

Teachers' Leadership in the Structure of the University Image: A Psychological Study

Yuliia Drozdova*

Department of Foreign Philology and Translation
Kyiv National University of Trade and Economics
Kyoto str. 19, 02156 Kyiv
Ukraine
e-mail y.drozdova@knute.edu.ua

Vasyl Stasiuk

Department of Moral and Psychological Support of the Troops Activity
National Defence University of Ukraine
Povitroflotsky Ave. 33, 03049 Kyiv
Ukraine
e-mail vvsgrad@gmail.com

Serhiii Vasylenko

Department of Moral and Psychological Support of the Troops Activity
National Defence University of Ukraine
Povitroflotsky Ave. 33, 03049 Kyiv
Ukraine
e-mail vsv04242@gmail.com

Abstract Our paper defines psychodiagnostic tools of research to carry out factor analysis and find out the individual-psychological features of academic staff leadership by the structural components of University image. Psychodiagnostic techniques aimed at the study of transformational leadership, social and psychological attitudes of the individual in the motivational sphere, communicative and organizational abilities, psychological and individual-typological features of the examined. We defined structural components of University image based on the results of empirical studies and factor analysis. We determined that the internal University image is a complete structural and functional organization of mental activity of academic staff which functions within 5 of its components: F-1 leadership, F-2 motivational, F-3 communicative, F-4 personal, F -5 typological with relevant functions of leadership, motivation, interaction, stabilization and integration. We have formed the author's definition of leadership based on the results of theoretical and empirical research. We consider leadership as its individual-psychological characteristics in the structure of the University academic staff as a holistic polymotivated structural and functional organization of the mental activity of the individual, which determines the effective level of functioning due to the integrated homeostatic regulation of transformational leadership variables, motivational, communicative, personal and typological spheres of personality examined as leading components, which determine the high status of the individual, ability to influence the behavior and activity of the environment to achieve the goal and to develop a positive University image.

Keywords: teachers, leadership, University image, psychology, structural components

1 Introduction

The issue of leadership and University image is of relevance today as in the whole world and in Ukraine. Uni-versity strategic goal is survival in the harsh conditions of competition in the education services market. At the same time, leadership positions on the educational services quality level depend on many external and internal factors, its scientific and educational potential, namely: the quality of academic staff and personnel policy; image and prestige; experience in the educational services market; financial informational and logistical support.

Leadership as a socio-psychological phenomenon has traditionally interested scientists from all over the world and in all fields of science. In various historical periods, attempts were made to uncover leadership qualities based on an idealized description of certain prominent personalities.

Scientific studies of leadership emerged in the 20th century, when this phenomenon became the subject of study of such sciences as psychology, sociology with advanced diagnostic tools. One of the early leading theories of leadership in the first half of the 20th century was the "trait theory" with the concept of "great man".

uring this period, extensive research emerged to determine the variety of leadership traits that were replenished by each scientist.

Not degrading the role of researchers who founded the "theory of traits" Stogdill (1948) on the basis of his studies of leadership properties, noted that the analysis of the obtained data showed inconsistent results. The author proved that a certain set of leadership qualities does not yet determine their realization.

In further studies, such scientists as Hemphill (1949), Fiedler (1988), Menegetti (2000) in their concepts stated that inclinations and leadership manifest in certain situations, in specific organizations.

Along with these concepts of leadership, Stogdill and Shartle (1955) proposed to consider leadership not only because of the leader's personal qualities, situations, but in terms of his status, interaction and behavior with others. Gibb (1958) singled out four leading positions in the general theory of interaction: internal interaction as the attainment of the purpose of the group and the personal attainment of every person; role differentiation of leadership in the group; interaction and mutual evaluation by each other's members; unity of physical and emotional perception of the environment.

Blank (1995), developing previous concepts of leadership, argues that not only personal traits, situational or organizational factors predetermine leadership, but also the ability to form relationships with others who are considered followers of the leader.

