

NAMES OF CANDIDATE:-

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Title of Thesis:

The relationship between personality and social factors, and success as a sales representative, both of a petrol company and an animal food company.

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SUMMARY OF THE THESIS

An oil company's and an animal food company's salesmen were interviewed and tested. The interview was largely biographical, but particular emphasis was placed on collecting information on the involvement in leisure time activities of the subjects, as this was considered to be a good guide to the level of activity-passivity of our subjects. It was hypothesised that level of activity would bear a relationship to success in at least some types of selling. The subjects were given the Morrisby General Ability Test (verbal). The supervisors of the subjects provided ratings of their success as salesmen. The various items of data were correlated with the ratings to examine what personality factors and background factors tended to be related to success at the job.

It was found that the type of person who succeeded as a petrol representative showed, in general, a number of characteristics which differentiated him from a successful animal food salesman.

The successful petrol representative tended to be passive (and therefore, without much involvement in leisure time activities), and a product of the public schools. The successful animal food salesman tended to be active (although this was not a simple relationship), also from a public school but unlike the petrol salesman, interested in the general

field he worked in - in this case - agriculture. In both groups of subjects no relationship was found between rated success and verbal ability, age, length of experience, training, and experience of other selling jobs.

It was suggested that the data collected could be a valuable guide to the type of person the companies should be looking for if they were anxious to improve the standards of their sales force.

INTRODUCTION

The selector is making a prediction when he offers employment to an applicant. He is predicting that this applicant is a suitable person to succeed in the particular vacancy he is trying to fill (or possibly that he is the most suitable person available). There are three stages he has to go through in order to make this prediction: he has to decide what the job involves, what type of abilities are needed in order to do this job well, and whether each particular applicant has these relevant abilities.

Techniques for the collection of information on job descriptions have been developed by Flanagan (1954) (1), and Flanagan and Miller (1955), (2), Techniques for collecting information about applicants and assessing applicants' personalities have been developed by Rodger (1952), (3) and Munro-Fraser (1954). (4) We are concerned with the second of our selector's problems: the assessment of what type of abilities are needed to succeed at the job. We are concerned specifically with what type of person makes a successful salesman.

It is the purpose of this research to provide this information to a number of managers: to suggest to them what to look for when they interview applicants for certain specific selling jobs.

Many standard correlational studies have been conducted

(virtually all in America) in an effort to measure characteristics associated with selling effectiveness. Typically these studies have used ratings or rankings as criteria of selling effectiveness and various psychological test scores have been correlated with the ratings.

The present study differs from these in that it is not concerned with correlating ratings of success with psychological test results but with biographical data and personality ratings collected by non-psychometric means. This is largely because the majority of the previous studies have produced largely negative results, and partly because we set out with a hypothesis that could not be tested with data collected by a test or inventory. The hypothesis concerns the personality dimension of activity-passivity, and it is also the purpose of this exercise to look closely at this factor and examine its relevance to success in selling.

SURVEY OF THE RELEVANT LITERATURE

There has been little work reported on salesman personality and selection of salesmen which has been of any assistance to this survey. We have already stated that a number of studies have been conducted mostly in America whose objects have been similar to our own. However most of these studies have sought to find correlations between psychometric tools and ratings of sales ability and have, with very few exceptions, produced largely negative results. They have been characterised by an empirical orientation and an absence of theoretical developments from which we could derive ideas that could be tested.

The reason for this record of failures seems to be, as Kirchner (5) has pointed out, that implicit in many of the studies is the assumption that the same pattern of personal characteristics may be associated with top-notch selling, regardless of the product sold, kind of people called on, or other differentiating circumstances.

Kirchner with Dunette has (6) compared retail salesmen with industrial salesmen employed by a large company. He found them to be significantly different. Retail men only were found to be like the stereotype generally held about salesmen - the outward, dominant, persistent types who rejected "thinking" jobs. He concludes that his findings explain the disappointing results of attempts to identify

an absolute pattern of characteristics common to all selling jobs. However, he also affirms that "there will be a proportion of every salesman's job which he has in common with all other salesmen". This position is developed in an article in New Society by W. W. Daniel (7): "From this analysis there emerges a core of characteristics which it is suggested are common to all selling jobs. These include sociophilia, empathy, self-confidence and resilience, an appearance and manner acceptable to customers, and supportive personal circumstances." Daniel's conclusions on this subject are that "it all sound like a stereotype of a public-schoolboy: perhaps the new role of the public schools should be to produce not colonial administrators but export salesmen" (an interesting observation in view of our findings on the greater success of public-school products). Daniel argues therefore that there are qualities that all salesmen will need in order to succeed and in addition each different type^{of} selling will require further additional qualities. This theoretical position does not conflict with the general conclusions of this study, as long as acceptance of the position does not imply the acceptance of the list of the "constant" qualities that Daniel asserts.

Daniel's arguments are based to a considerable extent on the published works of the American consultants, Greenberg and Mayer (8), who assert that selling ability stems from two qualities - empathy and ego-drive. Greenberg

and Mayer put forward impressive facts and figures to support their case, but their reports in the literature have not contained details of methods or statistical treatment of results. It would appear that Greenberg and Mayer's main objects are to cash in wherever they can rather than add to our knowledge in this field. Greenberg and Mayer's impressive claims can be neither confirmed nor denied, but it is difficult to see how they could have been able to make the break-through these results suggest. Reviewers of Greenberg's work on personality in Buros (10) are far from complimentary on the general scientific expertise involved, and the work takes no account of the different qualities required for different types of selling. The authors claim that the tests are unfakeable. This seems unlikely as it has been shown that not only can people fake personality tests but also that in practice they do. Even if these tests have been scientifically validated in the U.S.A., they certainly have not been validated in the U.K.

On the other hand Greenberg and Mayer conducted an exercise with the salesmen employees of the distributors of a large car firm in the U.K. The recommendations of the consultants were compared with the ratings of the salesmen's supervisors. The predictions of the ratings were shown to be considerably better than chance. The methodology of this experiment can be criticised in a number of ways and because it was financed by the car company for its own use it is

most unlikely that the details will ever be published, but nevertheless it seems that despite all the objections listed, Greenberg and Mayer may be able to shed a considerable amount of light in the field of salesman personality. It is a pity that they do not appear to be willing to do so.

John B. Miner (11) looked at the characteristics of dealer salesmen employed by a major oil company. His subjects appear to be almost the same type of salesmen as our own (except that they were American) although his findings show few similarities to the results described below. He identified (predictably according to Daniel) "sociophilia" - a predisposition to seek the company of other people which, taken to extremes, can become a real need for the company of other people, and a fear of being alone. Associated with this is a need for emotional dependance and a need for attention, approval, acceptance and encouragement. It is because of this, according to Miner, that a person develops a strong sense of empathy.

The present investigation is a development of the work of G. W. Howells, (12).

Howells' work is outlined in a paper, "A Scientific Approach to Job Specification" (1964). He summarises his procedures as follows:- "If a suitable basis for a performance (rating) can be established, and if differences in personal characteristics can be identified, it is a relatively straightforward task to determine whether the

differences in personal characteristics as compared with differences in performance, are statistically significant."

Howells collected data on a number of delivery salesmen (83). Assessment of personality characteristics was based on information of a biographical nature collected by trained interviewers. Criteria of effectiveness were based on ratings by managers, after they had been suitably briefed on the dangers of subjective ratings. Howells also administered Morrisby's General Ability Test (verbal).

Howells found that assessment by interviewers of appearance, speech, manner, education, job experience, and emotional experience did not differentiate the successful and non-successful delivery salesman.

However, general ability (verbal) and activity-passivity (see discussion of this concept below) did differentiate. Howells concluded that there will be an optimum ability range associated with a given type of selling, and that more active salesmen are more successful than more passive salesmen.

The present investigation is commissioned by an industrial organisation and is an extension of Howells' work. Using his methods of verbal ability test and biographical interview we have collected data on a further 118 salesmen representing two different companies: 86 petrol salesmen, and 32 animal food salesmen.

A survey of literature on the personality dimension of activity-passivity is included in the section on activity-passivity.

