability and success in selling. The differences in per cent of favored response to items 35 and 83 are in agreement with the conclusions based on the correlations. Since correlations are more reliable than group comparisons, the negative relation between sociability and success in selling must be stressed. But even this relation is, of course, too small to make our finding, namely, that successful grocers are somewhat non-sociable, disturbing. The truth of the matter is that successful grocers are in all likelihood average with respect to sociability, as they have proven to be with respect to every other personality trait measured by the Bernreuter Inventory.

Our item analysis brought out a few other personality tendencies that seem slightly to differentiate the successful

from the unsuccessful grocer. Thus it was found that the successful grocer is more desirous of telling others about his good or bad fortune, than is the poorer grocer. The successful grocer likes to share his joys and his sorrows with others. He also desires much more than the unsuccessful grocer to associate with younger people. This would stamp the successful grocer as a person with a more liberal outlook on life than the unsuccessful grocer shows. The latter is conservative in outlook and ideas, and does not welcome constructive criticism, as does the successful grocer. More people come to the successful grocer for advice than to the unsuccessful grocer.

The successful grocer does not do much day-dreaming. Although not free with his money, he does not as a rule turn down a man who asks him for the price of a meal. If he ever gets lost, he is not very perturbed, and on occasions thinks it fun to find his way in places that are strange, and streets that are unfamiliar to him. Neither is the successful grocer a nervous person. He is far from being temperamental, and is rarely grouchy. He is seldom tempted to bluff his way past a doorman. "Live and let live", is his motto. The doorman is expected to do his job well, so why hinder him in the attempt. Finally, the interests of the successful grocer do not change rapidly. They are fairly well set, and if any change takes place, it is likely to be only in degree.

Chapter 7

Summary and Conclusions

The present study was undertaken to investigate the relationship between certain personality traits and success in retail selling. More specifically, the study is a comparative investigation of the relationship between neurotic tendency, self-sufficiency, introversion-extroversion, dominance-submission, confidence in oneself, sociability, and success in the grocery business.

Discarding such methods of personality measurement as the interview and the letter of introduction, because of their unreliability, the investigator chose the personality inventory as the method to be used in this study. Of the personality tests available, the Bernreuter Personality Inventory seemed to be the best suited for the purpose and so was adopted.

The grocers were chosen as subjects, because they seem to be the only type of salespersons not as yet used as subjects in the study of the relationship between personality traits and success in selling. Most of the studies made of this problem have employed insurance salesmen and department store salesclerks as subjects. This has been unfortunate, for it is generally acceded that different types of selling demand different degrees of a personality trait for success.

The results of our study proved anything but startling. While the general findings of previous investigators were in some instances supported by our findings, this support was not sufficiently strong to permit the adoption of far-reaching conclusions. Four ways of dealing with the results were used.

First, the per cent of our subjects falling between the 50th and 100th percentile of the personality scales for neurotic tendency, self-sufficiency, dominance-submission, introversion-extroversion, confidence in oneself, and sociability were compared with the per cent of our subjects falling between the 1st and the 50th percentile of these scales. The percentages are given in table XXVII.

Table XXVII

Per cent of Subjects Falling Between the 50th and 100th and the 1st and 50th Percentile on the Bernreuter and Flanagan Personality Traits

Percentiles	<u>N1-B</u>		<u>N2-S</u>		<u>N3-I</u>		<u>N4-D</u>		<u>F1-C</u>		<u>F2-S</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
50-100	72.4	50	65.5	58.3	70.6	50	70.6	66.6	55.1	66.6	70.6	58.3
1-50	27.6	50	34.5	41.7	29.4	50	29.4	33.4	44.9	33.4	29.4	41.7

On the basis of these percentages the following conclusions were drawn: Irrespective of success in selling, grocers as a group are well balanced emotionally, quite self-sufficient, extrovert, dominant, not particularly self-conscious, and somewhat sociable.

Second, the median scores obtained for each one of the personality traits measured by the Bernreuter Personality Inventory, for grocers rating (1) very successful, successful, fairly successful, unsuccessful, and (2) above average, and below average in success, were compared. These median scores are presented in tables IX to XIV.

