

THE ACHIEVEMENT MOTIVE OF MANAGERS: A FACET ANALYSIS

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ABSTRACT

The achievement motive of midlevel managers was studied within the framework of the theoretical facet model of Elizur for achievement motive by applying the Achievement Motive Questionnaire of Elizur on 118 midlevel managers. The results of the smallest space analysis technique indicated that the managers possessed a clear time perspective and that they could clearly differentiate between the challenge to confront themselves in the problem situation and to find a solution for the problem situation. The instrumental orientation of the managers took a central place, and it was also possible to distinguish clearly between the cognitive and affective behaviour orientation.

OPSOMMING

Die prestasie-motivering van middelvlakbestuurders is binne die raamwerk van die teoretiese fasetmodel van Elizur vir prestasie-motivering ondersoek deur die Prestasie-motiveringvraelys van Elizur op 118 middelvlakbestuurders toe te pas. Die resultate van die kleinste ruimtelike ontledingstegniek dui daarop dat die bestuurders 'n duidelike tydsperspektief besit en dat hulle duidelik kon onderskei tussen die uitdaging om hulle self in die probleemsituasie te konfronteer en om 'n oplossing vir die probleemsituasie te vind. Die bestuurders se instrumentele oriëntasie het sentraal gelê en daar kon ook tussen die kognitiewe en affektiewe oriëntasies duidelik onderskei word.

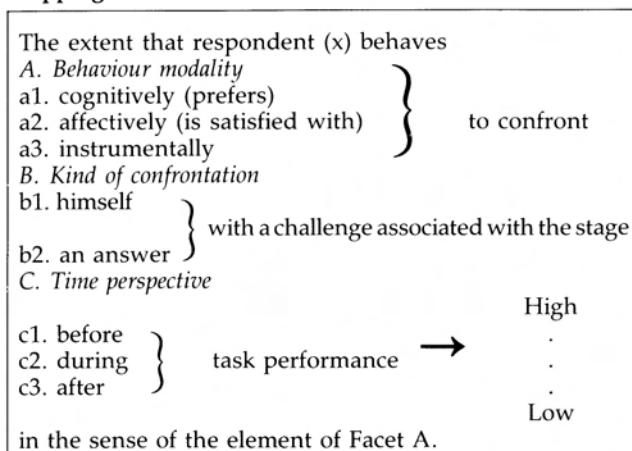
ORIENTATION

THE ACHIEVEMENT MOTIVE OF MANAGERS: FACET ANALYSIS

During the last three decades considerable attention has been given to the role which achievement motive plays in matters such as sport achievement, leadership and management. However it has become increasingly difficult to integrate and compare empirical information as different theoretical conceptions form the basis of the different instruments used to measure achievement motive. Elizur (1979) responded to this situation by developing a theoretical structural framework for achievement motive. After studying the work done by Atkinson and Feather (1966), Heckhausen (1967), Hermans (1970), Jackson, Ahmed and Heappy (1976) and McClelland (1961) he perceived achievement motive as the extent that a person behaves in a certain way to confront a challenge during the different stages of task performance. His theoretical and empirical approach was based on facet analysis and, true to tradition, he made use of a mapping sentence to specify the contents of a questionnaire which he developed to measure achievement motive. From the mapping sentence which is presented in figure 1, it is clear that he specified three aspects, called facets. These facets are:

- (i) The behaviour modality.
- (ii) The kind of confrontation.
- (iii) The time perspective.