PROBLEMS AND METHOD OF COLLECTING THE DATA

Considerable thought was put into the problem of how to assess the personality of our subjects. We finally decided to use the biographical interview technique (as did Howells) for the following reasons:-

(1) This is a practically orientated study; to a large extent for the benefit of men whose job it is to select. It was considered highly desirable, therefore, to collect data by a method which they themselves were able and prepared to use. The personality dimensions which we had found to be significant could then be discovered by these managers in a practical selection situation. This would obviously eliminate projection tests and similar instruments, but also many of the personnel managers we have dealt with were either unwilling or unable to use even the more straightforward tests and questionnaires which are available.

(2) It has been demonstrated that the interview, in certain circumstances, is a valuable method of collecting data.

Eysenck's (13) review of the research undertaken into the reliability and validity of the interview in even the specialists' hands leaves us in no doubt as to his opinion of the inability of most managers to predict the future performance of their applicants.

Vernon and Parry (14) report that investigations of the employment interview described by Hollingworth (1929), (15)

Hartog and Rhodes (1935), (16) and others suggest that there is so much divergence between the views of different interviewers of the same candidates that the technique is practically worthless. However, several investigations have shown that if interviewers are agreed on what they are attempting to assess they may show a considerable amount of agreement (Newman, Bobbitt and Cameron 1946) (17) (Fearing 1942) (18). Different interviewers can, therefore, agree to what extent a candidate is intelligent, sociable, independent, well-educated, etc., but they cannot agree whether he will make a good salesman, or lorry driver, or psychologist.

If these interviewers are given detailed information concerning which personality traits are important in order to succeed in a particular job they can assess whether a candidate possesses these traits fairly reliably. (This does not mean that their assessments are going to be valid: but validity is impossible without reliability). Vernon and Parry (14) conclude: "This suggests that psychologically trained interviewers who have reached a clear and agreed conception of what they are looking for can achieve very satisfactory reliability".

(3) There is considerable evidence that self-reporting tests and questionnaires are of doubtful value in many situations. To survey the results of studies with objective tests, including performance and self-report, would be a Herculean task, but the trend of innumerable investigations

into the measurement of personality by these methods is that they cannot be trusted. The median validity co-efficient probably around 0.4, is by no means negligible though hardly sufficient to justify using the tests for individual diagnoses. But the trouble is rather the variability; tests working fairly well in one investigation and not in another. The principal reasons for this seem to be as follows:-

a. It is extremely easy to falsify answers in such a way as to convey a picture of "good" personality. Subjects will often do this if they feel that there is anything at stake, e.g. in a selection situation. Many more "unpleasant" symptoms will be admitted when the instrument is answered anonymously, or when the subject is motivated to be candid.

b. There is a considerable self-halo effect, which will vary from individual to individual.

c. There will be unwitting self-deceptions or rationalisations: faking without intending to. People do not know enough about themselves.

d. Neurotics tend to exaggerate what they feel are their own defects, educated people tend to be more psychologically minded and self-critical, whilst some people tend to reject any imputation of psychological weakness.

On the other hand test scores can be readily treated statistically, correlated with other variables and factorised. It might be maintained that some subjects will be more candid

and objective when answering an impersonal questionnaire than when interviewed. Smith, Bruner and White (1956) (19) in an investigation into attitudes towards such topics as "Communist Russia", found that straightforward discussions were more revealing than projection or other tests or depth orientated enquiries.

(4) We needed to collect information on the degree of involvement and interests of our subjects and this had to be assessed as accurately as possible. Obviously there are a wide number of interests, and even wider number of emphases which will vary with each individual. There are no questionnaires concerning themselves with the degree of involvement in interests. (The Kuder and Strong Inventories are designed to discover types of interest rather than depth of interest). It follows from the use of a questionnaire that, even with open-ended questions, the answers one obtains are, to a greater or lesser extent, determined by the questions one asks. It was felt that we did not want to place ourselves in such a straightjacket, and, although a questionnaire has obvious statistical advantages, we thought that the opportunity-cost of missing significant variables far outweighed the easier task of quantifying the data.

Because this research concerned itself with practical industrial problems it was necessary to gain the support and co-operation of various industrial organisations. We have in fact looked at the sales staff of two companies.

Company I is part of a very large corporation and markets petrol and oils. We interviewed eighty-six salesmen; about half the total. This company had commissioned the investigation and ^{had} given a grant to the College to finance it. Senior members of the personnel department of this company, therefore, were prepared to co-operate with the researchers to a very considerable extent.

The selling force was divided into seven areas and the field worker visited each area interviewing and testing. It was thought by the company to be better if a centre other than where the area offices were situated was used for the field work. This was not considered necessary by the field worker and necessitated considerable extra expense in the way of hiring extra office space.

All the salesmen in each area who had been selected (randomly) to be interviewed met together at the beginning of the week. A representative of the management responsible for the smooth running of the field work gave a talk lasting about half an hour. He explained to the salesmen the reasons for the research, the methods being used, that it was for the benefit of both the Company and the College, and that all information gained by the researchers was confidential. Many of the salesmen had been apprehensive before the talk, and they seemed generally reassured by it.

The salesmen were then given the Morrisby General Ability Test (verbal), and individual interviews were time-tabled

throughout the week.

Some of the salesmen were still apprehensive when they arrived at the interview, but a repeat of the aims and methods of the research and an emphasis on the confidentiality of the replies seemed to alleviate some of this. As the interviews progressed and it became obvious that the interviews were not "depth" or "freudian" orientated, even the most apprehensive subjects were reassured. The field worker with later interviews emphasised the statistical nature of the operation and also described the interview to the group as a duplicate of a selection interview; which indeed it was. This approach seemed to be most successful in reducing apprehension.

It was found that if the purpose and methods of the research was fully and honestly explained to the subjects they were invariably willing to co-operate fully. The assurance that the researchers were not management spies, trying to weed out unnecessary and unsuccessful staff did not appear to have a particularly positive effect unless it was accompanied by a full explanation of the project.

Company two was a small animal food company, but a wholly owned subsidiary of a very large flour and milling corporation. The company was approached by the College and asked to co-operate. There is a history of co-operation between the Department of Applied Psychology and the staff selectors of this company, and a similar exercise to the one being reported had been carried out (by Howells) in

another branch of this corporation. The Company was running regular sales training sessions at their training centre and the researchers were allowed to conduct their field work at the training centre and during the training courses. The total sales staff of thirty-two was interviewed and tested.

A short talk was given by the researcher at the opening of each training session. The salesmen were told of the nature and method of the exercise, and of what they would be asked to do. Each salesman was then interviewed at any time it could be fitted conveniently into the programme. They were tested as a group at the end of the training session.

The salesmen of Company II seemed less anxious than the salesmen of Company I, possibly because the researcher more obviously was not a representative of the management.

These arrangements did present one difficulty. The interviewer was in regular contact with the subjects, and in order to remain as objective as possible had to be careful to keep in the background until the interview programme was completed.

THE PERSONALITY DIMENSION OF ACTIVITY-PASSIVITY

The concept of "activity" appears in the work of the Dutchmen Heymans and Wiersma (20) in one of the earliest statistical analyses of personality factors. Heymans and Wiersma analysed biographical material from a hundred famous people about whom a great deal was known. These persons were rated on a large number of traits, and by inter-relating these traits they found three main factors, (they called them principles).

H. J. Eysenck (21) interprets two of these factors as being identical with his two personality factors at the type level: emotionality-non-emotionality and extraversion-introversion. The other factor is a general drive or activity factor.

In his review of the work of Heymans and Wiersma Eysenck explains that "although we do not suggest that activity is not a useful descriptive variable in the psychology of personality, in our view this factor is located at the trait level, whereas emotionality and primary and secondary function (extraversion and introversion) are located at the type level.

He supports this view by demonstrating that in Heymans' and Wiersma's data emotionality and primary and secondary function are relatively independent, whereas strength of primary function (extraversion) is correlated with lack of

activity and strength of secondary function (introversion) is correlated with activity.

