
Individual Personality Traits as Predictors of Intra-organizational Vertical Career Growth of Employees

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Abstract:

The paper is devoted to the research on the influence of individual personality traits on the success of intra-organizational vertical career growth of employees, the indicator of which is the promotion of employees in their position (status) in the organization, taking into account their speed of passing the career levels.

The article analyzes the types of career, criteria and factors of career growth, including personality characteristics in the context of their influence on career processes. The article presents the results of an empirical study of the managers of JSC Concern Energomera, Stavropol (Russia), which determined the relationship between the success rate of intra-organizational vertical career growth and individual personality characteristics, manifested in the level of mental tension (anxiety, suspicion, inclination to risk, spontaneity and emotional sensitivity) and expressiveness.

The authors did not find statistically significant contribution of regulatory properties and indicators of general mental abilities to distinguishing groups of employees with high and low indicators of vertical career growth.

The averaged personal profiles of employees with high and low indicators of vertical career growth are presented.

Keywords: *Career, career mobility, intra-organizational vertical career growth, individual personality characteristics, level of mental tension, spontaneity, personal profile.*

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1. Introduction

The modern labor market makes its own amendments to the organization of the work of specialists whose field of activity is human resources, focusing on the effective management of the labor motivation system, the use and rehabilitation of personal potential, profiling and success evaluation in a profession. One of the criteria for a positive evaluation of an expert's success is his or her career advancement, both in terms of the professional competence growth and in terms of vertical (promotion) career growth, which in modern social practice is correlated with the concepts of "social lift" and "vertical mobility".

The career phenomenon is a complex social and psychological construct, a set of "individually acknowledged positions and behaviors related to work experience and activity throughout the working life of a person" when career success "does not mean a different kind of success or failure, except for the one represented in an individual's own judgment" (Hall, 2006; Amilin, 2017).

Career processes can manifest themselves in different types of career growth. Aksenova (2005), Bazarov and Eremin (2002) distinguish two types of career: professional one and intra-organizational one. In their opinion, the concept of "career" in Russia is most often associated with vertical promotion (career growth). In the works of Super (1992) and Sutin *et al.* (2009), four directions of career development are allocated within the limits of one organization: 1) development within the limits of a current position – developing into the chosen field of activity and consolidating the status; 2) horizontal movement–transferring to a new functional area and mastering new professional skills; 3) vertical movement – acquiring new job aspirations and raising to a higher level in the hierarchical structure of an organization; 4) centripetal development – moving towards the core of a company's management.

Presentations of the factors and criteria for career success are ambivalent (Baldacchino *et al.*, 2017). Greenhaus summarizes seven groups of characteristics related to professional success: career strategies, interpersonal relationships, family relationships, investment in human capital, motivational factors, organizational characteristics and personality characteristics (Greenhaus, 2003). According to Moll, situational, institutionalized (organizational and social) and individual factors of personality development can influence career development (Moll, 2012).

Chemekov (2010) and Krichevskii (2006) believe that different grounds can serve as criteria for career success: status (position), career mobility, earnings and achievements. According to Krichevskii (2006), in the traditional sense, widely represented in the modern Russian society, a career is a linear dependence with a small deviation of the line from the vertical, which indicates the dominance in the minds of most Russians of the status over other factors in choosing a career path. As a criterion for the career efficiency, the concept of "career mobility" was offered

determined by the speed of an employee's passage through the hierarchical ladder (Krichevskii, 2006). Such criteria as an increase in the cost of an employee's labor, regardless of the level of a position in the organizational hierarchy, or achievements (implementation of innovative projects) are less significant and characteristic for assessing career efficiency in modern domestic culture (Mogilevkin, 2007).

