

ЕКСПЕРИМЕНТАЛЬНІ ТА ПРИКЛАДНІ ДОСЛІДЖЕННЯ

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INDIVIDUAL-PSYCHOLOGICAL PROPERTIES OF PERSONS WITH DIFFERENT LEVEL OF EDUCATION

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Aim: To identify the motivational-value and individual-characterological characteristics typical for persons with higher education. Disclosure of their psychological structural model of personality in comparison with persons with incomplete higher, special or secondary education.

Material: 58 respondents took part in the study. Men - 22, women - 36. Average age of the sample is 32.7 years. Respondents with higher education (n = 29, average age 33.3, standard deviation 10.06), and having an average, special, incomplete higher (n = 29, average age 32.3, standard deviation 10.4).

Results. It is established that persons with incomplete higher, special or secondary education have significant value orientations such as active social contacts, creativity, achievements in family life, personal prestige, material support and spiritual satisfaction in the field of hobbies. Their value field is made up of such terminal values as family life and the sphere of hobbies.

It was found that respondents with higher education differ in communicative, self-controlling, purposefulness, organizational qualities, focus on results in activity and power. They are aimed at achieving success in professional activities and building their own careers.

The psychological structure of the personality of the more educated respondents have been identified. Factor 1 "Value component of the personality structure", factor 2 "Emotional component of the personality structure" and factor 3 "Institutions in the motivational-need sphere." The psychological structure of less educated respondents according to the results of factor analysis has the following factors: factor 1 "Family values of personality" factor 2 "Personal properties and attitudes in the motivational-need sphere of the individual" and factor 3 "Material values".

Conclusions: More educated people are characterized by a focus on productive performance of professional activity, while less educated respondents are guided in building their own behavior to meet the needs for family life and leisure.

Keywords: motivational-need sphere, attitudes, individual-characterological differences, terminal values, persons with higher education.

Індивідуально-психологічні властивості осіб з різним рівнем освіченості

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Мета: Виявлення характерних для осіб з вищою освітою мотиваційно-ціннісних й індивідуально-характерологічних властивостей. Розкриття їх психологічної структурної моделі особистості у порівнянні з особами з неповною вищою, спеціальною або середньою освітою.

Матеріал: у дослідженні прийняли участь 58 респондентів. З них чоловіків – 22 особи, жінок – 36. Середній вік по вибірці 32,7 років. Респонденти, що мають вищу освіту (n=29, середній вік 33,3, стандартне відхилення 10,06), та такі, що мають середню, спеціальну, незакінчену вищу (n=29, середній вік 32,3, стандартне відхилення 10,4).

Результати: Встановлено, що особи із неповною вищою, спеціальною або середньою освітою мають такі виражені ціннісні орієнтації, як активні соціальні контакти, креативність, досягнення у сімейному житті, власний престиж, матеріальне забезпечення та духовне задоволення у сфері захоплень. Їх ціннісне поле складають такі термінальні цінності, як сімейне життя та сфера захоплень.

Виявлено, що респонденти з вищою освітою відрізняються комунікативністю, самоконтролем, цілеспрямованістю, організаторськими якостями, орієнтацією на результат у діяльності та владу. Вони спрямовані на досягнення успіху у професійній діяльності та побудову власної кар'єри.

Визначено психологічну структуру особистості більш освічених респондентів. Фактор 1 «Ціннісна складова структури особистості», фактор 2 «Емоційна складова структури особистості» та фактор 3 «Установки у мотиваційно-потребнісній сфері». Психологічна структура менш освічених респондентів за результатами факторного аналізу має наступні фактори: фактор 1 «Сімейні цінності особистості», фактор 2 «Особистісні властивості та установки у мотиваційно-потребнісній сфері особистості» та фактор 3 «Матеріальні цінності».

Висновки: Більш освічені особи характеризуються спрямованістю на продуктивне виконання професійної діяльності, у той час, як менш освічені респонденти орієнтуються у побудові власної поведінки на задоволення потреб у сфері сімейного життя та дозвілля.