	<u>Primary</u>	<u>Secondary</u>	
Activity +	25%	75%	r = 0.5
Activity -	57%	43%	

There are numerous other examples of the postulation of an activity trait in personality theory. Aspect of Cattell's (22) concept of ergic drive appears to be similar to Heymans' and Wiersma's general drive concept. Guilford (23) gave six hundred subjects questionnaires of twenty-four items and two of the factors isolated he names N (nervousness or jumpiness) and G.D. (general drive) characterised chiefly by pleasure in action. A factorial study of Baehr (1951) (24) also isolated a factor which she called "activity".

Koch (25), again in a factorial study, used objective behaviour tests of "activeness" (1934, 1942). Nine different measures resulted in three factors, strength or maturity, nervousness or emotionality, spontaneous activeness or aggression. The latter two Eysenck identified as Neuroticism and Extroversion respectively, while he suggests the first factor may be the opposite of Heymans' and Wiersma's activity factor. In his later work Eysenck (26) describes the extrovert as craving stimulation, the introvert as trying to avoid stimulation. This would appear to have relevance to our concept of the active person having a large

number of interests, and being very much involved with his interests, the passive person having a very few interests and not being involved with them, (see overleaf). It is however, in contrast to the correlation he discovered in Heymans' and Wiersma's work, where general drive was correlated with introversion.

THE MEASUREMENT OF ACTIVITY

Howells (12) looked at the interest pattern of his subjects and found that no coherent pattern of successful salesmen of the type postulated in the work of Strong (27) and Kuder (28) emerged. However, in the unstructured interview it soon became apparent that there was a considerable variation from one individual to another in the involvement in their interests. Some subjects had a large number of interests and spent a great deal of time and energy in their spare time pursuing them. Other subjects spent little of their spare time in pursuing their interests. Howells hypothesised that the subject very much involved in his interests was the active "always likes to have something to do" type, those subjects not much involved in leisure time interests the "likes to put his feet up and relax" or passive type. The degree of involvement in interests is used here as a measure of the degree of activity or general drive.

Howells and two colleagues independently rated each of their subjects as active or passive. He found that those rated active were more likely to be successful than those rated passive.

	<u>Successful</u>	<u>Non-Successful</u>	
Active	26	16	Chi ² significant
Passive	13	28	0.01

Howells concludes on this subject that:

1. Activity, as revealed in interest, is a valuable measure in selection procedure of generalised drive.

2. It may well be useful in considering interest to concentrate more on the activity content than the actual type of interest since there is little evidence that the type of interest is a good predictor of job performance.

In the present investigation we set out to develop a more sophisticated quantification of the subjects' involvement in their interest. It seemed to us that there were two dimensions to the concept; firstly the number of interests expressed by the subject, and secondly the involvement in each particular interest.

At the interview each subject was asked to describe his interests. He was asked specifically if he had any outdoor, social, artistic, or intellectual interests or hobbies. If the subject admitted to interests in any field he was questioned as to the amount of time spent pursuing them, in the degree of skill gained, whether he read books on the subject, and whether he was a member of any organisation concerned with the interest. He was also asked to outline how he spent his leisure time during an average week.

Each expressed interest was then rated on a ten point scale. For example a subject expressing an interest in sport would be rated on the following basis:

10. Very regular sport, summer and winter: three or

more, of which two must be of a high standard.

9. Very regular summer and winter: three or more of which one must be of a high standard.

8. A high standard in one sport plus other sporting interests.

7. Regular team position in two sports, or very considerable involvement in one sport.

6. Regular team position in one sport, also playing another regularly.

5. Weekly support for a team plus interest in another sport.

4. Weekly support for a team, or regularly playing non-team sports.

3. Plays regularly, although not necessarily weekly, or is a keen supporter or follower of a sport.

2. Is a supporter or follower of a team or sport.

1. Occasional exercise, or occasional visit to a football match or cricket match etc.

Each expressed interest was rated. The classification of the interest was based on "environment type" variables found in a factor analysis of Guilford, Schneidman and Zimmerman (29) (1954), consisting of interest in the following categories: Mechanical, scientific, social welfare, aesthetic appreciation, aesthetic expression, clerical, business, domestic work, sport, intellectual, literary, social and committee work. The rating on each expressed interest

occasionally did not fit into any one category. For example, piloting light aircraft could be categorised under mechanical, scientific, sporting, and also perhaps aesthetic appreciation. In this case the rating on involvement in the hobby of piloting light aircraft would be divided (somewhat arbitrarily) between all these categories. In this way we get a measure of the number of interests each subject had, the involvement in each, and a rough guide to the predominant type of interest. By adding the rating in each category we obtained a total interest score.

RELIABILITY OF THE ACTIVITY MEASUREMENT

To be useful in this study the involvement, or activity, score must correlate with ability, or lack of ability in a selling job. The knowledge of interest involvement would then allow us to predict the success or lack of success of an inexperienced job applicant. We are not concerned, at least in the practical situation, with whether in fact our scale is measuring the personality dimension of activity (i.e. whether the test is valid) but if whatever we are measuring predicts success. To do this our measurement must be reliable: two different interviewers must rate each applicant in the same position on the activity-passivity scale. We therefore set out to test the reliability of the score.

The interviewer rated all the salesmen interviewed from Company II (36 in all) and ranked them. The method of rating was then explained to a colleague, (also an experienced interviewer and psychologist), and he was asked to rate each individual from the evidence contained in the original interview notes. These ratings were then ranked. The two rankings were correlated. A Spearman Rank Order Correlation of 0.76 was judged to demonstrate a fair and useful degree of reliability.

PROBLEMS OF THE MEASUREMENT OF ACTIVITY

If the personality dimension of activity-passivity is typical of what we know of personality dimensions generally, then we must assume that each individual's place on the continuum will remain at least reasonably constant throughout his adult life. For this reason if a subject recorded that he had in his twenties played rugby for Upper Saxekoburg, later had been a colonel in the Territorial Army, and had recently retired in order to give more time to his honorary position as secretary to the Local Anti-Blood Sport League, we must not rate him on all three of these activities. His activity was directed into only one of these interests at any one time and he must not, therefore, be rated on all of them. If he had held his commission in the T.A. at the same time that he was secretary of the Anti-Blood Sport League, then his degree of involvement in interests is considerably higher than if he had dropped one in order to concentrate on the other.

There are two main problems in rating individuals' activities by this method:

1. Subjects dropped a number of interests on marriage.

Although frequently sporting and social interests were replaced by domestic work interests this process took some time. A number of subjects who had been recently married would have been rated higher had they

been assessed shortly before their marriage.

2. It takes time to become integrated into a community. Subjects who had been recently moved from one area to another and whose interests were sporting or social tended to score lower than they would had they been rated before the move. It takes time to get accepted into a sports club, drama group, or social club, and perhaps years before election to an important committee.

RATINGS BY THE COMPANY

Cleveland's (3) review (1948) of sales research stresses the difficult problem of obtaining criteria of sales success even though there are literally mountains of so-called objective sales records available. In most instances, it is difficult to predict from objective records who the better salesmen might be. From the psychologist's view-point it is extremely hard to do validation studies of tests in sales selection for the criteria are usually shaky ones.

The reliability of the results of an investigation of this nature can be no better than the reliability of the assessment of the subjects. The accuracy of this part of the operation is crucial to the success of the whole and for this reason a considerable time was spent at the beginning of the investigation of each company discussing with the managers the difficulty and pitfalls of assessing people. However, the managers themselves were responsible for the method of assessment and the investigators have little idea to the extent the various biases were allowed for.

The assessors in Company I were asked to rate on a five point scale and were asked to assume a certain degree of normality in the distributions. In fact they ranked the total sample - one would have thought an extremely difficult task in view of the distribution areas of the salesmen and in view of the differences in the nature of the work from one

salesman to another. This ranking was sub-divided into 17 groups - the members of each group being considered of roughly equal ability. It is this subdivision that was used for the basis of most of the calculations, although the results are frequently given in terms of the average ranking (i.e. the average score of a group of salesmen, each individual having a score from 1-86).

Company II presented an easier task. All the salesmen were doing the same sort of job, and the sample was smaller. The assessors were asked to rank the sample.

