

PERS 235

THE CONSTRUCTION OF TWO SCALES OF MANAGERIAL STYLE

NATIONAL INSTITUTE FOR PERSONNEL RESEARCH COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH

CSIR Special Report PERS 235 (pp. $_{i-v}$; 1-28) UDC 658.01:658.311.56 Johannesburg, South Africa, March 1976

ISBN 0 7988 0874 8

CSIR Special Report PERS 235

Published by

National Institute for Personnel Research Council for Scientific and Industrial Research P O Box 10319 Johannesburg 2000

March 1976

Printed in the Republic of South Africa by National Institute for Personnel Research



SPECIAL REPORT

PERS 235

THE CONSTRUCTION OF TWO SCALES OF MANAGERIAL STYLE

T R TAYLOR

NATIONAL INSTITUTE FOR PERSONNEL RESEARCH COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH

CSIR Special Report PERS 235 (pp. i-v; 1-28) UDC 658.01:658.311.56 Johannesburg, South Africa, March 1976

ACKNOWLEDGEMENTS

This report presents the research performed under the project 3305.5; Work Motivation Scales.

This project is directed by Mr D J M Vorster, Director of the National Institute for Personnel Research.

The research has been carried out as part of the activities of the Psychometrics Division under the guidance of Mr D W Steyn and Mr M A Coulter.

The writer would like to extend special thanks to Mr R F Skawran, head of Personnel Selection, for his invaluable contribution to the definition of the scales of managerial style.

SUMMARY

This project has addressed itself to the construction of two scales of managerial style, one dealing with staff relations and the other with the structuring of work. The study took as its basic point of departure the conceptualizations of Blake and Mouton (1964) and Hemphill and Coons (1957). Certain theoretical and practical shortcomings are to be found in the work of these authors; in particular, their approach fails to take into account the possibility that different managerial styles may be effective in different situations.

This report reviews empirical evidence which invalidates Blake and Mouton's claim that there is a universally effective managerial style. Cognizance was taken, when framing the definitions employed in this study, of the situation-dependence of managerial effectiveness. Using these definitions two scales, Interaction and Structure, were constructed and applied to 200 upper-level managers. After item analysis both scales had a length of 20 items and reliabilities in the vicinity of 0,80.

CONTENTS

		Page No.
1.	INTRODUCTION	1
2.	APPROACHES TO THE STUDY OF MANAGERIAL EFFECTIVENESS	3
2.1	The Actuarial Approach	3
2.2	The Judgemental or Clinical Approach	4
2.3	The Descriptive Approach	5
2.4	The Situational Approach	6
2.5	The ''Managerial Style'' Approach	6
3.	DEFINITIONAL PROBLEMS OF THE STYLISTIC VARIABLES	9
4.	CURRENTLY AVAILABLE MEASURES OF MANAGERIAL STYLE	16
4.1	The Leadership Opinion Questionnaire (LOQ) of Fleishman (1969)	16
4.2	The Leader Behaviour Description Questionnaire (LBDQ) of Hemphill and Coons (1957)	17
4.3	The Styles of Management Inventory (SMI) devised by Hall <u>et al</u> (1964) for Teleometrics International	17
4.4	The Leader Adaptability Style Inventory (LASI) of Hersey and Blanchard (1974)	18
5.	CONSTRUCTION AND REFINEMENT OF THE ORIENTATION QUESTIONNAIRE (OQ)	19
5.1	Construction of the OQ	19
5.1.1	Test Format	19
5.2	Refinement of the OQ	21
6.	CONCLUSION	23
8	REFERENCES	25

1. INTRODUCTION

Management plays a crucial role in the performance of any organization. No matter what criterion is used of organizational performance, whether it be productivity, profits, staff turnover or employee satisfaction, the quality of management has a direct bearing on this criterion. No matter how able lower-level employees are, it remains for management to use and direct the abilities of staff to the best advantage.

It is not surprising, therefore, that an enormous amount of research has been directed, particularly in the United States of America, at the area of selection and training of effective managers. Research workers in this field have adopted a number of different approaches. Some have taken an empirical stance and have attempted to identify cognitive personality and biographical variables which covary with indices of managerial effectiveness. Generally, the empiricists have paid scant attention to theoretical considerations which could possibly explain their findings at the theoretical level. Other research workers, through the analysis of managerial jobs, have endeavoured to identify behaviours which are crucial to effective management. The rationale of this approach is to refer these behaviours back to broader mental abilities, skills or personality traits which, if possessed by the manager are likely to make him successful in his job. Yet other researchers have put their faith in situational "games" as instruments for selection and training. These tasks are designed to closely parallel the actual job and therefore have a high degree of face validity.

Although all of the above-mentioned approaches have specific shortcomings, there is one problem which they have in common: all are highly situation-dependent. Managerial jobs vary widely. From foreman to managing director, from industrial to commercial and state undertakings, from mammoth multinational companies to small private firms, from machine-intensive to labour-intensive operations, the managerial job can be expected to vary widely. Because the approaches mentioned above deal with the specifics of managerial tasks, they do not have the generality to be applicable to all managerial

situations. Hence, for maximal effectiveness, these approaches have to be tailor-made to suit each application.

Several investigators have attempted to circumvent the problem of situation-boundedness by studying the "how" rather than the "what" of managerial behaviour. They have asked how a manager does his job rather than what he does. The reasoning behind this is that stylistic variables, being aimed at a "molar" level of job performance are capable of transcending the content of particular jobs, whereas other approaches which concentrate on the "molecular" level of performance cannot free themselves from situation-dependence. Some space will be devoted in this study to a discussion of the degree to which the protagonists of the stylistic approach are justified in their claim.