The analysis, conducted by the authors, on the social perception of the phenomenon of a career, its criteria and types, allows clarifying the direction and peculiarities of the interpretation of the results of the psychological study (internal potentialities of an individual) related to the predictors of career achievements. The dependence of career success not only on factors external to the subject of labor (social, industrial, economic, political, etc.) but also, to a large extent, on his or her individual and personality characteristics, acts as a problematic field of research in the psychology of professional activity (Derkach, 2004; Dyrin, 2008; Chernyshev, 2007), as well as in the psychology of personality (Abulkhanova-Slavskaya, 1988; Dikaya and Zhuravlev, 2014; Klimov, 2004).

Kibanov (2007), Mogilevkin (2007), Super (1992), Millor (2016), Arthur *et al.* (2005) and Nauta *et al.* (2009) consider the following properties important for achieving career success, which are different by the content and structure (characterological, motivational, intellectual, philosophical and instrumental): from the ability to self-understanding and adequate ideas about their capabilities to the ability to team interaction, mastering the skills of business communication and the ability to make various types of psychological impact.

In a number of studies (Salgado, 1997; Grant, 2007), the importance of personality parameters for predicting the success of career growth was determined. Among them there were: extraversion, neuroticism and conscientiousness, which were part of the five-factor model of personality by McCrae and Costa (1987). Sutin *et al.* (2009) highlighted the correlation among extraversion, the degree of prestige of the chosen profession and the level of income in the initial stages of professional activity.

Raymark *et al.* (1997) outlined twelve characteristics of behavior in the profession related to the personal factors of the Big Five: overall leadership, negotiation skills, the pursuit of achievement, friendliness, attention and interest in other people, an inclination to teamwork/cooperation, responsibility, the implementation of standards of work ethics, thoroughness in work and attention to detail, emotional stability, the desire to generate ideas and a tendency to think through actions.

In this study, the authors have proceeded from the notions of individual personality traits as essential and stable features that are manifested in the individualized goals of a person's daily life, which determine the qualitative and quantitative parameters of activity and behavior, which allows them to be viewed as predictors of favorable career development, given their correspondence to the requirements of the professional environment and the tasks of the organization. Career success was

examined in the context of intraorganizational vertical career advancement, which was most widely represented in the structure of Russian public assessments, as well as subjective and personal ones.

The aim of the research is to study individual personality traits in the aspect of their influence on employees' intraorganizational vertical career development.

2. Methods

Managers aged 21 to 55 who worked in JSC Concern Energomera in Stavropol participated in the study (2017-2018). The total number of test subjects (N) was 97 people. Based on the results of studying the databases of employees and the protocols of differentiations conducted annually by the expert commission to determine the potential and prospects of an employee in the organization, the test subjects were divided into 2 groups: 1) employees with high indicators of vertical career growth; 2) employees with low indicators of vertical career growth.

For the indicator of vertical career growth, the authors took an objective criterion in accordance with Chemekov (2010) and Krichevskii (2006), i.e., a promotion of an employee in the position (status) in the organization, taking into account the speed of passing the career levels. Employees with high indicators of vertical career growth were promoted in the first 5 years of work in the organization. Employees with low indicators of vertical career growth were in the same position for over 5 years.

To study the personal characteristics of employees with different indicators of vertical career growth in the organization, the authors used the individually-typological questionnaire (ITQ) by Sobchik (1999), the structure of which was represented by scales of spontaneity, anxiety, extraversion and introversion, sthenicity, rigidity, sensitivity and lability; the 16 personality factor questionnaire by Cattell *et al.* (1970), which permitted to diagnose peculiarities of character, propensities and interests of a person, reflected in personal traits (properties); the short-form selection test by Wonderlic, adapted by Buzin (1992), for diagnosing the general level of intellectual abilities (the test was used to refine the "concrete thinking – abstract thinking" scale of the personality questionnaire of Cattell). Statistical processing of data was executed using the r-Pearson correlation; the Kruskal-Wallis H test, Student's t-test for determining the statistical significance of differences in mean values.