Each assessor was asked to rate the salesmen on the basis of their ability to close a sale and also on their ability to organise themselves and their work - it being considered that these two factors are the main constituents of successful selling. A more statistical rating would have been very difficult and complicated. Obviously a salesman in East Anglia could not be expected to sell as much petrol as a salesman in Middlesex - for a statistical comparison it would be necessary to take population figures, number of cars per head, amount of travel necessary and difficulty of travel into account. It would be very difficult to compare the difficulties of selling animal foods in North-umberland, Cheshire and Sussex, especially if competitors' figures are not available.

These difficulties of assessment make this aspect of the investigation the most doubtful. However, what checking

of reliability that has been possible (see over) is
evidence for, rather than against, good reliability.

COMPANY I. INTRODUCTION

A sample of 86 salesmen were interviewed, representing almost half of the sales force.

This Oil Company was taken over by a larger organisation briefly before the second world war but has continued trading under its old name. It is a marketing outlet for the large corporation and is one of the names under which this corporation sells its products. Nevertheless it has a high degree of autonomy in running its own affairs and certainly is in competition with the other marketing outlets of the corporation.

The salesmen can be divided into three categories - specialists, retail and commercial.

The specialist representative - either real estate or technical - is recruited because of his specialist knowledge and covers problems within his specialist province over a division. The division is divided into areas. Each area has a retail and commercial representative.

The retail representative visits garages. His job is to persuade the garage owner to sell the particular brand of petrol, and to continue selling it. Most garages are tied to long-term contracts - either in order to gain better rates, or, more usually, because of loans from the company. The salesman is the "go-between" for these loans and contracts but has very little authority to make decisions - these must

come from higher levels of management. He is also responsible for selection and negotiating new sites for garages, but only a few of the garages selling this brand of petrol are owned by the company.

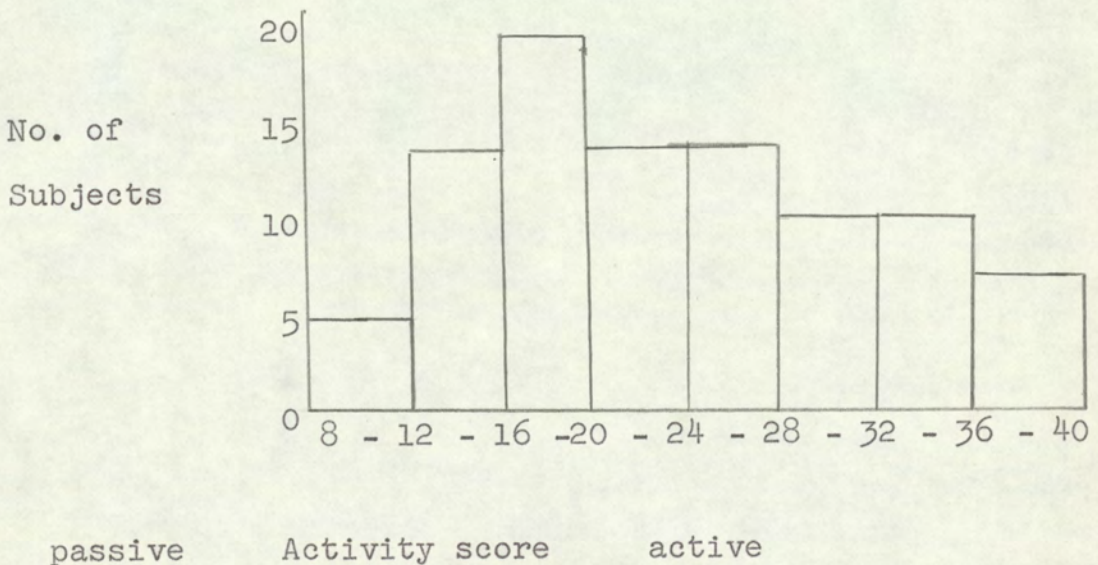
The commercial salesman visits large companies with transport departments, transport companies, bus companies, etc., in order to acquire contracts to supply fuel and lubricants.

COMPANY I. RESULTS.

A. Activity

We have hypothesised that the personality dimension activity-passivity is an important factor in success at selling, and that involvement in interests is a measure of the degree of activity possessed by each subject. We therefore correlated our interest in involvement score with the company's success rating. The resultant correlation -0.4 (Spearman's coefficient) is significant at the 0.001 level. It appears therefore that success in selling in this company is related to a lack of involvement in interests.

The involvement scores appear to be fairly normally distributed:-



There was a progressive deterioration of company ratings as the involvement score or activity score increased.

Activity score	Av. Co. Ratings	N
36+	9	4
31-35	10	9
26-30	10	18
21-25	8	15
16-20	7	21
11-15	6	14
10-	6	5
		86

In a number of studies of this type it has been found that success correlates with a limited range of values. This does not appear to be the case in this study. The hypothesis that particularly active and particularly passive salesmen are unsuccessful, and that a score around the median is necessary for success, is unconfirmed.

The total interest involvement scores was worked out by quantifying the number of interests each salesman had and also the degree of involvement in each interest. Each salesman could have a score made up of a high score of both number of interests and involvement in interests, or a low score on both or high on one and low on the other.

We therefore looked at both number of interests and

involvement in specific interests separately.

A product moment correlation between the number of expressed interests and success was -0.2 , a Spearman rank correlation between involvement in any one interest and success was -0.3 . It would appear therefore that involvement in any one interest is a more important criterion for lack of success than is the number of expressed interests.

The involvement in any one interest rating was calculated by ranking the data on an eight point scale ranging from extremely active, takes up all spare time (8), through pursues hobby or interest regularly (4), to involvement irregular and intermittent (1).

We next set out to discover if involvement in some of the expressed interests was correlated with lack of success more than was involvement in other of the expressed interests. Only those interests mentioned by the salesmen interviewed sufficiently often to warrant analysis are included. See table over-leaf.

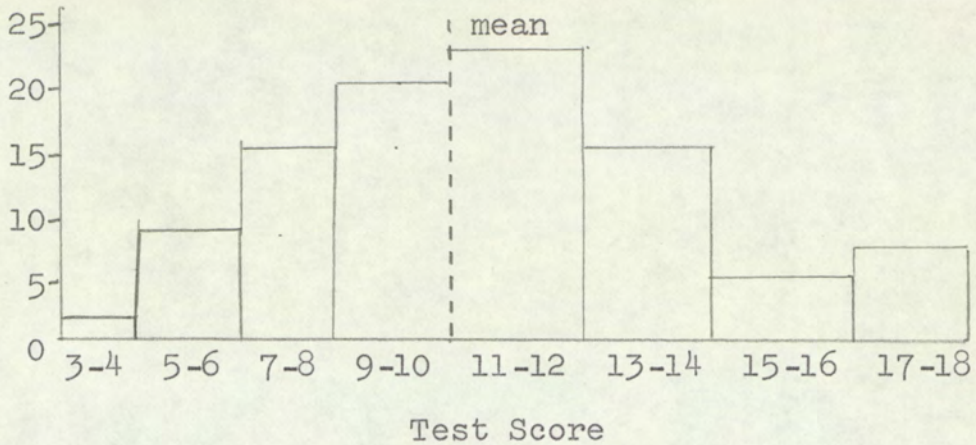
<u>INTEREST</u>	Frequency expressed	% level of significance (Chi ²)
Sport	86	20
Mechanical	28	10
Domestic work	40	no significant result
Aesthetic appreciation	27	1
Aesthetic expression	20	10
Social Welfare	14	no significant result
Non-directed social	55	30
Literary	49	no significant result
Committee work	42	1

It would appear that those salesmen with considerable involvement in aesthetic interests, mechanical interests and committee work were least successful

B. Verbal Intelligence

Each salesman was given the verbal part of the Morrisby General Ability Test. The correlation between this score and success was -0.13 ; a non-significant result at the 5% level. The scores varied very considerably from (the I.Q. equivalent) 70 -130, with the mean at 103.

The distribution appears to be fairly normal. See Graph (overleaf)



We looked at the scores to see if, although there was no overall significant correlation, a certain range of scores were conducive to success.

