Factorial Structure of Director's Managerial Consciousness

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Abstract: The author performs comparative analysis of psycho-semantic parameters of managerial consciousness of directors depending on the level of development of this consciousness. Using the method of repertory grids with further factorization of data the author established relative complexity of notions about evaluated objects demonstrated by directors with high level of development of managerial consciousness. Less complex factorial structure was demonstrated by directors with less developed managerial consciousness. The simplest notions’ structure is shown by bearers of average level of managerial consciousness development.

Key words: Managerial consciousness • The level of development of managerial consciousness • Comparative analysis • Factor analysis • Method of repertory grids

INTRODUCTION

The basic postulate of our studies is the idea that managerial consciousness can be considered as a way of organization of contents of profession world image of a manager [1]. Managerial consciousness is investigated by us as highest level of psychological reflection of profession world and internal world of the subject of managerial activity which is determined by professional contents of director's activity.

While traditional approach to measurement of individual differences considers an individual as a point in space of diagnostic parameters, set by a scientist, we follow experimental psycho-semantic approach [2-4], which considers an individual as bearer of special space, set by him-the space of individual meanings.

The number of participators (respondents) was 423-they are managers of private-ownership organizations, with higher education, average age was 44, average duration of their work as directors-15,6 years. Typical representative in the sample has about 16 subordinates at average, 2 directors of lower rank which are subordinate to him and is a subordinate himself to 2 directors of higher rank. Previous study of developmental particularities of managerial consciousness of directors showed that the respondents are distributed into 3 groups: with low level of development (MC3), average (MC2) and high (MC1) [5]. The purpose of this study was to establish dominating psycho-semantic components of managerial consciousness in each group.

Method of repertory grids introduced by G. Kelly allows to reconstruct world vision “through” the eyes of the subject [6]. G. Kelly understands personal constructs as the system of binary oppositions, which is used by a subject for categorization of himself and other people, the contents of oppositions are defined not by language means, but the notions of the respondent himself.

G. Kelly's theory of constructs is based on the idea that every man is a researcher and people are striving to find out the essence of phenomena, things in surrounding world, in themselves, in many situations in which they must participate. These ideas are most fully presented in the works of V. Myasishchev [7] who proposed to consider not separate components on the level of needs, motives and values but integral system of all relationships of personality. Only when considering the whole integral system of personality relationships it is possible to find out particularities of interrelation of such components in the space of relationship system of particular subject. The picture of particular space can be obtained with the aid of mathematic tools, developed by G. Kelly in the framework of his theory of individual personal constructs and method of repertory grids.

As it was emphasized by F. Francella and D. Bannister the analysis of repertory grids will allow to assess the strength and direction of relationship between personality constructs, to find out the most important and significant parameters (depth construct) lying in the base
of specific measurements and relationships, to build up integral subsystem of constructs and to describe and predict measurements and personality relations (individual semantic map) [8].

Yu. Borisov and I. Kudryavtsev [9] having modified the method of repertory grids have analyzed the sense-bearing sphere of consciousness and self-consciousness of successful and non-successful medium level managers. Side by side with personality features which differentiate efficient directors from non-efficient, they for the first time developed the principles of formation of repertory benchmark model of organizational culture.

The approach of these experts is based on the comparison of particularities of self-consciousness of managers with so called ideal corporative model. Focus is made on the arrangement of 5 key elements (I now, I in 5 years, ideal employee, bad employee, ideal director) in managers’ semantic space which allow to reconstruct the image of profession world of real or potential director. Criteria of evaluation here is nearness of basic social roles: dominating (set by the construct “ideal director”), parity (ideal employee) and subordinate (relative to notion ideal employee) to “I” in semantic space.

With due regard to particular features of the respondents and the purpose of this study we include into the list of symbolic and role dispositions of personality the following elements: Ideal employee, Ideal director; Bad employee; Bad director; I now; I in 5 years; A man whom I like; A man whom I don't like.

Instructions to apply this method: “Please, express your subjective opinion about the strength of features (in lines) are attributive to the objects of assessment (in columns). Evaluation must be done in the following way: first you should choose the pole to which your estimate is nearer, define the strength of this feature and underline corresponding number. If you think that both poles are equally presented, underline 4. As a result in every of the given below scales only one figure should be pointed out”.

For example, Ideal director.

Striving to have his own business 7 6 5 4 3 2 1 Not striving to have his own business.

Analysis of obtained constructs was done automatically by a computer program with the aid of correlation and factor analysis [10], which allowed to identify the strength and direction of the relationship between the constructs, to find out the most important and subjectively significant parameters (depth constructs), on which specific estimates and relationships are based.

Main Part: Analysis of the results of scale factorization of the repertory grids method has proved that the structure of latent factors in many cases is different in the groups of respondents. Since factor analysis is base on the use of correlation matrix, its features almost completely determine both the structure of latent factors and their explanatory force (a share of dispersion of empirical data which they explain). In order to compare and evaluate quantitatively the quality of factorial picture we used the indicator of complexity of correlation matrix.

\[ c = \frac{2}{n(n-1)} \sum_{i,j=1}^{n} |rij| \], where \( n \) – span of correlation matrix\( \]

As it can be seen from the formula the complexity coefficient, in fact, is average value of correlation coefficients in matrix. That is why it is possible to judge by its size about combined complexity of correlation matrix of input data and in such a way to compare the structure of relationships in different groups by the degree of complexity.