3. Results and discussion

To determine the statistically significant differences between employees with high and low indicators of vertical career growth in the organization in accordance with the representation and manifestation of personality properties diagnosed by the method by Sobchik (ITQ) and the 16 personality factor questionnaire by Cattell, the

authors used the Kruskal-Wallis H test, which permitted to establish the change in the sign of the transition from one group to another, without indicating the direction of these changes (Table 1).

Table 1. Values of the Kruskal-Wallis H test for personality parameters that make statistically significant contribution to the demarcation of employees with high and low indicators of vertical career growth in the organization

No.	Null hypothesis	Test	Value	Resolution
1	The distribution of the F factor is the same	H test	0.044	The null hypothesis is rejected
2	The distribution of the I factor is the same	H test	0.035	The null hypothesis is rejected
3	The distribution of the L factor is the same	H test	0.006	The null hypothesis is rejected
4	The distribution of the Q₄ factor is the same	H test	0.001	The null hypothesis is rejected
5	The distribution of the parameter " spontaneity " is the same	H test	0.000	The null hypothesis is rejected
6	The distribution of the parameter " anxiety " is the same	H test	0.004	The null hypothesis is rejected

Note: Asymptotic significance is derived; the level of significance is 0.05.

The analysis of the values of the Kruskal-Wallis H test showed that the groups of employees differed on a statistically significant level with respect to the following parameters: the level of anxiety and spontaneity, relaxation-high tension, trustfulness-suspicion, rigidity-sensitivity and restraint-expressiveness. This means that the listed characteristics (personal properties) have an impact on the vertical career growth of an employee within the organization. The average level of anxiety, spontaneity, lack of tension, mild suspicion, medium level of rigidity and average level of expressiveness, determining the appropriate level of employees' activity, peculiarities of their communication, organization of activities and behavioral strategies, provide the probability of employees' faster job promotion. At the same time, increased anxiety, the average level of spontaneity, the average level of tension, suspicion, rigidity, manifested not only in rationality and logic but also callousness towards others, as well as restraint, act as a deterrent to the vertical career growth of personal parameters.

In analyzing the influence of individual personality traits on the success of career growth, it is advisable to use not only the manifestation of certain traits but also their combinations, which form the symptomatic complexes of intellectual, emotional, communicative and regulatory personal properties. The methodology by Cattell allows interpreting pair combinations of primary factors. The group of communicative properties of a personality is formed by the factors: A (sociability), E (dominance), H (courage in social contacts), L (suspicion), N (diplomacy) and Q₂ (independence). Among these factors, the factor L (suspicion) has a significant influence on the indicators of vertical career growth (Table 1), which in combination

with the factor N (diplomacy) characterizes the attitude of a person to other people. The analysis of combinations of the mean values of these factors in the compared groups allows assuming confidently that employees with high indicators of career growth are more natural in their behavior, less alert in communicating with other people, benevolent, but without special confidence.

The group of emotional properties includes the factors: C (emotional stability), F (expressiveness), H (courage in social contacts), I (emotional sensitivity), O (anxiety) and Q₄ (tension). Among these factors, the factors Q₄, I and F affect the rate of employees' job promotion at a statistically significant level (Table 1). The factor I in combination with the factor C reflects the sensitivity of a person to emotogenic influences. The factor Q₄ in combination with the factor O is manifested in anxiety as a personal property. The influence of the level of anxiety on the indicators of employees' vertical career growth in the organization is confirmed by the values of the H test for the parameter "anxiety" of the ITQ method by L.N. Sobchik (Table 1). The factor F in combination with the factor H reflects a person's inclination to risky behavior. The analysis of combinations of the mean values of the factors discussed in the employees' compared groups reveals a higher sensitivity to emotogenic influences, a high level of personal anxiety and a lower level of inclination to risk for employees with low indicators of vertical career growth in the organization.

The group of regulatory properties of personality is formed by the factors Q₃ (self-control of behavior) and G (normative behavior). These factors do not make statistically significant contribution to the demarcation of employees with high and low indicators of vertical career growth in the organization (Table 1).