***Ключові слова:** мотиваційно-потребнісна сфера, установки, індивідуально-характерологічні відмінності, термінальні цінності, особи із вищою освітою.*

Introduction. Ukraine is known throughout the world as a country with a high human resource and, accordingly, potential. Indeed, a rather high percentage of Ukrainians have a higher education that allows them to become competitive both in the Ukrainian and world labor markets. The world-wide understanding of the educated person as a cultural-historical concept is forming at the moment (Ortynskiy, 2009). It represents not only a person with certain knowledge, skills, competence, but also the kind of developed worldview, developed morality, etc. (Ortynskiy, 2009). We believe that not only this knowledge contributes to successful professional development, employment, improvement of a sense of subjective well-being. Certain individual and psychological properties that are developing in higher education are also important. Therefore, the study of these qualities is an important direction in the development of professional psychology.

The **aim** of the research is to identify the characteristics of persons with higher education of motivational-need sphere and individual-characterological properties: the implementatuin of their psychological structural model of personality in comparison with persons with incomplete higher, special or secondary education. A hypothesis is made that those with a higher level of education in the structure of the person dominate the values associated with the field of achievements in the professional field. Typical settings in the motivational-need sphere are orientation on the result and power.

Methodology of research. Research sample: 58 respondents participated in the study (male - 22, female – 36). The average age of the sample is 32,7 years. Respondents with higher education (n = 29, average age 33,3, standard deviation 10,06), and those with a secondary, special, incomplete higher (n = 29, average age 32,3, standard deviation of 10, 4).

Organization of research: for solving the tasks, the following methods of research were used: analysis of scientific literature, psychological testing and methods of mathematical statistics (descriptive statistics, parametric Student's t-criterion, factorial analysis (an exploratory method of the main components with a Varimax rotation).

The testing program includes the following psychodiagnostic methods. The questionnaire of terminal values (I.G. Senin,1991). The total scores for scales were calculated: the sphere of professional life, education, family, social life, and sphere of hobbies. For each of the fields, terminal values are

deduced: prestige, high financial standing, creativity, active social contacts, self-development, achievements, spiritual satisfaction and the preservation of their own personality.

Method of multifactorial personality research by Cattell (Form C) (Kapustina, 2004). The personality profile of this technique is measured by 16 factors, which include communicability, intelligence, self-control, emotional stability, normativity, trust, self-control, conservatism, conformism, courage, practicality, straightforwardness, stiffness, prudence, dominance and self-esteem.

Psychodiagnostics of socio-psychological mindsets of the person in the motivational-need area by Potomkina (Ilin, 2002) consists of two parts with the following scales: process orientation, result, altruism and selfishness, orientation towards work, freedom, power and money.

Results. The problem of individual psychological properties of a person with different levels of education for today is not sufficiently researched. Features of socio-psychological competence of subjects of different levels of education were studied A.V. Kvitchasty (2012). In particular, the level of education affects the following structural and content characteristics of social and psychological competence, such as general communicative tolerance, the ability to track their emotional states and recognize the emotions of others, empathy, the ability to find an understanding with others, to adapt to the group and the propensity to participate in the collective social -significant activity. N.O. Ivashchenko explored personal resources in working with normative crises of people with different levels of education. It is revealed that persons with higher education are more capable of eliminating the contradictions between personality and environment, overcoming unfavorable circumstances of life (Ivashchenko, 2017). People with higher education are more satisfied with life and successful, they succeed in different spheres of life (Dubov, 2012).

The peculiarities of handicapping in relation to the level of education can be found in O.O. Stavitsky (2012). It is indicated that the higher the level of education is, the more intolerant attitude towards such people, and more "abyss (intellectual, emotional, motivational, etc.) between a healthy and disabled person" (Stavytskyi, 2012).

The specificity of the use of protective mechanisms by people of various educational status was investigated by V.O. Negriy (2012). In particular, it has been established that persons with higher education less use protective mechanisms such as introjection, response and omnipotent control.