The conclusions drawn on the basis of these scores follow: As a group successful grocers are fairly well balanced

emotionally, somewhat self-sufficient, slightly extrovert, fairly dominant, not very self-conscious, and not very sociable.

Third, the scores obtained by the subjects on the Bernreuter Personality Inventory were correlated with success in selling. The coefficients of correlation with their probable errors are given in table XV. None of these correlations has statistical significance. The largest of them, that between dominance and success in selling, is only twice its probable error, whereas to be of any significance it should be at least four times as large as its probable error.

Nevertheless, on the basis of these correlations tendencies may be discerned; and on the basis of these tendencies the following conclusions may be suggested: As a group successful grocers are fairly well balanced emotionally, quite self-sufficient, slightly extrovert, somewhat dominant, self-confident, and non-sociable.

Fourth, the personality inventories of our subjects were analyzed item by item with a view to selecting those items, the responses to which might indicate a difference in personality tendencies between the best group of grocers and the poorest group of grocers. 29 such items were found. Next a rough scoring system was devised in accordance with which a score of 1 was given for every response that was in agreement with the favored response given by the best group of grocers. Since this scoring system was based on the best group of grocers, this group as well as the group of poorest grocers, could not be used for a final correlation between the personality scores obtained on the 29 differentiating items and success in selling.

Consequently, the remaining group of grocers was divided into above average, average, and below average in success, and used as a control group to test whether there is a significant relationship between certain of the personality items in the Bernreuter Personality Inventory and success in selling. The correlation between personality scores obtained by the control group of grocers on the basis of our experimental scoring system, and success in selling came to $.19 \pm .11$.

The 29 differentiating personality items were finally grouped under those personality tendencies which they most nearly seemed to indicate. On the basis of this grouping, the successful grocers were provisionally characterized as being less moody, less subject to worry, and better balanced emotionally; more self-sufficient and more self-confident; more aggressive or dominant; more sociable; less self-conscious; more desirous of telling others about their good or bad fortune; more desirous of associating with younger people; and more sought after for advice than the poorer grocers.

Since no high correlations between any of the personality traits considered in this study and success in selling were obtained by the investigator, there is the danger that our results may be regarded as rather insignificant, because they point to a repeated conclusion that the successful grocer is, after all, only a person with an average personality; and since most people cluster about the average, and extremes are exceptions rather than the rule, our findings may inadvertently be regarded as having little to offer in the way of a positive contribution to the psychology of vocational guidance and selection.

To take such an attitude would be unscientific. It is a standard fact that the average person is the one who succeeds most fully and most completely in adapting himself to the strenuous demands of western civilization. There are so many paradoxes present in our way of life that it sometimes seems difficult to see how we manage to carry on. On the one hand, we are to be aggressive, on the other, submissive; on the one hand co-operative, on the other, competitive; on the one hand, we are to hate, on the other, to love our fellow beings.

In view of this state of affairs, it becomes evident that the average person will best succeed in most of the undertakings characteristic of our way of life. To be able to be both aggressive and submissive, co-operative and competitive, all depending upon what the social situation at hand demands, is, therefore, an asset which must not be underestimated.

The successful grocer possesses this asset, and it, no doubt, is one of the factors that contributes to his success. Thus, such personality tests as the Bernreuter Personality Inventory may be used to advantage in vocational selection and guidance. The prospective grocer who, upon taking a personality test, finds himself falling anywhere near the 50th percentile of the six personality traits indicated, may assume (barring unfavorable ratings with respect to other causative factors of success in the grocery trade such as amount of money available for investment, and location of store), that he is likely to become a successful grocer.

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Appendix

Letter of Introduction

Dept. of Psychology,
University of Manitoba,
Winnipeg, Canada,
7th September, 1939

Dear Sir or Madam:

This letter introduces Mr. Peter Hampton, who is now studying for his Master's degree in Psychology at the University of Manitoba. Mr. Hampton's thesis, which has been approved by the University Department of Psychology, will be an attempt to discover the personality factors which lead to success in retail selling. In order to carry out this study it is necessary to give a personality test which brings out some of the information required. Any co-operation extended to Mr. Hampton in connection with the administration of this test will be of great assistance to him, and will be duly appreciated.

Very truly,

H. W. Wright

Professor of Psychology
University of Manitoba.