Verbal test score	Sample	Average company Rating
2 - 6	10	5.5
7 - 8	15	8.5
9 - 10	20	8.5
11 - 12	21	9.0
13 - 14	13	9.5
15 - 18	8	7.0

This breakdown suggests that, although we have a general picture of increased intelligence being a factor working slightly against successful selling, those salesmen who were particularly dull did better than their more average colleagues. This is certainly not an expected result. The sample is quite small; only eighteen salesmen fall into the six and under, or fifteen and over categories, and this result could well be due to the small sample. If a larger

sample produced the same result then possibly growing knowledge in the field of creativity could explain the apparent efficiency of the dull. Closer examination of the eighteen salesmen in the two extreme categories did not reveal any other differences or similarities which might have brought about this rather bizarre result.

C. Age and Experience Variables

Age and length of experience did not correlate with success. However it is not necessary to assume that the average salesman does not improve as he gets older and gains more experience. The better salesmen are possibly more likely to be given promotion, or alternatively feel that their talents are not appreciated and look for another job. Thus only the least successful men may remain in the same position after a number of years. Practical difficulties made it impossible for us to test whether, in fact, this was the case.

Length of other relevant experience, in selling or other positions within the petrol industry, did not correlate with success. Men recruited from selling jobs and with selling experience did not do significantly better than men recruited without selling experience.

The length of time each man stays in a job is a possible guide to his stability. We found that those salesmen whose previous positions had averaged more than six years performed better than the salesmen who had changed their jobs more often

Those salesmen who remained in the same job for a very long time (an average of over fifteen years) are most unsuccessful. Again this could be accounted for by successful men either being promoted or leaving. Another factor to be considered is that the average length of time per job increases with age.

Average length of time per job (years)	Sample	Average company rating
1 - 2	19	8.2
3	18	8.9
4	15	8.7
5 - 6	14	8.4
7 - 11	14	6.0
12+	7	10.5

D. School Background

The salesmen who had attended public schools performed, on average, better than the salesmen who had attended grammar schools, but a small group of salesmen who had attended secondary schools before the 1944 Education Act, and whose parents were unable or unwilling to send them to grammar school, were the most successful group.

	TYPE OF SCHOOL ATTENDED		
	Public	Grammar	Secondary Pre 1944
Ave. Success ranking	41	52	32
Ave. Activity Score	22	22	23
Sample	24	51	11

The success of salesmen with a secondary school background is difficult to explain. We have already discovered that success is not correlated with age, so the fact that this group is older than the average for the total sample, is not relevant.

A possible explanation is that these men are less likely to be chosen for promotion because of their working class rather than middle class values, and behaviour patterns. Had they had more in common with the managers responsible for the promotion of salesmen perhaps their persistently high performance would have been better rewarded.

We compared the grammar and public school products who were educated before the 1944 Education Act with those who were educated after it. The older group appeared in both public and grammar schools to be similar to the younger group.

	PUBLIC SCHOOL		GRAMMAR SCHOOL	
	Pre 1944	Post 1944	Pre 1944	Post 1944
Ave. Success ranking.	41	41	53	50
Ave. Activity Score	24	20	24	20
Sample	9	15	29	22

These differences in the type of school attended are independent of the interest involvement score.

A Chi² test shows that the difference between public and grammar school products is significant at the 2% level.

E. Classification according to type of selling

The total sample of salesmen fell into two main categories; retail salesmen (46) and commercial salesmen (28). The other twelve salesmen were divided into specialists in real estate (8), or technical sales (3), with one general salesman.

It was found that the retail salesmen were rated slightly more successful than the commercial salesmen, and the specialists rather more successful than the commercial salesmen.

	Retail	Commercial	Specialist
Ave. Success ranking	42	49	39
Sample	46	28	12

These results could be due to the transferring (whether deliberate or not) of the better salesmen to the retail and specialist jobs, or alternatively a halo effect in the ratings. The average interest involvement rating was similar in each group (retail, 22.4; specialist, 22.4; commercial, 21.3;) but the correlation between passivity and success was higher amongst the commercial (0.52) and specialist (0.5) salesmen, than amongst the retail salesmen (0.35).

F. Differences in Administrative Areas

There was a considerable difference in the ranking by the company of the company's different administrative areas. The average ranking for the salesmen in the best area was 35, in the worst 55. Assuming that the rankings did not themselves show a bias between areas these differences must be due to one or both of two factors. Firstly, there could have been a genuine difference in the performance of the staff in different areas; secondly our random selection of the salesmen could have included more of the better salesmen in some areas, more of the less able in others.

To collect confirmatory evidence as to the accuracy of the ratings we correlated the average interest involvement rating with the average Company success rating for each area. We assume that as our passivity score correlated with success in the whole sample, then the more successful group would be more passive, the least successful would be more active (different areas were similar with regards to age, years of

experience, intelligence, school background, etc.) This assumption appears to be verified.

The areas ranked for success correlated 0.76 with the areas ranked for passivity.

We also correlated passivity and success for the salesmen within each area. In each case the correlation was positive, and in only one area was it at a non-significant level. However the correlation tended to be higher in the less successful areas. Similarly the ratings of the most successful salesmen in the total sample (N = 34) correlated 0.22 with passivity, the ratings of the least successful salesmen (N = 42) 0.47.

	Sample	Average Company Ranking	Average Activity Ratings	Correlation passivity & success
South	13	35	20	0.16
Midlands	12	39	19	0.58
London	13	44	21	0.03
South West	15	45	24	0.68
East	7	51	23	0.6
North East	13	53	22	0.4
North West	13	55	24	0.35

G. Conclusion

Our analysis of the data collected by interviewing and testing eighty-six petrol salesmen shows that the successful salesmen are differentiated from the unsuccessful salesmen in three ways:

1. Their position on our activity-passivity scale.
2. The type of school attended.
3. The average length of time spent in each job.

Had these three factors been the criteria for selection of these salesmen, would the successful men have been selected and the non-successful been rejected?

We rated each salesman for activity or passivity on a three point scale. Secondary school products were rated 3, public school 2, grammar school 1. Those salesmen whose average length of staying in a job was between 6 and 11 years were rated three, less than this period two, more than this period one. In this way each salesman was given three scores, each either one two or three.

Activity-passivity discriminated the successful from the non-successful the best. The type of school attended was a rather more successful indicator than the length of time in each job. For this reason the scores were weighted (although rather arbitrarily). The score on the activity-passivity scale was multiplied by three, the score gained by the type of school attended by two. A total score was thus obtained.

The total sample was divided into two on the basis of our final weighted scoring, (the highest half predicted successful denoted (a), the lowest half (b).) Similarly the sample was divided on the basis of the company ratings into the most successful (a) and the least successful (b). The results are as follows:-

Weighted score	Company rating		
	a	b	
a	30	12	Chi ² Significant
b	13	31	0.001

It would appear, therefore, that had the present sales staff been selected on this basis the number of poor salesmen would have been markedly reduced and it is also likely that a number of potentially successful salesmen would not have been rejected. Work along this line is to follow a well tried procedure in applied psychology.

COMPANY II. INTRODUCTION

Thirty-two salesmen were interviewed; this figure being the total sales force.

Company II, like Company I, is a subsidiary of a large corporation, and also like Company I is in a highly competitive field. However it is not in competition with any other company within the corporation: rather its products - animal foods, - are a bi-product of the main production processes. Again the company has a fairly high degree of autonomy, but does not run its own affairs to the extent that Company I is able to do.

All the salesmen have the same function. Each has an area for which he is responsible. He visits farms and farmers in order to persuade the farmer to use his brand of animal food. Because the farmer obtains his animal food through a merchant the representative also has to ensure that the brand name ordered is in fact delivered.

The representative must, to a certain extent, act as an adviser to the farmer. Nearly all the representatives has had some formal training and experience in farming and are expected to advise the farmer on feeding problems. However the company also employs a number of highly qualified technical staff for particularly difficult problems.

COMPANY II. RESULTS.

A. Activity

At first glance the relation of activity to success appeared rather confused. A Chi^2 calculation gave a result significant at the 0.08 level:-

	Activity	
	+	-
Success	+ 10	6
	- 5	11

However a rank order correlation gave a non-significant result. It would appear therefore that the majority of the sample showed increasing success with increasing activity, but the minority who showed the opposite trend did so very markedly. In other words a small number of the sample with a high negative correlation between activity and success were able to balance the majority of the sample with a smaller positive correlation.