The peculiarities of the personality motivational sphere with higher education in the context of the influence on her perfectionism (Dubov, 2012), the structure of the motivational sphere of people with different levels of education (Guay, Morin, Litalien, Valois & Vallerand, 2015), the influence of personal resources on the formation of academic motivation (Fatima, Sharif & Zimet, (2018), and the peculiarities of information literacy in more educated individuals (Ross, Perkins & Bodey, 2016).

Despite a certain number of works devoted to various psychological aspects of people with different levels of education, the problem of motivation-need and value spheres and individual-characterological properties of such persons is still unresolved.

Therefore, in order to achieve the goal and to identify the motivational-value and individual-characterological properties characteristic for persons with higher education, a psychodiagnostic study was conducted and in the subsequent comparison of the results of respondents with complete higher and incomplete higher, special or secondary education was made. Table 1 shows comparisons of determined methods only on those scales, according to which statistically significant differences were found.

Table 1

Psychological characteristics of persons with different levels of education

<i>Psychological characteristics</i>	Group 1	Group 2	Statistics	
	M±SD	M±SD	t-Student	p
Active social contacts in the professional field	6,3±1,82	7,41±1,45	-2,458	0,017
Creativity in learning process	7,1±1,97	8,13±1,55	-2,130	0,038
Achievements in family life	7,1±1,76	8,13±1,59	-2,246	0,029
Prestige in the field of hobbies	6,26±2,03	7,34±1,56	-2,066	0,043
High financial position in the field of hobbies	7,33±1,68	8,13±1,52	2,357	0,048
Spiritual pleasure in the field of hobbies	6,7±1,89	7,62±1,84	-2,157	0,024
Sphere of hobbies	56,8±8,77	61,75±8,82	-2,153	0,049
Communicativeness-closure	7,4±1,84	6,41±1,68	2,002	0,049
Self-control	7,66±1,74	6,68±1,67	2,558	0,013
The result in the activity	6,76±1,59	5,58±2,07	2,558	0,013
Power	4,55±2,21	3,48±2,02	2,217	0,048

Group 1 - Individuals with higher education. Group 2 - Individuals with incomplete higher, special or secondary education

It is established that according to terminal values, which should be sought in life, the studied samples are seriously different. Respondents who do not have a higher education appreciate more actively social contacts in professional life ($r = 0,017$), creativity in education ($r = 0,038$), achievement in family life ($r = 0,029$), prestige, material position and spiritual satisfaction in the field seizures ($r = 0,043$, $r = 0,048$ and, respectively, $r = 0,024$). The sphere of hobbies for them is more significant, in contrast to more educated subjects ($r = 0,049$).

Attempting to establish communication during the professionalization indicates lack of attention to the process itself or the result of professional activity. The focus only on building a warm relationship with colleagues can reduce the effectiveness of the activity and, accordingly, cause a lack of effectiveness.

The orientation on finding something new during profession studies shows the trying to add something new in a group with no higher education. This testifies to their active cognitive interest in learning. It is clear that people with a higher education are already trying to realize the knowledge they have, and thus to a lesser extent aimed at learning.

Achievements in family life are more characteristic of a sample with a lower level of education. The activity of these people is focused on the analysis of the quality of their own family relationships in comparison with others. They also try to prove to others that they themselves or their children are not worse than others.

There are quite a lot of differences in terms of different terminal values in the field of hobbies. According to them, individuals without higher education are oriented towards the assessment of other people about their hobbies. They try to choose a way to spend their free time that would be appreciated by their friends and, accordingly, would increase their authority. In addition, they are intended to receive material rewards from hobbies, as well as satisfaction from the process of spending free time. Thus it is established that for respondents with higher education in general less important is the sphere of hobbies. At the same time, in less educated respondents, it occupies one of the leading places, because they believe that full-fledged life is impossible without hobbies.