Heider (1958) and Hollander (1958), who introduced and developed the concept of "credibility" of the leader, made a significant contribution to the transactional approach of leadership research. According to the authors, the magnitude of credit is determined by social status of the leader, his / her competence, degree of conformity of the behavior, which is accepted in the organization, and moral values. The integral value of the trust credit is directly proportional to the expectations of the followers about the leader's performance.

Subsequently, Pfeffer (1977) and Calder (1977) considered the "attribution approach" in the study of leadership as a construct that leads to belief in what determines leadership behavior and its expectations.

The concept of a predominantly motivational-value approach of leadership, which was significantly contributed by Hodgkinson (1991) and Kuczmarski (1995) is gaining a significant recognition in the late 20s in the early 21st century. The main tenets of this concept are that the leader has a tremendous influence on the development of the values of individual members and the organization, and that leadership is value-based and should evolve in the process.

At the same time, nowadays in the educational sphere both in the world and in Ukraine the approach of values with the concept of cost and benefit (claim) for University is gaining popularity. Another transfer leadership approach is that the leader evokes feelings and awareness of what is now particularly important and necessary to the followers, which emphasizes the value of what they do (Bennet and Anderson 2003). Both approaches complement each other when material, spiritual, motivational and other values are combined by the leader to achieve the goal of the activity.

Since leadership is considered to be the best and most essential manifestation of strong personality traits, the individual and psychological characteristics of academic staff that lead to leadership in the quality of educational services in the structure of a positive image of University have not been sufficiently studied.

The purpose of the article is to substantiate the psychodiagnostic tools of the research, to determine the structural components, functional mechanisms and features of the individual-psychological characteristics of leadership in the structure of the positive University image.

2. Methods, procedure, participants

In carrying out the scientific work we used theoretical and empirical methods of research. Theoretical methods included analysis and generalization of scientific achievements in the psychological literature on the problem of research. Empirical methods aim to elucidate the psychological characteristics of leadership examined in the structure of University positive image.

Thus, the Multifactor Leadership Questionnaire (Bass and Avolio 1990) allows to evaluate such personal trait as leadership. Through the Method of Personality Research (FPI - Freiburg Personality Questionnaire), we have identified states and personality traits that are of paramount importance to the process of social adaptation, behavior regulation, and therefore leadership.

To analyze the communicative sphere of academic staff we used the method of "Communicative and organizational skills" (Korolchuk and Krainyuk 2012). Motivational component was identified using the technique "Diagnosis of social and psychological attitudes of the individual in the motivational and needs sphere" (Bodrov 2003). Temperamental features were determined by the indices of "Individual typological questionnaire" (Bodrov 2003).

Factor analysis was conducted to find out the individual psychological characteristics and leadership of academic staff that lead to a positive image of University. Factor analysis was subjected to X-indicators of methods that determine indicators of personal, leadership, motivational, emotional-volitional and communicative qualities.

Organizational work was carried out in two stages. The theoretical stage was aimed at the analysis of scientific sources and definition of survey methods, the empirical stage was aimed at researching, interpreting and summarizing the results.

Characteristics of the surveyed academic staff contingent. A total of 250 persons participated in the study, 22% (25-34 years), 26% (35-40 years), 24% (41-45 years), 19% (46-50 years), 11% (51-60 years). According to their positions, the respondents were divided as follows: teaching assistants 20%, senior teachers 21%, associate professors 43%, professors 16%.

3. Results and discussion

According to the results of factor analysis of methodological indicators aimed at finding out the individual-psychological characteristics of NPP leadership, we have identified a 5-factor model of the structure of the positive image of University. Each factor was given a corresponding name for the prevailing factor load in the range of 0.5-0.8 units. Thus, the first factor F1 was called leadership (coefficient of variance of 12%); second F4 - personal factor (coefficient of variance of 18%); F3 - communicative (coefficient of variance of 16%); F2 - motivational factor (coefficient of variability of 14%); F5 is a typological factor (coefficient of variation of 19%).