The purpose of this study, in fact, is the identification, definition and measurement of managerial styles which appear, on theoretical and empirical grounds, to have relevance to effective managerial performance. The factor analytic work of Hemphill and Coons (1957) and others has provided an empirical basis for this study, and the theoretical contribution of Blake and Mouton (1964) has provided the point of departure for the theoretical aspect of the study.

A few words should be said about the format of this report. The next section will deal with the possible approaches to the study of managerial effectiveness. This will place the stylistic approach in the content of competing approaches. Following this is a discussion of the definitional problems encountered in the descripition of the stylistic variables. Thereafter, there is a section dealing with the currently available measures of managerial style. The final section before the conclusion deals with the construction and refinement of the scales of managerial style.

2. APPROACHES TO THE STUDY OF MANAGERIAL EFFECTIVENESS

This section will attempt a critical assessment of the various approaches to the study of managerial effectiveness.

2.1 The Actuarial Approach

This approach, which is almost totally devoid of any theoretical background is aimed at the identification, through empirical statistical methods, of variables which predict managerial effectiveness according to some criterion. Some of the criteria which have been used are: measures of productivity of the manager's unit, indices of employee morale, rate of staff turnover, or even the manager's salary adjusted for age and length of service. A wide range of possible predictors have been tried, most of them being cognitive, personality and biographical variables. Most of the studies have employed only one or two predictor variables, although a few have used more. Examples of actuarial studies are MacKinney and Wolins (1960), Comrey and High (1955), Meyer (1956) and Mahoney et al (1963). Most studies have obtained predictor-criterion correlations of a moderate-to-low order.

A small number of more ambitious studies have employed fairly large numbers of predictors. Multiple regression analysis has been used to derive weights for the predictors in order to maximize the correlation between a combined predictor score and the criterion. In some cases even the scoring keys of individual predictor measures have been modified in order to maximize correlations between predictors and the criterion. A study of this type was conducted by the Standard Oil Company of New Jersey (Campbell et all, 1970). Correlations of up to 0,75 between multiple regression scores and indices of managerial success were obtained.

The main shortcoming of this type of approach is that it capitilizes on chance variance in order to maximize the predictor-criterion correlation, with the result that prediction under differing conditions (e.g. a new sample of managers or a different organization) is likely to suffer. Another way of putting this is to state that the actuarial approach is highly situation-specific.

2.2 The Judgmental or Clinical Approach

In this approach the data on the manager is not dealt with in a purely statistical manner. At some point there is an intervention whereby an intermediary, using his own judgment and insights, combines scores and personal impressions and makes predictions regarding the manager's standing on the criterion variable. Generally the validity studies which are performed using the judgmental approach are predictive in nature, unlike the actuarial studies which usually concern themselves with concurrent validity. Hence, from the point of view of the lack of any possible predictor-criterion contamination, the judgmental approach is methodologically satisfactory.

Some of the studies which have employed the clinical approach have produced quite promising results. Albrecht, Glaser and Marks (1964) published validities which varied from 0,43 to 0,58. Huse (1962) on the other hand reports validities based on the judgmental method which are inferior to those obtained purely on the strength of objective measures. It appears that if the judgmental approach is to work successfully, an organization must be prepared to make a large investment, in the method, in the form of managers' time and the time of a clinical psychologist.

2.3 The Descriptive Approach

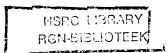
This approach should not be regarded as an alternative to the above-mentioned approaches. Both methods previously mentioned may draw on the findings of the descriptive approach. However, as this approach constitutes a viable way of looking at the problems of managerial effectiveness, it will be dealt with in its own right.

The descriptive approach tries to answer the question: What does a manager do? It attempts to break down the managerial job into a number of "behavioural units". These in turn may be related back to the manager's abilities. A successful manager is one whose abilities suit the behavioural demands of his job.

One of the first research workers to make explicit use of this approach was Fayol (1949). He identified a number of behaviours which he saw as crucial to the managerial task: planning, organizing, directing, co-ordinating and controlling. Most modern research in this area relies on activity records filled in by managers. After the data has been collected, the researcher attempts to categorize the behaviour into classes. Horn and Lupton (1965) conducted a study of this sort. They classified managerial behaviour according to three criteria: method of working, purpose of work activity and location of work activity.

Boshoff (1967) criticizes the descriptive method on the grounds that the managerial functions which are identified generally constitute rather sterile concepts. For instance, knowledge that managers spend an average of two hours a day writing letters tells one nothing about the content of the letters. Campbelletal (1970) point out that users of the descriptive approach have generally failed to discover fundamental dimensions which could be used to describe the differences among various managerial jobs. This criticism is highlighted by the work of Hemphill (1959, 1960) and Stewart (1967). Hemphill cluster analyzed a large number of executive jobs. Ten main job clusters of managerial duties emerged. Stewart's (1967) dimensional analysis of the way managers spend their time produced five main types of managerial job. Campbelletal (1970) remark that these two studies have pointed to the differences among managerial jobs. Further studies are now necessary to develop useful dimensions for describing manager's jobs.

An offshoot of the descriptive approach is the Critical Incidents Method (CIM) developed by Flanagan (1954). In this method, anecdotal material is collected concerning managerial tasks which were particularly well or particularly poorly performed. The aim of the CIM is to identify behaviours which are crucial in making the difference between doing a job effectively and doing it ineffectively. One of the major problems of the CIM is that difficulties are often encountered in the classification of critical incidents.