The intellectual property group includes the factors: B (intellectuality), M (dreaminess), N (diplomacy) and Q₁ (susceptibility to the new). These factors do not make statistically significant contribution to the demarcation of employees with high and low indicators of vertical career growth in the organization. It should be noted that the factor B (the pole B⁺ is abstract thinking, the pole B⁻ is concrete thinking) aimed at measuring the speed of thinking and the general level of verbal culture and erudition, but not at determining the level of intelligence, is not strictly validated, so the results for this factor are indicative. Anxiety, frustration, a low level of education can reduce the estimates for the factor B. Since the use of psychometric intelligence tests shows a reliable and socially significant predictive power in respect of success in professional activity (Hunt, 1997) due to the fact that intellectual abilities determine the subject and symbolic aspects of social adaptation of an individual and are components of structuring his or her professional competencies, the authors conducted an analysis of the impact of the development level of intellectual abilities for vertical career growth of the organization's employees by comparing the average values of the integral indicator of general mental abilities (Ii) of the short-form selection test by Buzin and Wonderlic (SST) in groups of employees with high and

low indicators of vertical career growth and assessing the significance of differences using the Student's t-test (IBM SPSS Statistics, 23rd version) (Table 2).

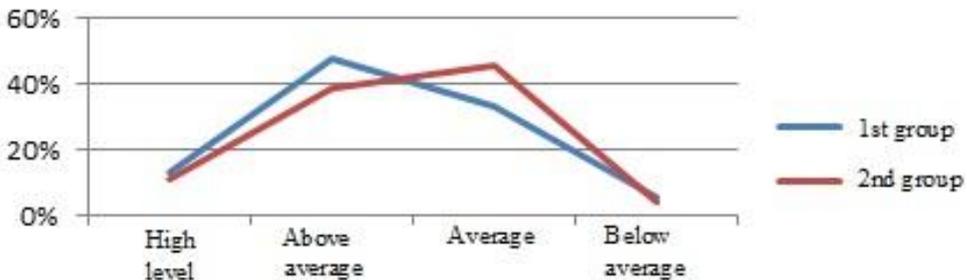
Table 2. Assessment of the reliability of differences in the integral indicator of mental abilities (Ii) between groups of employees with high and low indicators of vertical career growth

Average values of Ii		Livin's F test for the equality of variances		Student's t-test		
1 st group (HIVCG)	2 nd group (LIVCG)	F	Significance	T	Deg. of fr.	Significance (two way)
25.5	24.5	.526	.470	1.064	95	.290

Note: HIVCG – high indicators of vertical career growth; LIVCG – low indicators of vertical career growth; Deg. of fr. – degree of freedom.

Statistically significant differences between employees with high and low indicators of vertical career growth by the integral indicator of mental abilities (Ii) were not found. The average values of the integral indicator of general mental abilities (Ii) in both groups of test subjects (Table 2) were in the "above average" range. However, some of the trends revealed in the comparative frequency analysis of general mental abilities (the frequency of occurrence of a high level, an above average level, an average and a below-average level) in the groups of test subjects did not allow excluding them from the prognostic criteria of vertical career growth (Figure 1): the attention was attracted to the higher Ii values in the group of employees with high indicators of vertical career growth, as compared to the group of employees with low indicator of vertical career growth, a higher frequency of occurrence in this group of employees of values Ii from the "high level" and "above average level" range and the lower frequency of occurrence of values Ii from the "average level" and "below average level" range.

Figure 1. Distribution of the levels of the integral indicator of general mental abilities (Ii) for groups of test subjects with high (1st group) and low (2nd group) indicators of vertical career growth



The significance of incorporating the intellectual properties of personality in the analysis system in the probabilistic determination of the success of an employee's

vertical career in the organization is confirmed by the presence of a correlation relationship ($r=0.205$, $p \leq 0.05$) between the factor B (intelligence factor according to Cattell's method) and spontaneity (scale of Sobchik's ITQ method), which makes significant contribution to the indicators of the success of vertical career growth in the organization.