The analysis of leadership indicators using the Multifactor leadership questionnaire (Bass and Avolio 1990) showed the following. Thus, the most pronounced indicators were on the scales: ability to inspire (11.3 ± 0.6 p.) and influence (11.0 ± 0.8 p.). The high level of these indicators indicates the academic staff ability to stimulate the work of others, to direct activity and overcome obstacles. The high level of the scale of influence, respectively, indicates the ability of the individual to form confidence and to convey their ideas.

The following indicators of leadership scales have determined the ability of academic staff to stimulate intellectual stimulation (10.4 ± 0.7 p.). This characterizes the surveyed as being able to inspire others to take a creative approach to solving problems and to create an environment for their ability and self-fulfillment.

Indicators on a control scale (10.4 ± 0.7 p.) are essential for characterization of academic staff leadership. This indicates how the individual is managing the goal achievement process or trying to optimize teamwork.

The motivational component of leadership in academic staff is also observed at a high level (9.0 ± 0.8 p.), although this figure is $1.0 - 2.0$ p. significantly lower than indicators on the scales of influence, ability to inspire, intellectual stimulation, management (at $p < 0.05$). According to the author's interpretation of the motivation scale, it indicates the degree of motivation of others to achieve the goal, the value of the result, its criteria and clearly defined expectations.

Indicators on the scale of individual approach (8.2 ± 0.9 p.) and granting of independence (8.1 ± 0.7 p.) corresponding to their moderate expression ($5.0 - 8.0$ p.) are practically at the same level. (by author's interpretation). This level of indicators in the academic staff indicates the interest, ability to find an individual approach in the interaction.

The scale of independence reveals the propensity of the subjects to properly and effectively organize their work in order to achieve their goal, the desire to do everything on their own.

The ability of academic staff as a whole to transformational leadership is determined by the sum of all seven scales (9.71 ± 0.7 p.), which we regard as high (within $9 - 12$ p. by criterion estimates of the authors of the methodology).

Thus, we have found that for academic staff there is a high level of transformational leadership. This is confirmed by the performance of the relevant scales within ($10.0 - 11.3$ p.) and the hierarchy of ratings on such scales as: ability to inspire (1 by rating); impact (2 by rating); intellectual stimulation (3 by rating); management (4 by rating). At the same time there are moderately expressed abilities for leadership in terms of motivation and individual approach.

Thus, it has been identified that such high level academic staff leadership indicators as ability to inspire, influence, intellectual stimulation, control and moderate level as motivation and autonomy in the aggregate and interaction lead to a high level of transformational (overall leadership), which, overall, has a positive impact on the image of University.

The values of the motivational component of the characteristics of academic staff leadership in the structure of the University image were determined according to the indicators "Methods of diagnostics of social and psychological attitudes of the individual in the motivational and needs sphere". The assessment was performed on a 10-point scale with the following criteria: 0-3 points - low; 4-7 - medium and 8-10 points - high level of motivation (Bodrov 2003).

We established that the academic staff on the scale "process orientation" is estimated 8.94 ± 0.71 p. that is, the examinees like the process of professional activity, but they have a negative attitude for the hard work.

Indicators on the orientation of the academic staff to the result were recorded at the high level (9.31 ± 0.4 p.). Such persons aim to achieve results in all conditions, overcoming obstacles and failures.

Indicators on the scale "orientation to altruism" are within the average level - 5.91 ± 0.32 p., which indicates the presence in the survey medium of this important and valuable social motivation, which emphasizes human maturity.

The results on the self-orientation scale (5.61 ± 0.39 p.) indicate that there is a share of "reasonable selfishness" in interaction with others.

The high indicator on the scale "orientation to work" 8.78 ± 0.64 p. indicates that academic staff are focused on the performance of their professional activities, without sparing their time (weekends, vacations), and this style of life brings them pleasure.

Indicators of one of the main values inherent in the academic staff - orientation towards freedom are on a similar scale (8.92 ± 0.81 p.).