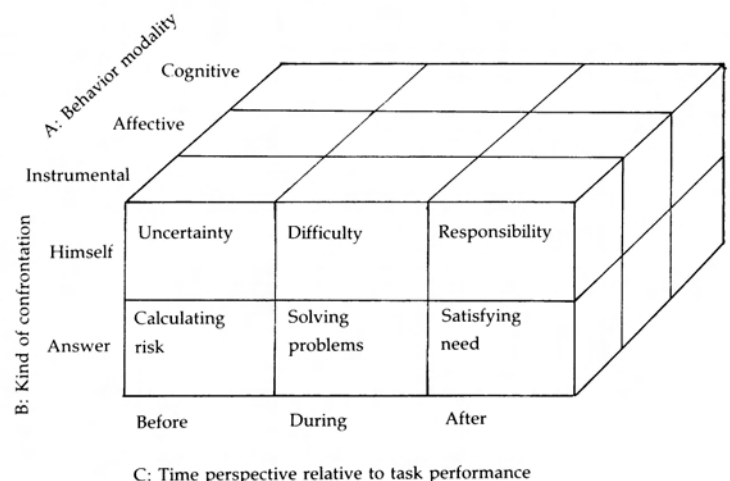
Figure 1
 Mapping sentence for the definition of achievement motive



To specify the relation of the three facets he postulated a three dimensional facet model which is presented in figure 2. As can be observed in the figure there are six elements for each behaviour modality when the type of confrontation subfacets and time perspective subfacets are paired off. These elements are called *uncertainty, difficulty, responsibility, calculating risk, solving problems and satisfying needs*. Elizur presented the following formal descriptions for them:

- Uncertainty: to confront oneself with a challenge BEFORE task performance, i.e. to face uncertainty.
- Difficulty: to confront oneself with a challenge DURING task performance, i.e. to face difficulty.
- Responsibility: to confront oneself with a challenge AFTER task performance, i.e. to face personal responsibility.
- Calculating risk: to take a calculated risk by matching appropriate risk levels with an expected gain.
- Solving problems: to match solutions with problems.
- Satisfying needs: to match an activity to satisfy one's need to succeed.

Figure 2
 The facet structure of achievement motive



The three dimensional facet structure had been successfully tested on managers in America and Israel, especially in the field of management (Elizur, 1979). In the Republic of South Africa exceptional demands had been made in the past on the midlevel manager. This will be even more true in the new political, social and economical dispensation which is envisioned at present for the Republic of South Africa. It can be expected that in staff selection and training practices more attention will be given to the qualities of managers such as their achievement motive.

A questionnaire which is to be used for this purpose must be valid and as the Achievement Motive Questionnaire of Elizur appears to be usable it is important to test the structural validity of this questionnaire for managers in the RSA.

The aim of the research is thus to test the following hypothesis:

The empirical structure that would be obtained from analyzing the data on achievement motive of a sample of midlevel managers in South Africa would resemble that of the three dimensional theoretical facet model postulated by Elizur for this phenomenon.

METHOD

Population

Data were collected from a sample of 118 midlevel male managers representing a relatively diverse group of managers in terms of organizational variables (size, type of organization, department or function) and in terms of personnel background. The method of data collecting was by administering the questionnaire to participants in management courses or to individuals in private and public organizations. The most frequent age group was 30-39 years (there was more than a third in this age group). The results of this study can be generalized in as far as the group represents the managers at large in the Republic of South Africa.

The measuring instrument

The measuring instrument is the Achievement Motive Questionnaire of Elizur (1979). He wrote eighteen items for his questionnaire to cover each of the six elements for each of the three behaviour modality subfacets. A key to the items of the questionnaire is presented in table 1. Elizur (1985) reported internal consistency reliabilities (Cronbach's alpha) between 0.79 and 0.84 for the six elements and he found significantly validity figures at the 5% level for calculating risk and solving problems when he regressed managerial performance on the six elements.