It seems relevant to the authors to determine the degree of interdependence of personality traits in the research, which at a statistically significant level are important for employees' vertical career growth in the organization (Table 3).

Table 3. Results of the correlation analysis of employees' individual personal characteristics in the organization, which are significant for vertical career growth

Personal properties	Parameters of the correlation analysis	F	I	L	Q ₄	Spontaneity	Anxiety
F	r-Pearson	1	-.009	.073	-.068	.057	.006
	Significance (two way)		.927	.477	.511	.582	.952
I	r-Pearson	-.009	1	-.167	-.274**	.089	.009
	Significance (two way)	.927		.102	.007	.387	.932
L	r-Pearson	.073	-.167	1	.409**	-.095	.281**
	Significance (two way)	.477	.102		.000	.355	.005
Q ₄	r-Pearson	-.068	-.274*	.409**	1	-.423**	.484**
	Significance (two way)	.511	.007	.000		.000	.000
Spontaneity	r-Pearson	.057	.089	-.095	-.423**	1	-.417**
	Significance (two way)	.582	.387	.355	.000		.000
Anxiety	r-Pearson	.006	.009	.281**	.484**	-.417**	1
	Significance (two way)	.952	.932	.005	.000	.000	

Note: F – restraint–expressiveness; I – stiffness–sensitivity; L – trustfulness–suspicion; Q₄ – relaxation–tension.

The analysis of values of the Pearson correlation coefficient (Table 3) shows that such personal parameters as tension, anxiety, spontaneity, rigidity and suspicion are interrelated, and the expressiveness index (F) is independent. It is noteworthy that the intensity index (Q₄) influences most of the discussed properties: with an increase in tension, manifested by high energy tension, frustration, increased motivation, anxiety, nervousness and irritability, there is also an increase in anxiety, suspicion and stiffness, but a decrease in spontaneity.

Thus, one can identify the two symptom complexes of personal properties that affect the success of employees' vertical career growth in the organization: the symptom complex of mental tension, manifested by the level of anxiety, suspicion, inclination to risk and emotional sensitivity, and the symptom complex of expression, manifested in the degree of emotional and dynamic factor of communication. Conditionally, the symptom complex of mental tension reflects the inner mental state, predisposition, and the symptom complex of expression reflects the nature of the external manifestations of behavioral patterns.

Employees with low indicators of vertical career growth are characterized by a higher level of mental tension (they are energetically tense, they try not to go beyond the limits of official instructions, their increased (tense) motivation to perform professional functions and lack of inclination to risk do not allow setting and solving tasks of a higher organizational level, they do not notice the nuances and direct their behavior to obvious things) and low expression (restrained in expressing emotions, pessimistic, careful in communication). Employees with high indicators of vertical career growth are less tense (less anxious, spontaneous, slightly prone to risk) and more expressive.

4. Conclusion

Individual personal characteristics of employees in the organization can be considered as predictors of their vertical intraorganizational career growth. The indicators of vertical intraorganizational growth at a statistically significant level are associated with individual personality traits, manifested in the level of mental tension (anxiety, suspicion, inclination to risk, spontaneity and emotional sensitivity) and expressiveness.

The importance of regulatory and intellectual properties (speed of thinking, general level of verbal culture and erudition) in the differentiation of employees with high and low indicators of vertical career growth in the organization was not determined. But higher values of indicators of general mental abilities in a group of employees with high indicators of vertical career growth and statistically significant correlation of the intellectual factor with the scale of spontaneity that makes significant contribution to the success indicators of vertical career in the organization, do not allow excluding the intellectual properties of a personality from the analysis system under probabilistic determination of the opportunities for vertical career growth of an employee in the organization.

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