

Tolerance of uncertainty as a component of the process of life-creation of future educators

Tolerancia a la incertidumbre como un componente del proceso de la creación de vida de futuros pedagogos

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Abstract

The purpose is to present the empirical research on tolerance of uncertainty as a component of future educators' life-creation process during their studies at higher education institutions. The study emphasizes that *intolerance* of uncertainty is developed because of inability to act without clearly determined guidelines, intention to receive utmost clarity in ambiguous situations and inclination to avoid uncertainty. The study empirically investigates tolerance of uncertainty as a component of the process of life-long learning of future educators. The results show that intention for self-expression; independence and autonomy are not considered as personal growth by the respondents. Factor analysis allowed establishing the structure of the process of life-creation of future educators, consisting of four main factors (64.21%). The structure factors are: "Psychological well-being" (3.904; 20.55%), "Tolerance of uncertainty" (3.528; 18.57%), "Life awareness" (2.753; 14.49%) and "Self-development of personality" (2.014; 10.60%). The study determines that the research participants' consciousness of life awareness is not based on an integral and realistic opinion on it. It recommends that a low level of tolerance should be considered as an incentive to renew life-creation practices.

Resumen

El objetivo de la investigación es estudiar empíricamente la tolerancia de futuros pedagogos en la etapa de cursar estudios en los establecimientos de educación superior. Se observa que la *intolerancia* a la incertidumbre se forma debido a la incapacidad de actuar sin tener orientaciones claramente definidas, así que al deseo de obtener la máxima claridad de situaciones ambiguas y la tendencia de evitar la incertidumbre. La tolerancia a la incertidumbre de futuros pedagogos fue investigada empíricamente. Se demuestra que el deseo de la autoexpresión, la independencia y la libertad no se considera como crecimiento personal. El análisis factorial estableció la estructura del proceso de la creación de vida de futuros pedagogos, que consta de cuatro factores principales (64.21%): "Bienestar psicológico" (3.904; 20.55%), "Tolerancia a la incertidumbre" (3.528; 18.57%), "Comprensión de la vida" (2.753; 14.49%) y "Autodesarrollo de la personalidad" (2.014; 10.60%). Se estableció que la comprensión de la vida de los investigados no se basa en la visión holística y realista. Se propuso considerar el bajo nivel de la tolerancia como un impulso hacia la renovación de las prácticas de la creación de vida.

Key words

Palabras clave

Intolerancia – Estudiantes – Orientaciones del sentido de la vida – Bienestar psicológico

Introduction

Today the modern person faces many vital challenges. You can handle these challenges by tolerating the conditions and circumstances in which he or she is. For young people such challenges are difficult because of the lack of their value system, beliefs, and worldviews. The inability to act without clearly defined benchmarks, the desire to obtain the maximum clarity of ambiguous situations, the avoidance of uncertainty, ultimately the pursuit of illusory well-being, forms *intolerance* to uncertainty. True psychological well-being of the individual depends on the ability to make decisions taking into account the variability and contradiction of the context, to take into account the influence of different factors on the same process, to build multifactorial models in the analysis of phenomena and events, to show creativity. It's not a complete list of criteria that testify to such personal trait as the tolerance to uncertainty. The study of the tolerance to uncertainty in the structure of personality formation is relevant and fits into the context of current research into this problem in psychology¹. The assumption of Lebanese thinker and US financial guru Nasim Taleb is relevant:

“The life of the individual is happening primarily because of the anomalous, the unknown and the unlikely, while we are constantly focusing on the known and the repetitive”².

Therefore, uncertainty is a feature of life that diminishes as the activity progresses. Purpose and choice that are based on clear value preferences turn uncertainty into some certainty. A similar view was expressed by E. Anderson, R. Carleton, M. Diefenbach, and P. Han, describing the link between uncertainty and influence. Researchers suggest that uncertainty influence on affective states, prompting mental modeling of possible future outcomes. This process is moderated by the context and other factors of the situation, as well as individual differences such as the tolerance to uncertainty³.