2.4 The Situational Approach

This approach takes as its basic point of departure the premise that a manager's effectiveness can be determined most accurately by giving him a task to do which closely resembles the managerial tasks he will be expected to do in the real situation. The method generally used to simulate the managerial job is the In-Basket technique. This technique, which was developed by Frederiksen et al (1957) has been used widely both for selection and training. According to Lopez (1966) p.15: "Whether the exercise is simple or complex, its hallmark as a management game is its close approximation to reality. The player is placed in a controlled situation in which he must interact with a variety of stimuli and in which there is little likelihood of an obvious choice of response. Under such conditions it is presumed that he will fall back upon his real-life behaviour to respond as he would in an actual situation".

The test consists of memoranda, orders, letters from clients, subordinates, peers and superiors, etc; in other words the In-basket contains the usual correspondence one would be likely to find in a real in-basket. The subject is free to write letters, make telephone cails, give orders, etc., but he must record all his responses on paper. The In-basket technique is flexible in that the contents of the in-basket can be varied to suit different types of managerial Lopez (1966) mentions a number of such specialized In-baskets. The jobs. biggest problem of the In-basket concerns its assessment. The appraisal of a subject's performance is very difficult because all the assessor has to work on is a number of memoranda, letters, telephone calls, etc. Scoring therefore is in danger of becoming subjective. The difficulty in assessing Inbasket responses is partly attributable to the fact that this technique is attempting to measure a multitude of dimensions of managerial performance at the same time.

2.5 The "Managerial Style" Approach

Unlike the descriptive approach which attempts to ask what a manager does, the "managerial style" approach attempts to ask how he does it. The protagonists of this approach hold that it has more situational generality than the descriptive approach because, while the contents of a manager's job may vary

from position to position, he is still likely to execute different jobs in the same style. The implication is that, if stylistic variables can be used as predictors of managerial effectiveness, then these variables should function well as predictors across a wide range of situations.

The two major stylistic dimensions which have been identified by a number of research workers are Consideration and Initiating Structure. These dimensions have also been called Concern for People and Concern for Production. Most studies have found them to be relatively independent of each other. Some of the research workers who have been concerned with the stylistic variables are Fleishman (1953), Hemphill and Coons (1957) and Peres (1962). Blake and Mouton (1964) have backed up the empirical work of the above researchers with a theoretical approach. One remarkable fact about the impirical studies is that a number of studies, conducted independently of one another, have demonstrated the existence of two major stylistic variables which, broadly speaking, are similar from study to study.

Two of the major authors in this field, Hemphill and Coons (1957) based their work on nine designated dimensions of leader behaviour. These nine dimensions served as a basis for item writing. The resultant scale was called the Leader Behaviour Description Questionnaire (LBDQ). In a factorial study of the items of LBDQ, Halpin and Winer (1957) identified two major stylistic factors:

<u>Consideration:</u> High positive loadings on this factor are associated with behaviour indicative of friendship, mutual trust, respect and warmth. High negative loadings are associated with authoritarian and impersonal relations.

<u>Initiating Structure:</u> The behaviours with high positive loadings on this factor are those which indicate that the supervisor organizes and defines the relationship between himself and the members of his staff. He tends to define the role which he expects each subordinate to assume and tries to establish well-defined patterns of organization, channels of communication and ways of getting jobs done.

The LBDQ is irrended to be filled in by the manager's subordinates, although peers and superiors can also complete the questionnaire. Fleishman (1953, 1957) has developed a further questionnaire called the Leadership Opinion Questionniare (LOQ) which is intended to be completed by the supervisor himself.

A fairly large amount of work has gone into the investigation of the validity of the LBDQ and LOQ as predictors of managerial success. (Some of the studies are by Parker, 1963; Bass, 1956; Halpin and Winer, 1957; Hemphill, 1955 and Fleishman and Simmons, 1970). Korman (1966), in a review, concludes that in both the LBDQ and the LOQ no consistent relationship emerges between criteria of managerial effectiveness and stylistic variables; Stogdill (1974) on the other hand, in a similar review, presents more positive evidence for stylistic measures, the LBDQ in particular, as predictors of managerial success, especially as regards the relationship between employee satisfaction Korman (1966) points out that various situational variables and Consideration. may well affect the size and direction of the correlations between predictor and criterion. He mentions as possible moderator variables organizational climate and organizational size. Vroom (1964) has suggested that the wishes and expectancies of subordinates might influence the degree to which a particular style is appropriate and successful. Fiedler (1957) in proposing a contingency model of leadership has identified three situational variables which vitally affect the nature of the leadership task: leader-group relations, position power and task structure. Hersey and Blanchard (1974) have pointed out that what they call the "maturity" of the manager's subordinates might affect the appropriateness and effectiveness of various managerial styles. Stogdill (1974) has identified six main types of leadership: Authoritative (dominator), Persuasive (crowd arouser), Democratic (group developer), Intellectual (eminent man), Executive (administrator) and Representative (spokesman). Different types of leadership require different styles. Clearly, if a crowd arouser used an Intellectual or Representative style of leadership he would fail abysmally in The Executive and Administrative styles may be subsumed under the title of Initiating Structure, whereas the Democratic style may be identified with Consideration. Little attention has been devoted to the other styles which Stogdill has identified.

It seems then, that even the stylistic approach is incapable of completely transcending the problem of situation-boundedness. Nevertheless, Blake and Mouton (1964), in their theoretical work, contend that only one combination of styles, the so-called 9-9 approach is effective in all situations. The 9-9 approach combines high concern for Production with high concern for People. A review of relevant literature indicates that Blake and Mouton's view is not justified and that demonstrates that Blake and Mouton have not paid enough attention to situational variables. Palmer (1974) has summed up the situation succinctly: "A single, unique style of management has been the Holy Grail of personality and management researchers for many years research for over 40 years has failed to uncover such unique leadership qualities. On the contrary, a leader with certain traits may be effective in one situation and ineffective in another" (p. 283).