Differences in individual-characterological properties between the groups under investigation were revealed. In particular, communicativeness ($r = 0,049$) and self-control ($r = 0,013$). It was revealed that people with higher education are more sociable, ready for cooperation and to work together, feel easy in establishing contacts, try to keep up with the times and be leaders, at least in small groups. They are also characterized by

purposefulness, developed by the will, able to control their own emotions, are prone to organizational activity. They succeed in those professions where such characterological features as balance, resolve and objectivity are required.

The more educated respondents have the following more pronounced socio-psychological mindsets in the motivational-need sphere: orientation to the result in activities ($r=0,013$) and power ($r=0,048$). According to the results, such individuals seek to achieve results in any activity, regardless of the complexity of the circumstances that can prevent it. Respondents with a higher education are aimed at obtaining a concrete result, which must be made on certain terms. These respondents also need to control others, influence others.

By studying the structure of a person with higher education, using factor analysis, three main components are identified, with a total of 60.48% dispersion.

The first factor (dispersion is 33,7%) is unipolar and has the following major correlations: self-prestige (0,867), self-development (0,861), sphere of public life (0,824), spiritual satisfaction (0,810), sphere of professional life (0,772), achievement (0,762), creativity (0,754), field of study (0,748), high material position (0,738), preservation of individuality (0,729), orientation to labor activity (0,490). The factor characterizes the peculiarities of the value component of the personality structure of respondents with higher education. Accordingly, the value sphere is revealed in a multi-vector orientation on different aspects of life. In particular, it is an orientation towards one's own personality (prestige, development, achievement, creativity, individuality, etc.), as well as professional and social life. Therefore, such individuals are fully and harmoniously developed, they understand the need to simultaneously invest their own forces in different spheres of life, which will eventually produce a positive effect and bring satisfaction.

The second factor (dispersion is 16,084%) is bipolar and includes: emotional stability (0,813), anxiety (-0,704), courage (0,692), anxiety (0,690), independence (0,613), self-control (0,604), independence (0,526). The factor characterizes the emotional sphere of the person with a higher level of education. It is characterized by maturity, endurance, orientation towards reality, stability of interests, self-confidence, cheerfulness, ability to control emotions and behavior. There is also no need to ask for an outside opinion, the ability to cooperate with even strangers, demonstrate leadership qualities, they are active, courageous, and enterprising. Thus, persons with higher education are confident, independent and active, which allows them to achieve their life goals.

The third factor (dispersion is 10,7%) is bipolar, with the following components: selfishness (0,696), result (0,662), power (0,660), suspicion (0,602), freedom (0,560), money (0,485), impracticality (-0,473), altruism (-0,480), independence (0,451). The factor characterizes the mindsets of a motivation-need sphere on personality. It characterizes a personality that is directed at interests and needs, has a desire to influence other people and derive from it certain dividends in the form of material or social values.

The structure of a person with incomplete higher, special or secondary education includes the following factors (total dispersion is 56,44%).

The first unipolar (dispersion is 28,651%) has the following properties: active social contacts (0,885), family life (0,868), self-development (0,834), prestige (0,805), achievements (0,800), preservation of one's own personality (0,755), sphere of excitement (0,720), field of study (0,689), sphere of public life (0,688), spiritual pleasure (0,645), sphere of professional life (0,638). This factor reveals the value sphere of respondents. In particular, the focus, first of all, on the family sphere supposes to receive satisfaction from communication with others, including during leisure time, the implementation of some hobbies. The spheres of training and professional and social life are also significant for these respondents, but only in the context of family self-realization.

The second bipolar factor (dispersion is 19,519%) includes: power (0,689), courage (0,592), emotional stability (0,591), independence (0,573), self-support (0,566), money (0,504), sufficiency (-0,430), safety (0,403), sphere of enthusiasm (0,404), spiritual pleasure (0,416). The factor characterizes the mindsets in the motivational-need sphere and the characterological properties of respondents with incomplete higher, special or secondary education. According to this factor, the researchers can be characterized as emotionally stable and volitional individuals. They are aimed at controlling others, trying to influence even the society. That is, the leading value for them is domination over others, which can bring material pleasure.