TABLE 1
THE KEY TO THE ITEMS IN THE ACHIEVEMENT MOTIVATION QUESTIONNAIRE

No of item	The meaning of the positive direction
1	To prefer tasks involving uncertainty rather than certainty of outcomes.
2	To prefer difficult rather than easy tasks.
3	To prefer tasks with personal rather than shared responsibility.
4	To prefer tasks involving calculated risks rather than sure outcomes.
5	To prefer tasks requiring problem-solving rather than the application of instructions.
6	To prefer tasks gratifying the need to succeed rather than to ensure the avoidance of failure.
7	To be satisfied with tasks involving uncertainty rather than certainty of outcomes.
8	To be satisfied with difficult rather than easy tasks.
9	To be satisfied with tasks with personal rather than shared responsibility.
10	To be satisfied with tasks involving calculated risks rather than sure outcomes.
11	To be satisfied with tasks requiring problem-solving rather than the application of instructions.
12	To be satisfied with tasks gratifying the need to succeed rather than to ensure the avoidance of failure.
13	To undertake tasks involving uncertainty rather than certainty of outcomes.
14	To undertake difficult rather than easy tasks.
15	To undertake tasks with personal rather than shared responsibility.
16	To undertake tasks involving calculated risks rather than sure outcomes.
17	To undertake tasks requiring problem-solving rather than the application of instructions.
18	To succeed rather than to ensure avoidance of failure.

Experimental Design

The smallest space analysis technique was employed to determine to which extent the structural hypothesis in the three facet theory of Elizur was supported by the empirical structure obtained by analysing the data of the 118 midlevel managers. This technique was developed by Guttman for the structural analysis of similarity data (Guttman, 1968). Smallest space analysis determines the space of smallest dimensionality which is a metric representation of non-metric information and is based on the relative distances within a set of points. The location of the points is calculated, based on the

inverse relationship between the observed correlations and the geometrical distances. Each item is treated as a point in an Euclidean space in such a way that, the higher the correlations between the two items, the closer they are in the Euclidean space (Du Toit, 1986). The smallest space analysis had been successfully applied in various studies to test regional hypotheses (e.g. Canter et al, 1985, Elizur, 1979, Du Toit, 1986).

Results

The Pearson product moment correlation coefficient for the eighteen items is presented in table 2.

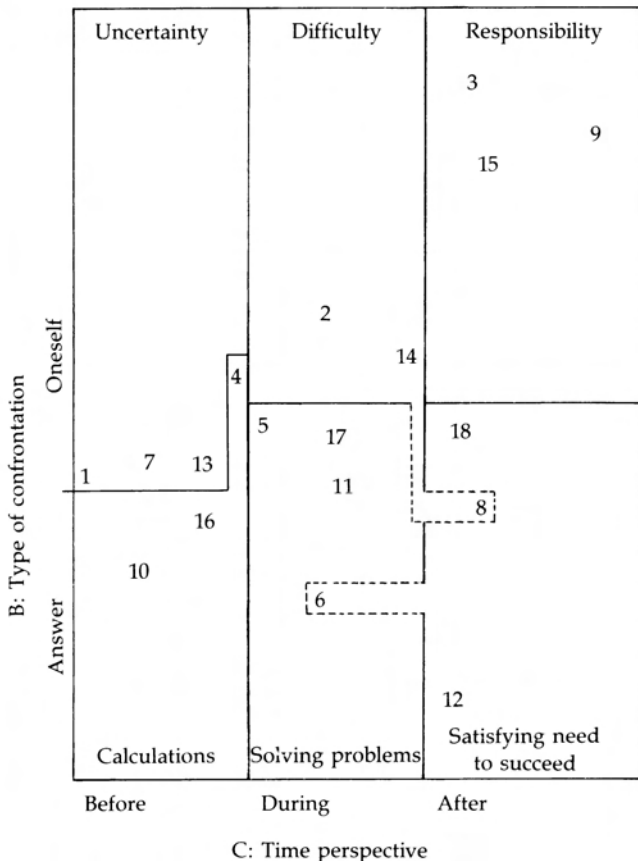
TABLE 2
The correlation matrix of the eighteen items in the Achievement Motive Questionnaire