According to the following indicators, the academic staff revealed a high level of orientation towards power (9.28 ± 0.52 p.), which testifies to their orientation value of influence on others, on society.

According to the "money orientation" scale it is determined that academic staff are aimed at increasing their well-being and this is expressed within the upper values (7p) of the average indicators of the examinees (6.83 ± 1.5 p).

Thus, on the basis of the obtained results, it is proved that in the motivational-needs sphere of the academic staff, the social and psychological attitudes of the personality such as orientation to the result, power, freedom, work, process, money dominate and determine the positive image of University. According to the author's interpretation of the technique for academic staff, there is a predominantly high motivation with harmonic orientations, as they dominate in the motivational and needy sphere of high and medium level orientations.

The analysis of the communication sphere of the academic staff was investigated by the method of "Communicative and organizational skills" (KOZ) (Korolchuk and Krainyuk 2012).

Importance in professional activity and expressiveness of leadership characteristics in academic staff is due to a very high level of communication skills (0.77 - 0.85 units)) and organizational skills (0.83 - 0.88 units). High level in the range of communicative abilities (0.66 - 0.75 units) and organizational abilities (0.71 - 0.80 units) and medium level of communication skills (0.56 - 0.65 units) and organizational abilities (0.66 - 0.70 units).

We found out that in 20% of the surveyed there is a very high level of KOZ, in 61% - high and in 19% - an average level of KOZ. This indicates that academic staff members are actively seeking communication and organizing activities, quick to navigate difficult situations, inclined to make independent decisions, uphold their opinions, help and influence the others so that they are perceived by others.

Therefore, communicative organizing skills are a necessary prerequisite for the development of leadership skills of academic staff, which have a positive impact on the image of University. Based on the analysis of FPI (Freiburg personal questionnaire) indicators, we investigated the individual-psychological features and states of academic staff that characterize social adaptation and regulation of the behavior of the subjects, which determines the leadership potential of the individual and positively influences the image of University. In accordance with generally accepted criteria, each of the 12 scales is rated in the range of 1 - 3 p. as low; 4 -6 p. both average and 7 -9 p. as high level (Korolchuk and Krainyuk 2012).

We determined that on the scale of "neuroticism" in academic staff indicators at the level of 5.56 ± 1.5 p are observed. This characterizes the examinees as such that the neurotic syndrome is moderately expressed, and they have signs of minor psychosomatic disorders.

The spontaneous aggressiveness scale gives a possibility to identify and evaluate the psychopathologization of the individual but obtained indicators (4.28 ± 0.75 p.) show that the impulsivity of behavior is not inherent in the majority of academic staff.

According to the indicators of the third scale, characterizing the level of depression in the examinees is determined at the border of medium and low indicators (3.91 ± 1.2 p.). This indicates that no significant signs of depressive syndrome in the emotional state, behavior, self-attitude and social environment were revealed.

On the scale of "irritability" indicators within the limits of 5.57 ± 1.68 p. are observed, that testifies to the average level of stability of emotional state and at the same time in 20% of the surveyed the estimation is at a rather high level that indicates signs of unstable emotional state.

The most pronounced in the academic staff were the indicators of communicativeness (7.29 ± 1.31 p.), this characterizes the social activity of the subjects, the ability to interact with others and, of course, enhances the leadership potential of the individual and has a positive effect on the image of University.

Such feature as equilibrium in academic staff is set at 4.6 ± 1.2 p. The high and average level of this indicator shows a significant level of protection to the effects of stress factors, their confidence in themselves, optimism, activity. At the same time, 20% of surveyed show low levels of resistance to stress, which negatively affects their leadership potential and the image of the University.

Ratings on the "reactive aggression" scale (5.24 ± 0.6 p.) indicate an average level of social aggression and this part of the surveyed has a clear desire for dominance.

Indicators of the “uncertainty” scale (6.01 ± 1.54 p.) show the tendency of the subjects to respond to stressful situations. The indicators above the average, which are observed in 20% of the surveyed, indicate the presence of tightness, tension, and therefore there are difficulties in social contacts, which does not contribute to the leadership and positive image of University.