The third and the largest factor (dispersion is 8,27% informative) includes the following major correlations: self-control (-0,654), high material position (0,627), labor (0,553), suspicion (0,484), process (0,478), tension (0,478), freedom (0,418), result (-0,411). The factor combines motivational-value and individual-characterological properties. This combination of personality structures characterizes respondents, such as those who work hard for the purpose of obtaining material rewards. They do not have enough control over their own emotional states and, in the

performance of any activity, are oriented not so much on the result as on satisfaction with the process of its implementation.

Discussion. The obtained results supplement the data on the importance of the analysis of individual psychological traits of people, depending on the level of education (Kvitchastyi, 2012, Negrii, 2012, Stavvytskyi, 2012, Fatima, Sharif, & Zimet, 2018). Other studies reveal the importance of factor analysis for constructing a model of personality structure, including with different levels of education, but data are not provided in this regard (Kozlova & Komarova, 2015, Negrii, 2012, Guay, Morin, Litalien, Valois, & Vallerand, 2015). The obtained data are important for assessing the psychological properties of more and less educated individuals, which determine the peculiarities of their behavior (Dubov, 2012, Ivashchenko, 2017, Stavvytskyi, 2012). They supplement the data on the impact of obtaining professional competencies on the emergence of certain psychological peculiarities (Dubov, 2012, Harvey, Milyavskaya, Hope, Powers, Saffran & Koestner, 2015).

Our results confirm the data of other studies on the different degrees of severity of certain psychological characteristics of more and less educated respondents (Ivashchenko, 2017, Kvitchastyi, 2012, Negrii, 2012, Stavvytskyi, 2012). The obtained results broaden the information about the necessity of analysis of the motivational-value sphere and the individual-psychological characteristics of the subjects [Harvey, Milyavskaya, Hope, Powers, Saffran, M. & Koestner, 2015, Ross, Perkins, & Bodey, 2016).

New data on specific individual-characterological features that are inherent to more educated persons and ensure the success of professional activity are obtained. Psychological structure of personalities of different levels of education is also substantiated and solved mathematically.

The hypothesis that has been put is almost completely confirmed. Indeed, more educated individuals differ in their specific psychological properties, such as communicative, self-control, purposefulness, organizational qualities, result orientation in activities and power, from less educated. Consequently, the results of our study indicate the need to focus the vector on the psychological properties of people with different degrees of education, the study of which will help direct their activities in a more efficient way.

The prospect of further scientific research is the study of the peculiarities of the behavioral components of the personality of people with different levels of education associated with the means to achieve their goals.

Conclusions. It has been established that persons with incomplete higher, special or secondary education have such significant value

orientations as active social contacts, creativity, achievements in family life, prestige, material support and spiritual satisfaction in the field of hobbies. They are oriented towards the assessment by others. In general, their value sphere is such a terminal value as family life and the field of hobbies.

It was revealed that respondents with higher education are characterized by communicative, self-control, purposefulness, organizational qualities, orientation to the result in activities and power. In general, they are aimed at achieving success in professional activities and building their own careers.

The psychological structure of the personality of the more educated respondents is determined. Factor 1 "Valuable component of the structure of the individual", factor 2 "Emotional component of the structure of the individual" and factor 3 "Mindsets in the motivational-need sphere". The psychological structure of less educated respondents according to the results of factor analysis has the following factors: factor 1 "Family values of the person", factor 2 "Personality properties and mindsets in the person's motivation-need sphere" and factor 3 "Material values". Thus, more educated individuals are characterized by a orientation on productive performance of professional activity, while less educated respondents are guided in constructing their own behavior to meet the needs of family life and leisure.

References

Dubov, I.G. (2012). *Sotsialno-psikhologicheskie aspekty aktivnosti [Socio-psychological aspects of activity]*. Moskva; Sankt-Peterburg: Nestor-Istoriia [in Russian].