3. DEFINITIONAL PROBLEMS OF THE STYLISTIC VARIABLES

Of the various approaches to the study of managerial effectiveness which were mentioned in the previous section, this particular study will pursue the stylistic approach. The stylistic approach will be adopted because, despite problems in this direction, it appears to be less situation-dependent than the other approaches. The stance taken in this study will not be that one particular managerial style is conducive to effective managerial performance in all situations; rather, the weaker claim will be made that stylistic differences play an important role in the relative effectiveness of managers, certain styles being conducive to effectiveness in certain situations.

A close scrutiny of the theoretical work of Blake and Mouton (1964) reveals that value judgements attend their descriptions of the various combinations of managerial styles. These authors have conceptualized what they call a "managerial grid" which is a 2-dimensional 9 x 9 area. Dimension 1 represents the "Concern for Production" style and Dimension 2 the "Concern for People" style. The major part of Blake and Mouton's (1964) book is devoted to a discussion of five major combinations of styles: 9 - 1 (High Concern for Production, Low Concern for People), 1 - 9 (Low Concern for Production, High Concern for People), 1-1 (Low Concern for Production, Low Concern for People), 5 - 5 (Moderate Concern for Production and Moderate Concern for People) and 9 - 9 (High Concern for Production, High Concern for People).

It is clear from Blake and Mouton's description of these styles that the only really "good" style is the 9 - 9. Because of the value judgements which are an integral part of Blake and Mouton's conceptualization of the managerial styles, these authors implicitly ignore the role which situational variables apparently play in the effectiveness of particular styles of management.

Blake and Mouton's (1964) conceptualization of managerial style suffers from a further deficiency. The most satisfactory approach would be to offer clear definitions of each dimension of managerial style and then, if desired, to describe particular combinations of styles. Blake and Mouton, on the other hand, offer virtually nothing in the way of dimension definitions but devote an inordinate amount of space to the description of particular style combinations. It soon becomes clear that they have failed to conceptualize the styles independently. In fact, Blake and Mouton (1964) even go so far as to admit that the nature of the dimensions change with changes in style combinations:

"In addition, the character of <u>concern for</u> at different grid positions differs, even though the <u>degree</u> may be the same. For example, when high concern for people is coupled with a low concern for production, the type of people concern expressed (i.e. that people be "happy") is far different from the type of high concern for people shown when a high concern for production is also evident (i.e. that people be involved in the work and strive to contribute to organization purpose)". (Blake and Mouton, 1964, p. 11)

Fleishman (1953) has conceptualized his two dimensions independently, but as is the case in Blake and Mouton, only one style combination is desirable from the point of view of effectiveness. According to Fleishman, Consideration reflects the extent to which an individual is likely to have job relationships with subordinates which are characterized by mutual trust, respect for subordinates' ideas, consideration of their feelings, etc. Structure reflects the extent to which an individual is likely to define and structure his own role and those of his subordinates toward goal attainment. High scorers on the structure dimension play a very active role in directing group activities through planning, communicating information, scheduling, criticizing, trying out new ideas, etc. A low scorer is likely to be relatively inactive in giving direction

in these ways. It can be seen from these descriptions that Fleishman envisages only one ideal style (High Consideration and High Structure). Apart from the obvious difficulty of accurately measuring individual differences on constructs so heavily loaded with social desirability, these descriptions, like those of Blake and Mouton (1964), suffer from the disadvantage that cognizance is not taken of the possible influence of situational variables on style effectiveness. Empirical evidence has shown that scales based on these definitions have erratic, but mostly indifferent, correlations with criteria of managerial effectiveness, probably for the reasons mentioned above.

These considerations led, in the present study, to a fresh approach which was guided by past experience, but which also took cognizance of the exigencies of practical usefulness. The first criterion was that all possible combinations of the two scales should represent managerial styles which would conceivably be effective in certain situations. A second important consideration was that the scales should be conceptualized independently. This avoids Blake and Mouton's questionable practice of developing typologies.

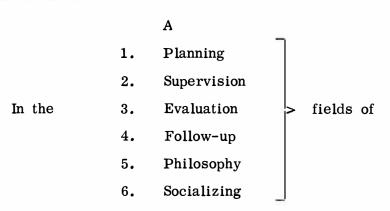
Certain features of the previous work on managerial style appeared to be worth-while and were therefore retained. Blake and Mouton (1964) seem to be making a sound observation when they divide organizational activity into two major areas: people and production. The ultimate aim of an organization is to maximize production and minimize excessive staff turnover. Hence, "people" and "production" refer to the two major areas of organizational effectiveness. It is reasonable to expect, therefore, that managerial styles which relate to these two major areas are likely to have a marked effect on organizational effectiveness.

All the above-mentioned considerations were borne in mind when the definitions for the purpose of the present study were drawn up. Because of certain advantages which it affords, it was decided to follow the Guttman (1957) facet approach in framing the definitions, although the intention was not to follow this approach rigorously. The definitions of the stylistic dimensions were cast into the format of mapping sentences. Mapping sentences have the advantage that item writing is facilitated and the pool of items thus constructed

is more likely to cover comprehensively the selected domain than if a conventional definition is employed. The facet approach facilitates item writing because it divides up the definitional domain into a number of fields and relates these to a number of aspects as a cartesian product. The item writer is therefore given very precise instructions as to the range and type of items which are required.

The above remarks will become clearer in the context of the actual mapping sentences which were devised.