O. FeldmanHall, P. Glimcher, A. Baker, and E. Phelps emphasize the role of the context in which the decision is made, exploring the role of emotional arousal in the decision-making situation. The authors note that the arousal reaction indexes many aspects of emotions and is associated with fear, anger

¹ T. Tytarenko, (Ed); O. Zlobina; L. Liepikhova; B. Lazorenko; O. Kochubainik; K. Cheremnyh; O. Klypeets; T. Larina; V. Kraichinska y Yu. Gundertaylo, “How to build your own future: the life tasks of personality”. (Kirovohrad: Imex-LTD. 2012).

² N. Taleb, “Black Swan. Under the sign of unpredictability”. (Moscow: KoLibri, ABC-Atticus. 2014) 8.

³ E. C. Anderson; R. N. Carleton; M. Diefenbach y P. Han, “The Relationship Between Uncertainty and Affect”, *Frontiers in psychology*, num 10 (2019): 2504.

and happiness, depending on the context, as well as other cognitive processes such as cognitive pressure⁴. Another study by O. FeldmanHall, conducted with A. Shenhav, focuses on the importance of cognitive processes in reducing social uncertainty and the role of uncertainty in motivating social behavior and cognition⁵. Another study proposes to rely on psychological entropy to understand uncertainty-related anxiety⁶.

Analyzing the literature on uncertainty it leads us to think about the role of individual experience in the processes of life. Correctly observed:

“It is necessary to cultivate a readiness for unexpected actions, to gain experience of life in the field of the unforeseen”⁷.

According to researchers, life-creation is not only projecting by the personality of one's life, but also testing, embodiment and practical realization of the most daring plans⁸.

One of the factors in ensuring the psychological stability of the individual in situations of diversity, complexity and uncertainty is the ability to perceive and act on these situations. Therefore, individual should be tolerant to uncertainty. Tolerance as a general paradigm of human behavior has been the subject of research by various scholars. In particular, the nature and functions of tolerance were studied by: G. Allport⁹, E. Fromm¹⁰, A. Asmolov¹¹, G. Soldatova¹² et al. G. Bardier¹³ examined forms of tolerance and described levels of development. Parental tolerance is explored, structure is constructed and the cognitive, emotional and behavioral components of tolerance are established¹⁴.

Tolerance is explored by F. Furedi, which the author fills with the true *meaning* of the word and seeks to protect the moral independence of the individual. He criticizes the rejection of cultural values and lifestyles of people

⁴ O. FeldmanHall; P. Glimcher; A. L. Baker y E. A. Phelps, “Emotion and decision-making under uncertainty: Physiological arousal predicts increased gambling during ambiguity but not risk”, *Journal of Experimental Psychology: General*, Vol: 145 num 10 (2016): 1255-1262.

⁵ O. FeldmanHall y A. Shenhav, “Resolving uncertainty in a social world”, *Nature human behaviour*, Vol: 3 num 5 (2019): 426-435.

⁶ J. B. Hirsh; R. A. Mar y J. B. Peterson, “Psychological entropy: A framework for understanding uncertainty-related anxiety”, *Psychological Review*, 119(2), 2012: 304-320.

⁷ T. Tytarenko, (Ed); O. Zlobina; L. Liepikhova; B. Lazorenko; O. Kochubainik; K. Cheremnyh; O. Klypeets; T. Larina; V. Kraichinska y Yu. Gundertaylo, “How to build ... 12.

⁸ T. Tytarenko, (Ed); O. Zlobina; L. Liepikhova; B. Lazorenko; O. Kochubainik; K. Cheremnyh; O. Klypeets; T. Larina; V. Kraichinska y Yu. Gundertaylo, “How to build ...

⁹ G. Allport, “Tolerant personality”, *National Psychological Journal*, Vol: 2 num 6 (2011): 155-159.

¹⁰ E. Fromm, “To have or to be?” (New York: Continuum. 2012).

¹¹ A. Asmolov; G. Soldatova, y L. Shaigerova, “On the meanings of the concept of tolerance”, *The Age of Tolerance*, Vol: 1 num 2 (2001): 8-19.