Ivashchenko, N.A. (2017). Lichnostnye resursy v kontekste normativnogo krizisa perekhoda k vzroslosti i professionalnogo stanovleniia lichnosti [Personal resources in the context of normative crisis of transition to adulthood and professional development of personality]. T.E. Nalivaiko (Eds.). *Pedagogika, psikhologiya, obshchestvo-2017*. (pp. 213–226). Moskva: RusAlians Sova. Retrieved from <https://books.google.com.ua/books?id=EQMtDwAAQBAJ&printsec=frontcover&hl=ru#v=onepage&q&f=false> [in Russian].

Ilin, E.P. (2002). *Motivatsiia i motivy [Motivation and motives]*. Sankt-Peterburg: Piter [in Russian].

Kapustina, A.N. (2004). *Mnogofaktornaia lichnostnaia metodika R. Kettella [Multifactor personal technique Cattell R.]*. Sankt-Peterburg: Rech [in Russian].

Kvitichastyi, A.V. (2012). Osobennosti sotsialno-psikhologicheskoi kompetentnosti subiektov raznogo urovniia obrazovaniia [Features of socio-psychological competence of subjects of different levels of education]. *Candidate's thesis*. Moskva. Retrieved from

<http://www.dissercat.com/content/osobennosti-sotsialno-psikhologicheskoi-kompetentnosti-subektivno-raznogo-urovnya-obrazovaniya> [in Russian].

Kozlova, N.S. & Komarova E.N. (2015). Osobennosti subiektivnogo blagopoluchiiia lichnosti v zavisimosti ot urovnia ee obrazovaniia [Features of subjective well-being of the individual depending on the level of education] *Integratsiia obrazovaniia*, 1 (19), 60–64. Retrieved from <https://cyberleninka.ru/article/n/osobennosti-subektivnogo-blagopoluchiyalichnosti-v-zavisimosti-ot-urovnya-ee-obrazovaniya> [in Russian].

Negrii, V.A. (2012). Osobennosti zashchitnykh mekhanizmov lichnosti u liudei s raznym urovnem obrazovaniia [Features of protective mechanisms of personality in people with different levels of education]. *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriia: Psikhologicheskie nauki*, 4, 33–40. [in Russian].

Ortynskiy, V.L. (2009). *Pedahohika vyshchoi shkoly [Pedagogy of higher education]*. Kyiv: Tsentр uchbovoi literatury [in Ukrainian].

Senin, I.G. (1991). *Oprosnik terminalnykh tsennosti: rukovodstvo [The questionnaire of terminal values: a guide]*. Iaroslavl: Sodeistvie [in Russian].

Stavytskyi, O.O. (2012). Stavlennia do invalidyzovanykh u liudei z riznym rivnem osvity [Nw Walsh attitude to people with different levels of education] *Visnyk Natsionalnoho universytetu oborony Ukrainy*, 4(29), 256–262 [in Ukrainian].

Harvey, B., Milyavskaya, M., Hope, N., Powers, T.A., Saffran, M. & Koestner, R. (2015). Affect variation across days of the week: influences of perfectionism and academic motivation. *Motivation and Emotio*, 4 (39), 521–530.

Guay, F., Morin, A.J.S., Litalien, D., Valois, P. & Vallerand, R.J. (2015). Application of Exploratory Structural Equation Modeling to Evaluate the Academic Motivation Scale. *The Journal of Experimental Education*, 1 (83), 51–82.

Fatima, S., Sharif, H. & Zimet, G. (2018). Personal and Social Resources Interplay Synergistically to Enhance Academic Motivation. *IJEP – International Journal of Educational Psychology*, 2 (7), 196–226.

Pidbutska, N., Knysh, A. & Chala, Yu. (2017). Future Engineers' Psychological Readiness For Common Competencies Development In The Process of Studying "Professional Psychology". *Hayka i osvita*, 11, 98–104 [in Ukrainian].

Ross, M., Perkins, H. & Bodey, K. (2016). Academic motivation and information literacy self-efficacy: The importance of a simple desire to know. *Library & Information Science Research*, 1 (38), 2–9.

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