The average values of the “openness” scale (5.15 ± 1.36 p.) characterize the attitude of the academic staff to the social environment, the desire for trusting and open interaction and self-criticism.

We found out that the data on the scale of “extroversion and introversion” (5.04 ± 2.01 p.), as well as “masculinism-feminism” (5.13 ± 1.71 p.) expressed equally.

The average scores on the emotional lability scale (4.75 ± 1.34 p.) give grounds to say that the emotional state changes between stable and unstable in mood, mood can fluctuate, sometimes irritability, excitability occurs, but the examinees are able to control themselves.

Thus, according to the FPI methodology we found out that such qualities as communicativeness, openness have a high level of expressiveness, which together with the average assessments of neuroticism, depression, equilibrium, emotional lability indicate that in the majority of the subjects they harmoniously combine and characterize. causes a positive impact on the image of University. At the same time, up to 20% of surveyed have indicators that go beyond the average (normative) values, which causes a negative impact on leadership potential and does not contribute to a positive image of University.

Analysis of results using the method “Individual-typological questionnaire” (Bodrov 2003) allows to estimate and determine a harmonious personality on a 9-point scale (3-4 points); presence of accented features (5-7 p.) and maladaptation qualities (8-9 p.). The results on all scales of this methodology are arranged as follows:

- insincerity (3.51 ± 0.17 p.). Such indicators mean that members of academic staff were frank during the responses;
- agrarianism, as the desire to emphasize certain problems and consequences, is not observed in the surveyed (1.0 ± 0.05 p.);
- extraversion characterizes academic staff members as realists with objective values, open, sociable, seeking to expand contacts, leadership (6.72 ± 0.97 p.);
- spontaneity reveals activity, self-affirmation in interaction, desire for leadership (6.13 ± 0.95 p.);
- aggression by the author's interpretation is considered as active self-realization, self-affirmation, stubbornness in defending their interests (6.19 ± 0.34 p.);
- rigidity characterizes subjectivity, inertia of attitudes, tendency to pedantry and alertness (3.8 ± 0.4 p.), which is not typical for examined;
- introversion as an appeal of personality to the world of subjective experiences, values, restraint, seclusion (2.7 ± 0.9 p.), which is not typical for examined;
- sensitivity indicates vulnerability, tendency to reflection, pessimism, dependence (3.17 ± 0.7 b.), which is not characteristic of the vast majority of academic staff;
- anxiety, which indicates emotionality, sensitivity, insecurity and is distrustful, fearful, (2.15 ± 0.07 p.) does not characterize the subjects;
- lability is expressed in the range of 4.01 ± 0.47 p., which characterizes academic staff as emotional, motivationally unstable, but such characteristic is not very expressed.

Thus, according to the results of the individual-typological characteristics of the personality, it was found that 7 indicators are within 0-4 points, and three - within 4-6 points, which indicates the emotional stability of the subjects and allows optimization of adaptation to different conditions. At the same time, leadership is formed by a combination of pronounced extraversion and moderately expressed spontaneity and aggressiveness, and high level of communication is formed due to such features as expressed extraversion and emotional lability.

4. Conclusions

On the basis of theoretical and methodological analysis of scientific sources and empirical research of scientific problem, which consists in substantiation of psychodiagnostic toolkit, determination of structural components, functional mechanisms and features of individual-psychological characteristics of leadership for academic staff in the structure of positive University image.

We defined structural components of University image based on the results of empirical studies and factor analysis. We determined that the internal University image is a complete structural and functional organization of mental activity of academic staff which functions within 5 of its components: F-1 leadership, F-2 motivational, F-3 communicative, F-4 personal, F -5 typological with relevant functions of leadership, motivation, interaction, stabilization and integration. Such a structural and functional organization of the subjects' psyche determines the homeostasis of the personality due to self-regulation, development and their reciprocal interaction.

This implies a possible strengthening and more intensive development of some functions while weakening others.