Dimension 1 : Interaction

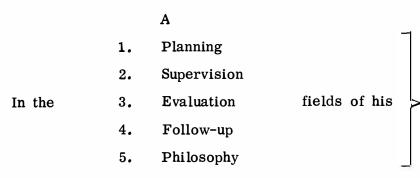


his managerial role, as it involves

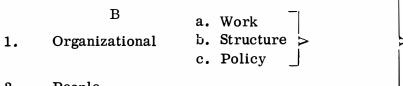
 \mathbf{B}

- Superiors
 Peers the supervisor
 Subordinates
 prefers to do organizational work,
- 1. As a member of a team, interacting with others and encouraging espirit de corps
- 2. On his own, as an independent individual

Dimension 2 : Structure



managerial role as it relates to



2. People

the supervisor prefers to do work which

- allows him scope to provide new perspectives and to initiate and organize
- involves the refinement and elaboration of existing machinery

A number of comments about these definitions should be made. should be noted that Dimension 1 is related to the "Consideration" or "Concern for People" dimension which has been mentioned previously. Dimension 2 is related to the "Initiating Structure" dimension, but relatively unrelated to Blake and Mouton's (1964) "Concern for Production" dimension. It should be noted that the definitions used for the present study are much less "onesided", i.e. less saturated with value-laden considerations of socially desirable and socially undesirable managerial practices. Both ends of the continua represent types of managerial behaviour which are appropriate in certain situations. Stewart (1967) in his dimensional analysis of the way managers spend their time identified certain jobs which require a high degree of inter-action with others while other managerial jobs require the opposite of the manager. The two extremes of the 'Interaction' dimension accommodate such differential requirements of managerial jobs to a much greater degree than was the case with previously used dimensions.

Similarly, in Dimension 2, both ends of the continium describe behaviour which is appropriate in certain circumstances. Managers in the top echelon are required to provide new perspectives and initiate new structures. In the middle ranks of many large organizations, however, the most appropriate and effective managerial behaviour is often directed at the refinement and elaboration of existing machinery.

A few words should be said about the facets of the two mapping sentences. The cartesian product $A \times B$ forms the set of all possible contingencies which the definition covers. Theoretically, it is possible to pair each member of A with every member of B, but in practice it is usually the case that certain combinations do not make logical or psychological sense. This is probably the case in combination A(4) B(2) of the "Structure" dimension: a manager does not follow up his staff, but rather the outcome of their work.

The elements of field A were partly derived from Blake and Mouton (1964). According to these authors, the traditional managerial role can be split up into the four aspects of planning, supervision, evaluation and follow-up. The philosophy element was derived from the Teleo-metrics Styles of Management Inventory (Hall, Harvey and Williams, 1964). In the Interaction dimension, a further element, Socializing was also added because of its appropriateness in the contest of this dimension.

The following are brief clarifications of the six aspects mentioned above:

Planning

This phase of management concerns the making of managerial decisions, planning of work flows, identification of evaluative criteria, etc.

Supervision

This phase concerns the actual translation of plans into action, especially as regards the directing and controlling of the activities of subordinates.

Evaluation

Following the accomplishment of work it is necessary to review how the work has been done in an attempt to learn from successes and failures. This phase also involves the giving of feedback to staff members regarding their performance.

Philosophy

A manager's philosophy of management reflects the basic set of attitudes, beliefs, feelings and assumptions which he has about people, their competence and how best to accomplish work.

Socializing (Only used in the Mapping sentence of Dimension 1)

This aspect is not directly connected with the execution of managerial duties but concerns the degree to which the manager enjoys or seeks out contact with other staff members, particularly in social settings.

The elements of set B were not derived from any particular source, but were selected after rational analysis of the managerial situation. In Dimension 1 it is reasonable to conclude that interaction may take place only with superiors, peers or subordinates. Determining the elements of set B of Dimension 2 proved somewhat more difficult, but the elements of this set appear to provide a comprehensive coverage of the aspects. Short clarifications of these are given below:

Work

This refers to the day-to-day productive activities of the organization, particularly those falling under the jurisdiction of the manager.

Structure

By this is meant the underlying hierarchical framework of the organization: channels of communication, chains of command, etc.

Policy

This refers to the guiding procedures, strategies and courses of action which organizations or divisions within organisations develop and use in order to secure long-term efficiency and survival.

People |

By people is understood work peers, superiors and subordinates.

4. CURRENTLY AVAILABLE MEASURES OF MANAGERIAL STYLE

The present section will concern itself not so much with the content as with the format of the well-known currently available measures of managerial style. A review of the different measures of style will afford some idea of the merits and demerits of various formats and will help in the determination of a suitable format for the purpose of the present study.

4.1 The Leadership Opinion Questionnaire (LOQ) of Fleishman (1969)

In this 40-item questionnaire which is intended to be answered by the manager himself, the respondent is asked to indicate what he, as a supervisor, believes to be the desirable way to act in various managerial situations. Each item consists of a statement followed by five alternatives which indicate possible frequencies of activity. The respondent is asked to endorse one of the five.

The following is an example of an item:

Do personal favours for persons under you:

Often	Fairly Often	Occasionally	Once in a while	Very seldom

A criticism which may be levelled against this instrument is that it requires the manager to record his feelings about what he thinks a supervisor <u>ought</u> to do, not what he actually does. It is highly probable that considerations of social desirability influence the subject's responses to the extent that there is little correspondence between the manager's actual behaviour and his scores on the LOQ.

4.2 The Leader Behaviour Description Questionnaire (LBDQ) of Hemphill and Coons (1957)

This questionniare is similar in format to that of Fleishman (1969), except that the items refer to the actual behaviour of the manager. Also, the LBDQ is not intended to be filled in by the supervisor himself, but rather by peers, subordinates or superiors. The correlations between the LBDQ and criteria of managerial effectiveness have generally been higher than those obtained using the LOQ. This is probably partly due to the fact that the LOQ taps opinions whereas the LBDQ taps behaviours. One drawback of the LBDQ is that the accuracy of the assessments depend on the extent to which the raters are familiar with the supervisor's behaviour in a wide variety of situations: in many cases the raters' knowledge of this behaviour may be incomplete. A further disadvantage is that the LBDQ cannot be used for selection purposes when the supervisor applies for a job at another firm.