Observation of the data showed that of the seven salesmen who showed this reverse trend five were from Secondary Modern Schools, the other two from Public Schools. The group from Secondary Modern Schools ($n = 7$) showed an almost complete negative correlation between activity and success:-

	Co. Success Ranking	Activity Score Ranking
1	4 (1)	36 (7)
2	6 (2)	11 (4)
3	8 (3)	35 (6)
4	19 (4)	26 (5)
5	27 (5)	7 (3)
6	28 (6)	1½ (1)
7	30 (7)	4½ (2)

rank order correlation - 0.87

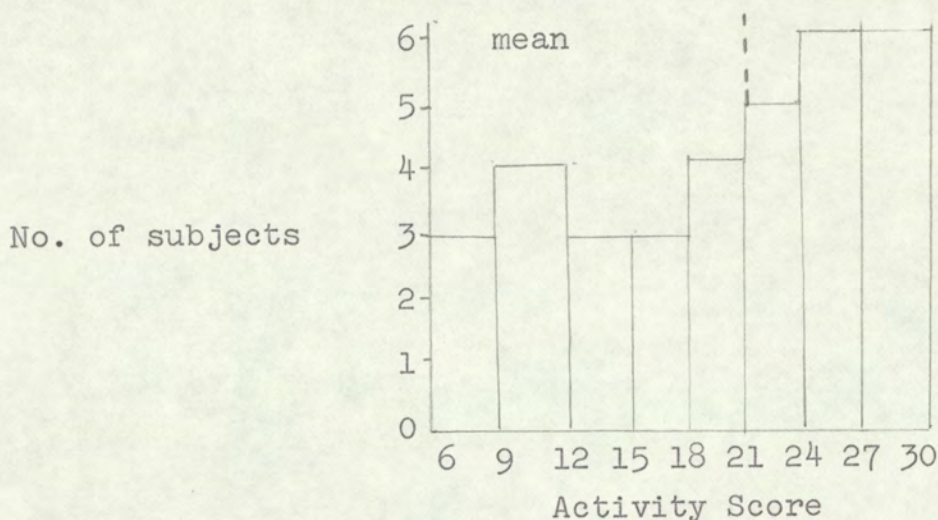
The rest of the sample, however, showed a correlation of 0.37 between activity and success. It will be remembered that, although there was a significant difference in the ability of salesmen with different school backgrounds in Company I, the association of lack of activity and success was similar in each of the three groups.

It would appear therefore that active people from Grammar and Public Schools and passive people from Secondary Modern Schools would be most likely to succeed in selling animal food for Company II.

We looked at the involvement score to see if there was any difference between those people who tended to be very much involved in one hobby or interest and those whose interests were spread over a larger number of interests. No significant difference between these two groups could be found.

Certain types of interest correlated with success more than others. The most successful salesmen were interested in domestic work, sport and reading and were less interested in general social activities, aesthetic interests and committee work. It is interesting to note that this is an almost exact reversal of the findings in Company I, where the opposite correlation was found.

The activity score showed a skewed distribution - more salesmen being active than passive.



Observation of the data showed that the hypothesis that success correlates with a limited range of values again was unconfirmed. There was a progressive improvement with increased activity with the products of Grammar and Public Schools, or progressive deterioration with Secondary School products.

B. Verbal Intelligence

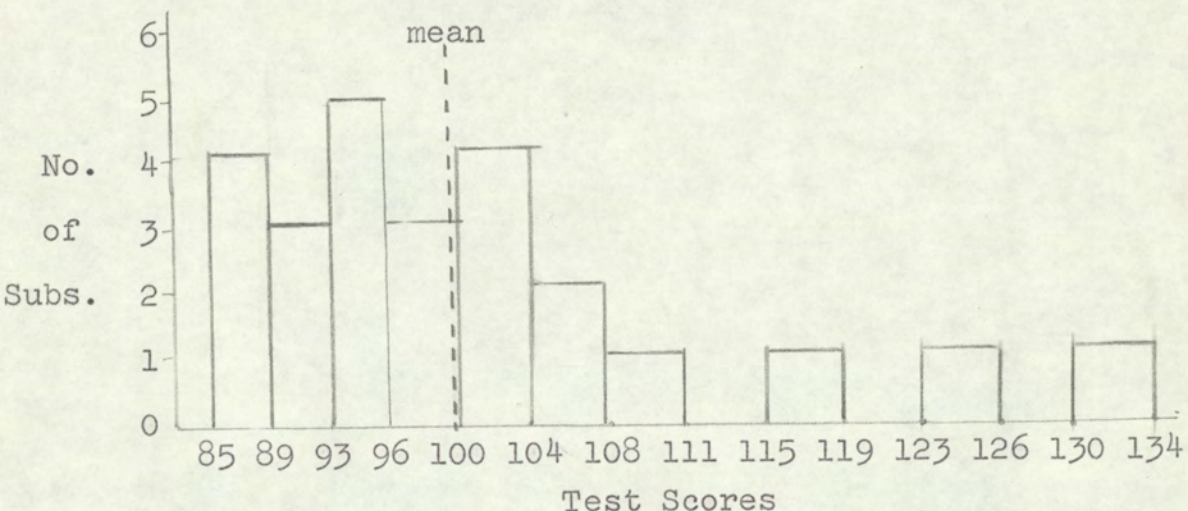
No relationship was found between verbal intelligence

and success.

Secondary Modern school products were, on average, two scale points below Grammar and Public School products.

There was a relationship between intelligence and lack of activity (0.27) - a result not found with Company I.

The score varied considerably from (I.Q. equivalent) 85-134 with the mean at 99. The distribution of intelligence is shown in the graph below.



We looked at the scores to see if, although there was no overall significant correlation, a certain range of scores were conducive to success. There is a certain amount of support for this. See table below.

Verbal Test Score	Sample	Average Company rating
6-7	7	18
8-9	11	17
10-11	8	14
12+	6	16
	49	

It was also noted, however, that 7 out of the 10 best salesmen, and 9 of the 10 worst salesmen had verbal intelligence scores below the mean. It would appear, therefore, that higher intelligence makes particularly poor performance unlikely.

C. Age and Experience Variables

There was no significant relationship between age and success, but the younger group (under 28) had six poor ratings as against three good ratings. However, there was a tendency for salesmen with very little experience (and most of this category are in the under 28 group) to be rated low. There was no improvement in rating of salesmen with increasing experience after the initial two years. There is, however, no need to assume that salesmen do not improve with age and increasing experience (see discussion of this point page 38)

It would be thought that in a job which required knowledge of farmers and ability to advise on farming problems, a considerable degree of experience and training in agriculture would be necessary. Certainly the company had been recruiting their sales staff from candidates with agricultural training rather than a non-agricultural selling background.

We first looked at the numbers of years farming experience each subject had. There was a slight, though non-significant improvement in ratings as the number of years experience increased:-

		Years in Farming	
		2 or less	3 or more
Rated	Good	8	8
	Poor	10	6

However, closer analysis of the data revealed that the subjects with no farming experience did markedly worse than the subjects who had had even a limited experience.

No. of Years Experience	0	1-3	4-6	over 7
Average Success Rating	23	14	16	16
Sample	5	8	11	8

It would appear therefore that some experience of farming is required for success, but wide experience is unnecessary. All five subjects who were without experience also had had no formal agricultural training.

More than half of the subjects had had formal agricultural training, which could have been at an agricultural Institute (1 year course), an agricultural college (2 years) or a University (3 or 4 years). There was no significant relationship between amount of training and success.

	<u>No. of Years Training</u>			
	0	1	2	3 or 4
Very Good	6	0	1	1
Good	2	4	2	0
Poor	0	2	3	3
Very Poor	6	1	1	0
<u>Success Rating</u>				
Average Ranking	-	-	-	-
N	17	16	14	19
	14	7	7	4

It was noticed, however, that the subjects without training tended to be either very good or very bad. We therefore looked more closely at these subjects.