We determined the psychodiagnostic tools of the research which allowed carrying out factor analysis and finding out the peculiarities of transformational leadership for academic staff in the structure of the University image

In addition, we characterized social and psychological attitudes of the individual in the motivational sphere, communicative and organizational abilities, and psychological qualities of the examined and individual-typological features.

We proved that the basis of transformational leadership is determined by the following characteristics: motivational ability to persuade, the ability to influence, intellectually stimulate, effectively manage. As for the motivational factor, academic staff has a dominance of highly motivated, harmoniously expressed orientation to the result, power, freedom, process. The communicative component of academic staff members is characterized by a high level of communicational and organizational skills. We found that such features as communicativeness, openness, balance, confidence, according to the FPI method, contribute to harmonization and leadership. Individually typological features in most indicators characterize emotional stability of the subjects, which allows optimization of adaptation to different conditions of life. In addition, expressed emotional-volitional traits, combined with moderately high spontaneity and aggressiveness, form leadership qualities, and a high level of communication is formed due to the combination of such personal characteristics as extraversion and emotional lability.

We have formed the author's definition of leadership based on the results of theoretical and empirical research. We consider leadership as its individual-psychological characteristics in the structure of the University academic staff as a holistic polymotivated structural and functional organization of the mental activity of the individual, which determines the effective level of functioning due to the integrated homeostatic regulation of transformational leadership variables, motivational, communicative, personal and typological spheres of personality examined as leading components, which determine the high status of the individual, ability to influence the behavior and activity of the environment to achieve the goal and to develop a positive University image.

References

- Bennett N, Anderson L, Rethinking educational leadership, 1st edn. (London: Sage publications Ltd., 2003), 200 p.
- Blank W, The Nine Natural Laws of Leadership, 1st edn. (New York: AMACOM, 1995), 234 p.
- Bodrov V, Praktikum po differencialnoy psihodiagnostike professionalnoj prigodnosti, 1st edn. (Moscow: PERSE, 2003), 768 p.
- Calder B, An attribution theory of leadership. In Staw BM, Salancik QR (Eds.), New directions in organizational behavior, 1st edn. (Chicago: St. Clair Press, 1977), pp. 156-168
- Fiedler F, Potter E, Dynamics of Leadership effectiveness. Small group and social interaction, 1st edn. (London: V I, 1983), 145 p.
- Gibb C (1958) An Interactional View of the Emergence of Leadership. The Australian Journal of Psychology. 10(1):101-110. doi: 10.1080/00049535808255958
- Heider F, The psychology of interpersonal relations, 1st edn. (NJ, Hoboken: John Wiley & Sons Inc., 1958), 326 p.
- Hemphill J (1949) The Leader and His Group. The Journal of Educational Research 28:225-246
- Hodgkinson C, Educational leadership: The moral art, 1st edn. (Albany: State University of New York, 1991), 172 p.
- Hollander E (1958) Conformity, status, and idiosyncrasy credit. Psychological Review 65(2):117–127. doi: 10.1037/h0042501
- Korolchuk MS, Krajnyuk VM, Teoriya i praktika profesijnogo psihologichnogo vidboru, 1st edn. (Kyiv: Nika-Centr, 2012), 536 p.
- Kuczmarski S, Values-Based Leadership, 1st edn. (Englewood Cliffs, N. J.: Prentice Hall, 1995), 237 p.
- Menegetti A, Psichologiya lidera, 1st edn. (Moscow: Ontopsichologiya, 2004), 258 p.

- Pfeffer J (1997) The ambiguity of leadership. *Academy of Management Review* 2:104-112. doi: 10.2307/257611
- Stogdill R, Shartle C, Methods in the Study of Administrative Leadership, 1st edn. (Colombus: Bureau of Business Research, Ohio State University, 1955), 125 p.
- Stogdill R (1948) Personal Factors associated with Leadership: A Survey of Literature. *The Journal of Psychology* 25:35-71. doi:10.1080/00223980.1948.9917362