4.3 The Styles of Management Inventory (SMI) devised by Hall, Harvey and Williams (1964) for Teleometrics International

This instrument which is based heavily on the work of Blake and Mouton (1964) taps the four main supervisory areas of planning, inplementation, evaluation and philosophy; separate scores for all four areas are available on both the stylistic dimensions.

Each item starts with a preamble. Following this are five statements which relate to the preamble and which the subject has to rate. Apart from those items dealing with the philosophy of management, all statements refer to the respondent's actual behaviour. The five statements of each item tap five

different combinations of styles according to the Blake and Mouton Model: 1-1, 9-1, 1-9, 9-9 and 5-5. The SMI is intended primarily for training. Although a sophisticated instrument in certain ways, the SMI suffers from the disadvantage of having been based on the Blake and Mouton "typologies". Consideration and Production are not adequately handled as separate dimensions.

4.4 The Leader Adaptability Style Inventory (LASI) of Hersey and Blanchard (1974)

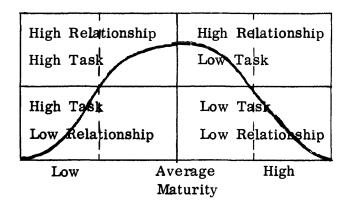
This inventory may be completed either by the supervisor himself or by others who know him. The LASI consists of 12 items. In each item there is a description of a situation, followed by four possible actions. The respondent is required to endorse the action which he thinks he would follow in the given situation. Although Hersey and Blanchard do not explicitly use Blake and Mouton's model, the four statements of each item correspond to 9 - 1, 1 - 9, 1 - 1 and 9 - 9 managerial styles. A manager's style profile on the LASI is the number of responses which fall in each quadrant. This somewhat crude classification suffers from the same disadvantage of the SMI (the scales are not treated independently).

Hersey and Blanchard make the valid point that different situations may demand different styles for effective performance:

"The difference between the effective and the ineffective styles is often not the actual behaviour of the leader, but the appropriateness of this behaviour to the situation in which it is used" (Hersey and Blanchard, 1974, p. 27).

Hersey and Blanchard stress the importance of the maturity of subordinates as a situational variable. This view is based on their Life Cycle theory: the relationship between effectiveness and subordinate maturity posed by this theory is illustrated in figure 1.

Figure 1



5. CONSTRUCTION AND REFINEMENT OF THE ORIENTATION QUESTIONNAIRE (OQ)

5.1 Construction of the OQ

The previous section should have made it clear that all the available measures of managerial style have some disadvantage, either in respect of style definitions or in respect of format. In the present study it was decided to use both a novel format and scale definitions which differ significantly from previous definitions.

The definitions have been discussed fully in a previous section. It will be remembered that, in framing the definitions, a conscious effort was made to reduce or eliminate the effects of social desirability. Hence it may be possible in the present approach to come nearer to the respondent's real behaviour rather than the behaviour which he thinks is right or which he thinks may help him to secure a job or promotion.

5.1.1 Test Format

The format of the test will now be discussed. It was decided that, apart from other disadvantages, the format of the LOQ and LBDQ are too restrictive: all items depend on endorsements of frequency. The formats of the SMI and LASI are not conducive to the independent measurement of the two styles. In order to overcome these shortcomings a format was adopted which has been used successfully before in the measurement of personality traits (Steyn, 1974).

In this format the behaviour, preferences or attitudes of two hypothetical persons, A and B are described. The subject can make four possible responses. By endorsing either A or B he indicates that he identifies very closely with the behaviour, attitudes etc., of A or B respectively. The other two responses are a and b. By endorsing a, the subject indicates that he feels he is more like A than B and by endorsing b he indicates that he feels he is more like B than A. This format has the advantage over the often-used two-choice format that subjects who do not feel that either A or B suit them completely are able to make the weaker a or b responses. In addition, the four choice item format allows each item to contribute more variance to the scale than a two-choice item format; hence it is possible to obtain a given level of reliability with shorter scales.

A total of fifty items were generated (25 for each scale) and cast into the four-choice item format. By using the Guttman facet design, the definitional domain was sampled as widely as possible. In each item the A and B statements represented behaviours or views at or near the two extremes of the dimension in question. Hence A might represent a preference for refining existing organizational machinery and B a preference for developing new organizational structures. The items were keyed as follows: For the Interaction scale, a high score represents a preference for high interaction and a low score represents a preference for working alone. Structure scale a high score represents preference for initiating structure and a low score represents preference for working within the structure of the system. If in a particular item B represents the high end of the scale, then endorsement of this option scores 3 points. The other options b, a and A score 2, 1 and 0 points respectively. Therefore the highest possible score with this type of format is three times the scale length and the lowest possible score is zero.

The items were randomly presented in the Orientation Questionnaire. The order of appearance of Interaction and Structure items was randomized and within each item the order of appearance of high and low representatives of the scale was randomized. Hence A sometimes represented the high end of the scale and sometimes the low end. These two randomization procedures help to reduce response set and also make it more difficult for the subjects to deduce the underlying constructs on which he is being measured.

Below are examples of Structure and Interaction items:

Structure Item

A new branch of an organization has just been opened. As Manager,

A structures the work of the branch using his own insights; B takes a look at routines used by other branches and uses them, making adaptation where necessary.

A represents the "innovative structuring" end of the continium and B represents the "structuring within the system" end.