	Very Good	Very Poor
N	6	6
With farming experience	5	1
Average scale intelligence score	8	8
Average activity score	22	18
Average Age	36	43

The difference in activity score would be expected in view of our knowledge of the correlation between activity and success in most of our sample. The most noticeable difference is in the number with or without farming experience. It would appear that it is most unlikely that a salesman without either training in farming or experience with farming will succeed in this job.

We looked at the work history of each subject and calculated how long, on average, the subject stayed in each job. The results were non-significant at the ^{level} 5%↓ but tended to confirm the pattern found in Company I - that those salesmen who changed their jobs very regularly or very irregularly tended to be less successful.

		Length of time in each job : (years)			
		1-2½	3-4½	5-7	8+
rated as	good	4	6	6	0
	poor	6	6	1	3

Very few of the sample had had previous selling experience in other fields - so it was impossible to evaluate this factor.

D. School Background

We have already remarked on the relevance of the type of school attended to the nature of the correlation between activity and success. Salesmen who attended Grammar or Public Schools tended to be more successful if they were more active. Salesmen who had attended Secondary Modern Schools showed the opposite trend.

We also found that public school products did significantly better (at the 0.015 level) than Grammar or Secondary Modern School products.

	Ave. Success Ranking	Ave Verbal Scale Score	Correlation Act.& Success	N
Public	13	10.3	0.32	10
Grammar	18	10.3	0.39	15
Secondary	17	8.5	-0.86	7

A more detailed analysis of the relationship between type of school attended and success showed that there were no grammar school products in the top 25%, only one public school product in the bottom 25% and secondary modern school products tended to be either very good or very bad.

		Grammar	Public	Secondary
success rated as	Very Good	0	5	3
	Good	8	0	0
	Poor	3	4	1
	Very Poor	4	1	3

It was noticed that the subjects tended to leave school rather earlier than average, and often seemed anxious to leave school. We analysed the subjects into number of G.C.E.'s and age on leaving for all three types of schools but could find few correlates with success. The number of subjects in each division had, however, become very small.

E. Interest in Agriculture

It was noticed at the interview that a large number of the subjects had said that they had always been very interested in farming and had never intended doing any other work

as a boy. Typically they spent their weekends and holidays from school helping on a farm. Many of them explained that they would have preferred to become practical farmers, but were unable to do so because of lack of capital or opportunity. Another group explained at the interview that they had always been interested in farming, but had to make a definite choice between the agricultural field and other fields when leaving school. A third group drifted into the field from other jobs or another branch of the milling industry. We looked at these three groups to see if these factors of interest had any relation to success and found that a history and considerable interest in agriculture differentiated (at the 15% level) between successful and non-successful salesmen.

	N	Ave. Rating
Very interested as a boy	15	14
Some interest as a boy	10	19
No interest as a boy	8	20

F. Conclusions

Our analysis of the characteristics of 35 animal food salesmen showed that they are more likely to be successful if they have the following characteristics:

1. Activity if from a grammar or public school, passivity if from a secondary modern school.
2. Have a particular interest in domestic work, sport

and reading.

3. Have been with the company for more than a year.

4. Have either farming experience or agricultural training.

5. Have attended a public, rather than a grammar or secondary modern school

6. Have had a considerable interest in agriculture from being a boy, and have spent holidays and spare time as a youngster on farms.

If these salesmen had been selected on this basis would the poorer salesmen have been rejected and the better accepted?

We designed a method of rating the data collected at the interviews and weighting the varying importance of each factor according to the degree of its significance. However, the first object was to be as simple as possible - the method had to be designed for practising personnel managers - and therefore the weightings are only approximations.

Scoring	Score
1. Grammar and Public Products	
Activity	+1
Passivity	-1
Secondary School Products	
Activity	-2
Passivity	+2
2. Considerable interest in domestic work	
Sport, literature	

Scoring (continued)		Score
2.	All three	+2
	Two	+1
3.	Absence of both experience and training in agriculture	-3
4.	Public School	+2
	Grammar School)	0
	Secondary School)	
5.	Long standing interest in Agriculture	+2

The prediction score was calculated for each salesman.

The higher the score the more likely is success. The results are shown below, and are significant at the 0.001 level.

		Predicted Success		
		A	B	C
Actual Success	A	8	1	3
	B	2	9	0
	C	2	1	7

Had these methods been used to select the present sales staff the number of poor or mediocre staff would have been rejected and it is also likely that a number of potentially successful salesmen would not have been rejected. Work along this line is to follow a well tried procedure in applied psychology.

There has been a recent change in selection policy in this company. The sales staff has been increased and the recent selections have tended to emphasise qualifications in agricultural sciences. There are therefore a number of subjects who have been recruited within^{the last} two years and who are well qualified technically.

We have already seen that salesmen who have been in the job only a short time are rated, on average, lower than those who have been with the company over two years. This could be due to the fact that it does indeed take time to familiarise the new salesmen with the job, but we suspect it might be due to the raters feeling that inexperienced salesmen ought to be less efficient.

It is likely that when these young, highly qualified salesmen have had perhaps a year's further experience they will be ranked rather higher than at present.

We would certainly suggest that a re-assessment of the qualities needed for success based on new ratings made in twelve months time could well give rather different results, especially concerning the value of technical agricultural training.

SUMMARY AND CONCLUSIONS

A. Summary of Results

The two companies were very different in the product they marketed, and the methods they employed in marketing that product. We would expect, therefore, that a successful petrol salesman will differ in some significant ways from a successful animal food salesman. To a certain extent this is verified. The successful petrol salesman is likely to be passive, avoid committees and mechanical hobbies and aesthetic interests and not necessarily have an interest in, or experience of, the petrol industry; the successful animal food salesman is likely to be active and particularly interested in jobs around the house, reading, and sport, and very interested in, and with experience of, the farming industry. The successful salesman from both companies is more likely to be from a Public School than a Grammar or Secondary Modern School, but is just as likely to be dull as bright, old as young, and experienced as not experienced (after the first year).

COMPANY I

COMPANY II

a) Activity

Passive subjects tended to be more successful:
($r = 0.4$)

Active subjects tended to be more successful ($r = 0.37$), if from a Grammar or Public School, passive subjects tended to be more successful ($r = 0.87$) if from a Secondary Modern School.

b) Specific Interests	Subjects with interests in aesthetics, committee work and mechanics tended to be unsuccessful. No relationships were found with interests in domestic work literary, general, social activities and sport.	Subjects with interests in domestic work, reading and sport tended to be successful. No relationships were found with interests in general, social activities, aesthetics and committee work.
c) Verbal Intelligence	There was no apparent relationship between success and intelligence.	There was no apparent relationship between success and intelligence.
d) Age	No apparent relationship.	No apparent relationship.
e) Length of Experience	No apparent relationship.	No apparent relationship.
f) Average Length of Time Spent in Each Job	No significant relationship, but a tendency for salesmen who stayed longer in each job to be more successful, except for older subjects who had been in the same job for a very long time, who were less successful.	No significant relationship, but a tendency for salesmen who stayed longer in each job to be more successful, except for older subjects who had been in the same job for a very long time, who were less successful.
g) School Background	Public School products performed better than Grammar School products. A group of 11 subjects who had been educated before the 1944 Ed. Act in State Secondary Schools were most successful.	Public School products performed better than both Grammar School and Secondary Modern School products.
h) Long Standing interest in Petrol Industry or Farming.	No apparent relationship	Salesmen who had always wanted to work in agriculture rated more successful.
i) Relevant F/T Training	Not applicable	No apparent relationship.

J) Experience
in other
Related
Fields

No apparent relation -
ships, either with
experience in other
branches of the petrol
industry, or previous
experience in selling
and success.

No apparent relation-
ships with experience
in selling and success
Salesmen without ex-
perience in farming
rated low, unless he
had received full-time
training in agriculture.
There were no apparent
relationships between
the amount of farming
experience over two
years, and success.

B. Applications of these Results

We have discovered that successful salesmen and non-successful salesmen within a company are differentiated by certain personality variables, and certain background variables. It would appear, therefore, that success in this field requires the individual salesman to have a personality and a background similar to those of the successful group. Having isolated these factors we can now select future staff from applicants who have these qualities.