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	100	25	12	44	24	13	60	25	08	32	20	06	58	26	01	36	23	01
2	25	100	25	37	40	22	20	60	16	30	33	21	25	59	12	27	35	25
3	12	25	100	32	34	15	21	36	53	27	21	15	27	38	51	28	34	06
4	44	37	32	100	47	23	52	45	15	60	41	10	45	39	13	66	41	15
5	24	40	34	47	100	27	32	37	06	41	57	18	29	29	11	39	60	11
6	13	22	15	23	27	100	19	23	17	29	41	46	15	29	13	24	41	64
7	60	20	21	52	32	19	100	39	26	62	31	13	62	33	14	52	36	09
8	25	60	36	45	37	23	39	100	26	48	48	21	30	69	24	48	40	19
9	08	16	53	15	06	17	26	26	100	32	27	21	27	40	67	26	34	12
10	32	30	27	60	41	29	62	48	32	100	47	22	55	46	18	71	43	14
11	20	33	21	41	57	41	31	48	27	47	100	26	29	39	17	48	73	18
12	06	21	15	10	18	46	13	21	21	22	26	100	03	27	13	17	29	55
13	58	25	27	45	29	15	62	30	27	55	29	03	100	39	16	48	29	03
14	26	59	38	39	29	29	33	69	40	46	39	27	39	100	26	38	41	28
15	01	12	51	13	11	13	14	24	67	18	17	13	16	26	100	27	32	14
16	36	27	28	66	39	24	52	48	26	71	48	17	48	38	27	100	48	12
17	23	35	34	41	60	41	36	40	34	43	73	29	29	41	32	48	100	25
18	01	25	06	15	11	64	09	19	12	14	18	55	03	28	14	12	25	100

The original coefficients were multiplied by 100 and rounded into integer numbers

The results of two of the facets, namely facet B: type of confrontation, and facet C: time perspective as obtained from analysing the data by means of the smallest space analysis, is presented in figure 3.

Figure 3
The empirical structure of type of confrontation and time perspective



This map depicts a two-dimensional duplex system with the empirical structure of achievement motive for the South African sample of 118 midlevel managers. From observing this portrayal of the empirical facet structure it was concluded that

the structural hypothesis was basically supported by the empirical data.

Concerning facet C (time perspective) the map could be ordered into three contiguous subregions of the time perspective pertinent to task performance. The order of the sub-regions was as postulated according to the time sequence before-, during- and after-task performance. Sixteen of the eighteen items of the questionnaire could be correctly classified by means of straight border lines. However it was possible to include item 6 and item 8 in their respective theoretical sub-regions by means of curving lines.

In the United States and Israel Elizur (1979) found similar strong empirical support for this structural part of the theoretical achievement motivation model.

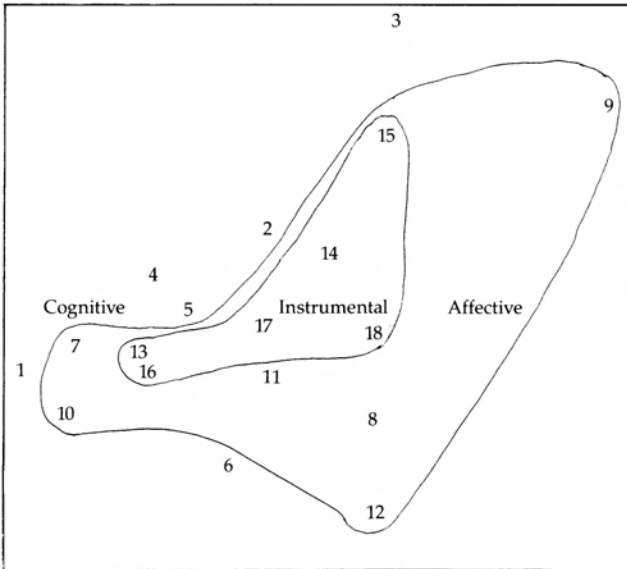
Concerning facet B (type of confrontation), the map could be clearly partitioned into two distinct sub-regions corresponding to the two postulated for this facet, namely "to confront oneself with a challenge and to cope with it" and "matching an answer in confrontation with a challenge". In fact the border line ran for most of the way very close to the centre of the map. However, the element uncertainty of the model penetrated the sub-region setting an answer in confrontation to a challenge. This might imply that the orientation of the South African managers to tasks involving uncertainty was more outward projected than postulated in the theoretical model. However, as indicated on the map, this deviation could be accommodated in the empirical model without a serious loss in the perception of the structure.