Interaction Item

A believes that for a firm to run effectively there should be plenty of interpersonal contact and consultation amongs staff members;

B feels that this is an unnessary waste of time which could even be counterproductive.

A represents the "preference for working in groups" end of the scale and B the "preference for working alone" end.

5.2 Refinement of the OQ

The 50- item OQ was administered to a group of 200 upper-echelon managers. Of this sample, 127 also completed the Marlowe-Crowne scale of social desirability (Crowne and Marlowe, 1960). The Marlowe-Crowne measures the degree to which a subject endorses statements which are socially desirable but which are highly unlikely to be true of him. In other words, the Marlowe-Crowne measures the tendency to "fake good" (An example of an item is: "I always try to practice what I preach"). This measure of social desirability was administered along with the OQ in order to determine whether subjects were influenced by considerations of social desirability when responding to the OQ.

Before item analysis, the Structure scale had a K.R. 20 reliability of 0,80 and the Interaction scale 0,78 (Kuder and Richardson, 1937). Item analysis did not improve these reliabilities but the same reliability was found to be attainable with only 20 items per scale. The reduction of the scale lengths also served to render the distribution of scores for both scales less skewed. Nevertheless the scores tend to be skewed towards the upper ends of the scales. This is not entirely unexpected since the sample was a highly-selected group of top managers. It seems reasonable that at this level high interaction combined with innovating structure is an effective managerial style. It is to be expected that if the OQ is appplied to a more heretogeneous group of supervisors the score distributions will become less skewed, the variances will increase and the K.R.20 values will rise. Nevertheless, reliabilities in the vicinity of 0,80 are creditable for These scales have the advantage that, being short, they 20-item scales. are quick to administer.

The means, standard deviations and reliabilities of the 20-item scales are displayed in Table 1.

Table 1

	Structure	Interaction
Means	41,24	41,82
SDs	7,789	7,255
KR20s	0,80	0,78

The Marlow-Crowne social desirability scale correlated -0,18 with the Structure scale and -0,0002 with the Interaction scale. Based on a sample size of 127, the former correlation is significant while the latter, of course, is not. The correlation between the Marlow-Crowne and Structure is noteworthy because it is negative. Hence the tendency was for "innovative" structurers to be low on social desirability. As was mentioned previously, an attempt had been made to give the scales a neutral tone as regards social desirability, but if judges were forced to say which end of the Structure scale they thought was the more socially desirable it would be expected that most of them would choose the upper (initiating structure) end. As the opposite

was found to be the case some other effect must be operating. One likely explanation is that those managers who structure "within the system" are those who are anxious to avoid "doing the wrong thing" or "rocking the boat" by introducing procedures which are not currently used, or which are frowned upon by top management. If this is the case, then structurers "within the system" are higher on social desirability than "innovative structurers"and the negative correlation between the Marlowe-Crowne and the Structure scale in no way invalidates the scores on the Structure scale. The above argument is even more plausible when one remembers that the Structure distribution is skewed towards the upper end of the scale; hence it is unlikely that social desirability is influencing subjects' responses.

The Structure and Interaction scales were found to correlate 0,22. This is significant at the 1% level. The actual magnitude of the correlation, however, is not great, there being only 4,8% shared variance. Wiessenberg and Kavanagh (1972) reviewed 72 studies which used either the LOQ or the LBDQ and found that 37 (51%) reported significant positive relationships between the two leadership dimensions, 7 (10%) reported significant negative correlations and 28 (39%) reported non-significant relationships. The authors identified two possible moderator variables, organizational level and organizational type which could possible influence the correlation between the two leadership dimensions. After examining the 72 studies they were unable to form any firm conclusions regarding these two variables. It is conceivable that some other situational variable influences the relationship between managerial styles.

6. CONCLUSION

The present study has succeeded in the aim of constructing a pair of stylistic scales which have the advantage of being both very short and creditably reliable. In addition, it appears that social desirability which often adversely affects the validity of questionnaire-type instruments does not spuriously influence responses on the OQ. Data from a further and more heterogeneous sample is needed to confirm these findings.

The present scales should prove to be of more practical use than previous scales of leadership style, because all possible combinations of scores on the two scales represent viable styles which should prove effective in appropriate managerial settings. The research by Hemphill (1959, 1960) and Stewart (1967) has shown that the demands and content of managerial jobs vary widely and other research has shown that the traditionally hallowed 9 - 9 style is not universally effective.

The OQ can be used to identify four basic style combinations:

- 1. Preference for innovative structuring and for working in groups;
- 2. Preference for structuring existing machinery and for working in groups.
- 3. Preference for innovative structuring and for working alone.
- 4. Preference for structuring existing machinery and for working alone.

Two possible strategies may be followed in using the OQ for selection purposes. The first possibility is to perform a job analysis and determine which of the four style combinations is most appropriate for the job in question. This could then be used as a criterion for selection. The second possibility replaces the step of performing a job analysis with an empirical investigation of the effectiveness of managerial styles. To this end, ratings of job effectiveness could be correlated with scores on the two stylistic variables. If at some future date more research is done on the major dimensions of executive positions it might become possible to identify optimal managerial styles for jobs with particular dimensional values.

7. REFERENCES

- ALBRECHT, P, E M GLASER and J MARKS (1964) Validation of a Multiple assessment procedure for managerial personnel. <u>Journal of Applied Psychology</u>, 48, 351-360.
- BASS, B M (1956)

 Leadership opinions as forecasts of supervisory success.

 Journal of Applied

 Psychology, 40, 345-346.
- BLAKE, R R and JANE S MOUTON (1964) The managerial grid.