We have, however, made an assumption that the type of person who is at the moment selling successfully will be the type of person who will be the successful salesman in the future. The nature of the organisation may change for administrative reasons: the general marketing conditions may become more or less competitive, the type of person available for employment may change due to lessening or increasing unemployment rates. Also, in a field which has received scant attention from social science theorists there may be other pertinent information available only to commercial organisations and inaccessible to this study, which may or may not confirm our findings. The methodology and statistical techniques used could have masked important variables. For all these reasons it is important that this study is considered to be the first step in establishing a job specification and selection system.

Both of the companies concerned are modifying their

selection techniques because of the findings of this investigation. By rating each future candidate on the scales we have devised the selectors will be predicting their success. It is necessary that further and continuous investigations take place to discover whether these predictions are accurate, and if so, to what degree.

The application of these results, therefore, is a first step in devising a selection system, and a follow-up is necessary. Such a follow-up will again require a motivated management in the companies concerned, although this stage will involve considerably less disorganisation than did the survey. There is always a danger, however, that the necessary continued work will not be done due to the changes in selection personnel, or changes in policy. There is also the danger that it will be considered unnecessary by managers to whom recommendations of specialist consultants are considered as ex cathedra statements!

C. Practicability of the Present Survey Method

It appears that the analysis of the salesmen of an organisation and the isolation of factors which appear to correlate with success is feasible.

The study has required between one and two hours of the time of about 120 salesmen, and this has required the co-operation of both the subjects and their managers, as well as the executives responsible for the decision to co-operate in the research, and for smoothing through the arrangements.

The programme could not have been attempted without the complete co-operation of the two companies concerned. One company felt the need for a review of their sales selection techniques, the other had already found a similar exercise to be useful and therefore did not have to be "sold". It was our original intention to include some 200 salesmen from three companies. A third (engineering) company (with which the College had had considerable previous contact) was approached and they declared themselves willing to co-operate. Several branch managers were approached by the Company and the College, but considerable difficulty was encountered in making satisfactory arrangements for the field-work, and several managers explained that, much as they would like to co-operate, etc., but at the present time administrative difficulties made this impossible. We concluded that without considerable pressure from above, a satisfactory survey of this company was not feasible, and that this pressure was not forthcoming. We were able to interview only seventeen subjects, and we did not consider this to be a sufficiently large sample to enable us to draw general conclusions on the total sales staff of this company. These subjects are, therefore, excluded from our report and results.

Another company was approached, but they decided that the administrative difficulties were too great to make the exercise worthwhile. The research grant was for a set period, and we did not have sufficient time to make arrangements for

field-work with any other companies.

Our methods have required considerable administrative difficulties for the managers concerned, and co-operation is doubtful unless they feel considerable need for the service offered (as was the case with Company I) or they believe that it is useful (as was the case with Company II). The arrangements were facilitated in Company II by seeing the subjects when they were together for training conference. The only alternative would be considerable simplification of the method of collecting the data - possibly using an introductory talk to the subjects, a carefully designed questionnaire a testing session, and also possibly analysing data by the method of criterion analysis.

The collection of data on the sales staff appears, therefore, to be possible with the present methods when the company is motivated to co-operate.

D. Personality Characteristics of Successful Salesmen

The subjects we have been investigating are all described as representatives or salesmen, but the job of the petrol salesman is very different from that of the animal food salesman. It is not surprising, therefore, to find that the characteristics of the successful petrol salesman vary in a number of important ways from the characteristics of a successful animal food salesman. If the jobs described as "selling" can vary so much there can obviously be no one personality types that would succeed in all branches of the

field. Some investigators - notably Greenberg and Mayer (8) - have suggested that there are qualities common to all successful salesmen. We have obviously investigated only a small number of the variables involved but the evidence that we have collected certainly suggests that if there are qualities needed in order to succeed in any selling job then some selling jobs will require qualities in addition to these. Our evidence inclines us to think that no matter how much empathy and ego-drive our animal food salesman had he would not be successful unless he had an interest in, and experience of, agriculture generally. This is not of course to deny that such factors as ego-drive and empathy are not also requirements for success in this field.

The only significant common factor with the two companies appears to be in school background. Public school products tended to be more successful than the products of the state school system. This was independent of intelligence, but whether a boy went to public school or not depends on a number of factors - of which probably the social and financial status of the parents are the most important.

We have not been able to relate systematically ability in selling with activity-passivity although this was one of our objects. It would appear that there is a connection between this personality dimension and selling success, and certainly this connection has appeared in previous work, (12) but the correlation between activity and success with our

petrol salesmen was in the opposite direction to that predicted. One possible explanation is in terms of the "hard" and "soft" sell. Our petrol salesmen's job was largely to keep the garage owners happy and to persuade them to remain in contact with the company. They did not actually sell any petrol at all. Their job was to ensure that the relationship between the garages and the company was a good one, and as such they were as much concerned with public relations as they were with selling. Perhaps the easy-going type was more likely to succeed at this job than in a job where the collecting of orders is the object. Our animal food salesmen, on the other hand, were expected to persuade farmers to buy the companies' products. The personality dimension of activity-passivity would appear to have a relationship with selling, but the discovery of the nature of this relationship in more detail will involve further investigations.

We have found that it is not always necessary for a salesman to be intelligent, experienced, trained, or even interested in his job and the product he sells in order to succeed. We found little relationships between types of interest or age and ratings of success.

The only general conclusions that can be reached is that the type of person who succeeds at one type of selling job could well fail at another. There is no evidence in this study to support the hypothesis that there are critical

personality factors underlying all successful selling, but there is also no evidence directly against this viewpoint.

E. Suggestions for Further Research

It is simple to make convincing arguments in favour of improving selection methods, in terms of human happiness (a man is happier in a job he is good at and to which he is suited), in terms of organisational efficiency, and in terms of national efficiency. In an era of increasing demand on skills and abilities the more efficient placing of the nation's human resources is becoming increasingly important. It is certainly true that in the field of salesmen selection the techniques employed are not even approaching a satisfactory level in most organisations.

This research has concerned itself with two companies and in analysing a limited amount of data on some 135 salesmen. We hope that, suitably followed up, it is going to be of use to the two companies concerned. We have, however, been able to offer only tentative hypotheses about the characteristics of salesmen in general, and to offer little advice on the selection of salesmen other than for our two experimental companies. If the problem we wish to tackle is inefficient use of national resources we will have to discover a great deal more about the characteristics of salesmen in general. We must find out a great deal more about what differentiates the successful salesman and the non-successful salesman. Our recommendations for further research would be, therefore:-

a) A follow-up over a period of some years of the personnel selected by the system outlined in this report. Such a follow-up would consist of rating each salesman accepted for employment and seeing to what degree this rating corresponds to the eventual performance. To be most effective such a technique requires that candidates who receive very different ratings are selected. If the companies were able to choose only candidates rated high then we have no means of comparison. We would then have to compare the new staff with the performance of the poor, and the satisfactory, present staff.

b) A large scale investigation of personality of salesmen. There is very little data on personality factors in selling, although the present research is able to put forward tentative hypotheses. The first task is to collect this data. Two groups of salesmen are selected; a successful and non-successful group - both groups would need to be large. Each subject is given suitable questionnaires and inventories, and other information collected on each subject's background and any other factors considered pertinent. These other factors would include instruments designed to test for the presence of those factors hypothesised by various authorities as the personality factors underlying successful selling such as sociophilia, empathy, self-confidence, resilience, appearance, supportive personal circumstances, and also activity-passivity. A criterion analysis (31)

is performed to discover what factors differentiate the successful and non-successful groups. Where a non-standardised technique has been used information must also be gathered from a random selection of the population.

c) The investigation of different types of selling. This will involve an extremely difficult job of classification but, if numbers were large enough, the comparisons could be made in the same way and at the same time as the data gathered in the investigation outlined in b) Page 69.

d) It would then be possible, if our investigation had isolated factors differentiating the groups to devise a selection system.

e) It would be necessary to follow-up this system, as outlined in a) Page 69.

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