Another noteworthy deviation is the position of item 8 on this map.

The fact that this item laid in the element satisfying need may imply that for the South African sample of managers the satisfaction with a difficult, rather than with an easy task, was strongly associated with the orientation to tasks gratifying need to succeed rather than to ensure avoidance of failure. Contrasts of this kind were also found by Elizur for facet C in the data of the American sample of midlevel managers, but none of this kind were found in the sample of midlevel managers in Israel.

In figure 4 facet A (behaviour modality) is presented as obtained from analysing the data.

Figure 4
The empirical structure of behavior modality



As can be seen from the figure the role of the behaviour modality facet could be described as modular since the items of the instrumental behaviour modality were located in the centre of the map. The items of the cognitive and affective behaviour modalities lay more to the peripheral area of the map. This corresponds with the findings of Elizur in the USA and Israel. The implications of this result are that there is generally a much closer association between the items of the instrumental behaviour modality than between the items of the other two behaviour modalities.

One more matter that should be attended to as far as figure 3 and figure 4 is concerned, deals with the coefficient of alienation of 0.24 found for this empirical structure. This is in line with coefficients normally found for constructs of this kind in the social sciences. A jack-knife approach was also applied to study the stability of the structure and it was found that it was quite stable as long as samples of not less than 80 were used.

The overriding concern in this study is that the visual comparison of the empirical and theoretical models did support the spatial hypothesis and the results of this study could be generalized to the rest of the midlevel managers in the Republic of South Africa in as far as this group of managers represented the population of managers in the Republic. This may be limited, however it may be stated that the value of facet analysis as an approach to obtain clarity about the structure of specific psychological constructs has been proven.

Discussion

By virtue of the results the following findings are of importance.

It is clear that time perspective as an aspect (facet) of achievement motive can be clearly represented in an empirical structural facet model. Thus the managers are aware of the order of the different matters to be confronted in the performance of a task. Furthermore, the strong support which the type of confrontation facet received indicates that the managers could also clearly differentiate between the challenges met when searching for an answer for the problem and when confronting themselves in the problem situation. The behaviour modalities were also properly separated and the fact that the instrumental subfacet laid in the centre indicated that the managers had a stronger perception of what they prefer to do.

Conclusion

The theoretical three-dimensional facet model for achievement motivation as postulated for achievement motivation by Elizur received empirical support when the data of 118 managers

who completed the *Achievement Motive Questionnaire* was analysed by means of the smallest space analysis technique. The three facets which all received considerable support were behaviour modality, kind of confrontation and time perspective. From the results it could be deduced that managers had a clear time perspective and that they were clearly aware of the difference between the challenge of confronting themselves in the problem situation and the challenge to search for an answer for the problem. Of the three behaviour modalities namely cognitive, affective and instrumental, the managers had the clearest perception of the instrumental. The willingness to undertake a task thus performed psychologically the centre of the achievement motivation of the managers.

Samevatting

Die drie-dimensionele teoretiese fasetmodel wat Elizur (1978) vir prestasie motivering gepostuleer het, is empiries bevestig deur die toepassing van sy prestasie motiveringsvraelys op 118 middelvlakbestuurders en deur die ontleding van die data met behulp van die kleinste kwadraatontledingstechniek. Uit die resultate het dit duidelik geblyk dat die bestuurders oor 'n duidelike tydsperspektief beskik. Die middelvlakbestuurders kon ook duidelik onderskei tussen die hantering van die probleem en die hantering van hulleself in die probleem-situasie. Die instrumentelesubfaset – die bereidwilligheid om 'n taak aan te pak – staan meer sentraal in die prestasie motivering van die middelvlakbestuurders as die kognitiewe en affektiewe.

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