 Houston, Gulf Publishing Co.
- BOSHOFF, A B (1967) 'n Vergelyking van drie metodes vir die evaluering van bestuur poste in 'n tersiere onderneming.

 Unpublished Ph. D. thesis, University of Port Elizabeth, Port Elizabeth.
- CAMPBELL, J P, D M DUNNETTE, E E LAWLER and K E WEICK (1970)

 Managerial Behaviour, performance and

 effectiveness. New York, McGraw Hill.
- COMREY, A <u>and</u> W HIGH (1955) Validity of some ability and interest scores. <u>Journal of Applied Psychology</u>, 39, 247-248.
- CROWNE, D P and D MARLOWE (1960) A new scale of social desirability independent of Psychology. <u>Journal</u>
 of Consulting Psychology, 24, 349-354.
- FAYOL, H (1949) <u>General and Industrial Administration</u>, London, Air Isaac Pitman and Sons.
- FIEDLER, F E (1957) A contingency model of leadership effectiveness. In L Berkowitz (Ed) Advances in experimental social psychology. New York, Academic Press.
- FLANAGAN, J C (1954) The critical indicent technique. <u>Psychological</u>
 Bulletin, 51, 327-358.
- FLEISHMAN, E A (1953) The description of supervisory behaviour.

 Journal of Applied Psychology, 37, 1-6.

- FLEISHMAN, E A (1957) The Leadership Opinion Questionnaire. In

 R M Stogdill and A E Coons (Eds.) Leader

 Behaviour: Its Description and Measurement.

 Ohio State University Bureau of Business

 Research, Research Monograph, No. 88.
- Manual for Leadership Opinion Questionnaire, Chicago, Science Research Associates Inc.
- FLEISHMAN, E A and J SIMMONS (1970) Relationship between leader patterns and effectiveness ratings among Israeli Foremen. Personnel Psychology, 23,169-172.
- FREDERIKSEN, N, D R SAUNDERS and BARBARA WAND (1957) The In-basket Test. Psychological Monographs.

 General and Applied, 71, whole No. 438.
- GUTTMAN, L (1957) Introduction to Facet design and analysis,

 Brussels. <u>Proceedings of the Fifteenth Inter-</u>
 national Congress of Psychology, 130-132.
- HALL, J, J B HARVEY and MARTHA WILLIAMS (1964) Styles of

 Management Inventory. Conroe (Texas)

 Teleometrics International.
- HALPIN, A W and B J WINER (1957) A Factorial Study of the Leader

 Behaviour Descriptions. In R M Stogdill and

 A E Coons (Eds). Leader Behaviour: Its

 Description and Measurement. Ohio State

 University, Bureau of Business Research,

 Research Monograph No. 88.
- HEMPHILL, J K (1955) Leadership behaviour associated with admininstrative reputations of college departments.

 Journal of Educational Psychology, 46, 385-401.
- HEMPHIL, J K (1959) Job Descriptions for executives. <u>Harvard</u>
 Business Review, 37, 55-67.
- HEMPHILL, J K (1960) Dimensions of executive positions. Ohio
 Studies in Personnel Research Monographs.
 Ohio State University, Bureau of Business
 Research, Research Monograph, No. 98.

- HEMPHILL, J K and A E Coons (1957) Development of the Leader

 Behaviour Description Questionnaire. In

 R M Stogdill and A E Coons (Eds.) Leader

 Behaviour: Its Description and Measurement.

 Ohio State University, Bureau of Business

 Research, Research Monograph, No. 88.
- HERSEY, P and K H BLANCHARD (1974) So you want to know your leadership style? <u>Training and Development</u>

 <u>Journal, 28, 22-37.</u>
- HORNE, J H and T LUPTON (1965) The work activities of "middle" managers. Journal of Management Studies, 1, 14-33.
- HUSE, E F (1962) Assessments of higher level personnel. IV.

 The validity of assessment techniques based on systematically varied information.

 Personnel Psychology, 15, 195-205.
- KORMAN, A K (1966) "Consideration", "Initiating Structure" and organizational criteria a review.

 Personnel Psychology, 19, 349-361.
- KORMAN, A K (1968) The prediction of managerial performance: a review. <u>Personnel Psychology</u>, 21, 295-322.
- KUDER, G F and M W RICHARDSON (1937). The theory of the estimation of test reliability. <u>Psychometrika</u>, 2, 151-160.
- LOPEZ, F M (1966) Evaluating executive decision making.

 AMA Research Study, 75, American

 Management Association, Inc.
- MACKINNEY, A and L WOLINS (1960) Validity Information

 Exchange. Personnel Psychology, 136,

 443-447.
- MAHONEY, T A, T H JERDEE and S J CARROLL (1963) <u>Development of managerial performance: a research approach.</u> Cincinnati, South Western, 1963.
- MEYER, H H (1956) An evaluation of a supervisory selection program.

 Personnel Psychology, 9, 499-513.

PALMER, W J (1975) Management effectiveness as a function of personality traits of the manager. Personnel Psychology, 27, 283-295. PARKER, T C (1963) Relationships among measures of supervisory behaviour, group behaviour and situational characteristics. Personnel Psychology, 16, 319-334. PERES, S H (1962) Performance dimensions of supervisory position. Personnel Psychology, 15, 405-410. STEWART, R (1967) Managers and their jobs. London, Macmillan. STEYN, D W (1974) Test administrator's manual for South African Personality Questionnaire. Johannesburg, National Institute for Personnel Research. STOGDILL, R M (1975) Handbook of Leadership. New York, The Free Press, VROOM, V H (1964) Work and motivation. New York, Wiley. WIESSENBERG, P and M J KAVANAGH (1972). The independence of initiating structure and consideration: a

review of the evidence. Personnel

Psychology, 25, 119-130.