One of the first applications of complexity coefficient of correlation matrix is the identification on its base of the idea of cognitive simplicity in the works of A. Shmelev [11] and V. Pokhilko. The method allows to measure cognitive differentiation of the subject in some area—it is known as cognitive complexity. The number of independent, non-synonymic, not correlating constructs which are used by the respondents determine their cognitive complexity in definite content area. By the definition of V. Pokhilko [12] "Cognitive differentiation is a measure of how multi-dimensional and complex is the perception of specific man in specific experience area. The last restriction is not by coincidence because a man can be cognitively differentiated in one area and non-differentiated—in the other” [12].

Not trying to investigate cognitive complexity of the respondents we took an opportunity to get integral estimate of their managerial consciousness’ complexity. In scientific literature the oriented values of the indicator \( c \) can be found for the groups of students of different specialities, which allow to see general context in which the calculations must be interpreted [2].

Table 1 shows the results of calculations of this coefficient for every group and for every object obtained by the method of repertory grids.

As we see from the table in most cases the representatives of group MC1 have the more complex notion about evaluated objects. The second place in complexity is occupied by the group MC3, is, the third place-MC2. The most complex qualification of the current
The system of notions of the group MC1 about an ideal director was formed by such factors: complex of features of ideal director; non-interested devotion; devotion to people; business-entrepreneurship.

About bad director: selfish conformism; economic voluntarism; selfishness-conscientiousness; humanity-ambitiousness; conformism-care; potential traitor.

About ideal employee: complex of features of ideal employee; rationalist; interested careerist; non-demanding; corporate employee; controlled conformist; ambitious work addict. Bad worker: materiality-minded worker; momentary grabber; helpful; arrogant. I now: devotion to the business, not to people; businessman-work addict; voluntary individualist; selfish adventurer. I in 5 years: devotion to the business; honesty and openness; targeted control; ambition and active. A man whom I like: devoted regardless of authority; handy in control; ambitious and active. An employee whom I do not like: non-demanding; corporate employee; controlled conformist; ambitious work addict. A man whom I do not like: materiality-minded worker; momentary grabber; helpful; arrogant. I in 5 years: devotion to the business; honesty and openness; targeted control; ambition and active. A man whom I like: devoted regardless of authority; handy in control; ambitious and active. I now: devotion to the business; not to people; businessman-work addict; voluntary individualist; selfish adventurer.

**CONCLUSION**

Now we shall consider semantic space of the representatives of the group MC3 in its factorial structure. We observe here rather complex architectonics of semantic space. Triad around the factor "demonstration of non-business activity" is formed by positively correlating factors "potential traitor", "reserved individualist" and negatively correlating factor "devotion to people". Triad around the factor "potential traitor" positively correlates with "demonstration of non-business activity" and negatively-with "work addict" and "responsibility". The factor "altruistic collectivist" is negatively linked with the factors "simplicity and weakness", "attractive novation work" and "initiative-free devotion". Triad around the factor "potential traitor" positively correlates with "responsibility distribution" and "individualism-collectivism" and negatively-with "careful and looking into the future". Single tetrad around the factor "team work addict" was formed by positively correlating factors "potential traitor" and "responsibility" and negatively correlating with them factors "absence of initiative and platitude" and "selfish adventurer".
MC2 group’s system of notions: Ideal director: honest and open; responsive leader; calculating corporate manager; director-tactic; executive director; selfish careerist. Bad employee: grabber; selfish, despotic director; greedy work addict; selfishly insincere. Ideal employee: honest subordinate; corporate employee; devoted to the director; personal devotion; initiative devotion; team work addict; non-initiative devotion. Bad employee: experienced and brave; potential traitor; helping; potential director; stranger in a company; independent and ambitious. 

A man whom I like: corporate player; team player; initiative strategist; partner; devoted to people; devoted to business; decent and ambitious. A man whom I do not like: dishonest; selfish; striving for his own purposes bootlicker; greedy; without initiatives; passive; hidden ego-centric; potential traitor. 

MC3 directors’ system of notions: Ideal director: openness-individualism; careful and looking into the future; balanced introvert; altruistic collectivist; openness-selfishness. Bad director: selfish adventurer; potential traitor; irrational businessman; reserved individualist; mercenary, free-lancer; initiative-free controller. Ideal employee: initiative-free devotion; selfish careerism; futuristic ambitions; corporate employee; subordinated initiative; team work addict. Bad employee: complex of features of a bad employee; initiative-free platitude; potential traitor; stranger in a company; business adventurer. 

A man whom I like: experienced; devoted; honest worker; team player; ambitious work addict; A man whom I don't like: dishonest; selfish, bootlicker; ego-centric; initiative-free, passive; independent; careless. 

We must mention the fact that the representatives of all 3 groups of development of managerial consciousness emphasize negative characteristics more or less in the same way (in term of complexity, not specific contents). Thus, the directors in all 3 groups imagine and range positive characteristics in a different way, but negative ones are to a great extent are the same. 

Inference. So, the representatives of group MC1 have complex notion about evaluated objects, then (in terms of complexity) comes group MC3 and then-MC2, representatives of this group have the simplest managerial structure. Simplicity is understood by us as separate constructs-characteristics, which together form an image, that can not be combined into more complex construct, but exist by themselves. We can say that in this case the attention is paid to a big number of details without elements of generalization and abstraction. Complexity is understood as manifestation of more creative approach to evaluation of profession world phenomena. 

REFERENCES 