¹² G. Soldatova, G. “Tolerance: psychological stability and moral imperative”. In: *Workshop on Psychodiagnosics and the Study of Tolerance* (p. 4-13). (Moscow: Moscow State University. 2003).

¹³ G. Bardier, “Social psychology of tolerance”. (St. Petersburg: SPbU. 2005).

¹⁴ R. Ovcharova, “The psychological structure of parental tolerance”, *Psychological science and education*, Vol: 23 num 4 (2018): 121-129.

who do not conform to generally accepted norms in society. Researcher presents tolerance as a precious human resource that needs constant intellectual renewal¹⁵.

Various researchers have emphasized the role of semantic structures as a dynamic system in the providing of human life. L. Vygotskiy considered the dynamic semantic system as the unity of affective and intellectual processes of consciousness¹⁶. The dynamic semantic system as an autonomous, holistic and hierarchically organized system of semantic structures has been investigated¹⁷. Sense, as a complex dynamic system, is given a vital function¹⁸.

Tolerance plays a significant role in the professional studies of educators. In particular, as a personality-professional quality tolerance is described in the studies of A. Demchuk¹⁹. Integral characteristic of the specialist, tolerance is presented in the works of A. Temnitsky²⁰. Tolerance in research by I. Halian appears as an element of value-semantic self-regulation of future educators²¹.

Although there are a number of studies outlining the problem of tolerance in its various dimensions, nevertheless, it seems appropriate to study the tolerance to uncertainty as a component of the process of personality life-creation, which is realized through his / her self-actualization²², responsible living position²³ and constructive use of one's own repertoire of identities²⁴. Interesting in the context of our study are the following perspectives of tolerance: psychological stability, a system of positive attitudes, a set of individual qualities, a system of personal and group values. The study of these perspectives will contribute to the systematic study of tolerance in its various manifestations²⁵.

Hypothesis. We assume that studying the factor structure of tolerance to uncertainty as a component of the process of personality life-creation will give

¹⁵ F. Furedi, "On Tolerance: A Defence of Moral Independence". (London; New York: Continuum Publishing Corporation Group. 2011).

¹⁶ L. Vygotskiy, "Collection of repairs". Moscow: Pedagogy. 1982.

¹⁷ D. Leontyev, "The technique of ultimate meanings (TUM)". (Moscow: Smysl. 1992).

¹⁸ B. Bratus, "To the study of the semantic sphere of personality", Bulletin of Moscow University. Psychology, num 2 (1981): 46-56.

¹⁹ A. Demchuk, "Formation of professional tolerance of future teachers for children with disabilities". (Ulyanovsk: Zebra. 2016).

²⁰ A. Temnitsky, "The dynamics of manifestations of professional tolerance in the process of forming future specialists in international affairs", Bulletin of MGIMO University, num 1 (2014): 225-234. 2014.

²¹ I. M. Halian, "Methodological bases of distinguishing types of value-sense self-regulation of future teachers", Science and education, num 9 (2017): 36-41.

²² A. Maslow, "Toward a Psychology of Being". (New York: J. Wiley. 1999) y C. R. Rogers, "To Be That Self Which Truly Is": A Therapist's View of Personal Goals. In: On Becoming a Person: A Therapist's View of Psychotherapy. (p. 163-183). (Boston: Mariner Books. 1995).

²³ T. Adorno, "Research authoritarian personality". (Moscow: Astrel. 2012) y J. Byudzhenal, "The science of being alive". (Moscow: Class. 1998).

²⁴ L. Pocebut y W. Chicker, "Organizational social psychology". (St. Petersburg: Peter. 2002).

²⁵ G. Soldatova, "Psychology of interethnic tension". (Moscow: Smysl. 1998).

meaningful empirical results that will help future educators to understand the proper acceptance of the environment and self-acceptance.

Purpose is an empirical study of tolerance to uncertainty as a component of the future educators' life-creation process at the stage of study in higher education institutions.

1. Methodology and methods

The methodological baseline of the empirical study of the factor structure of tolerance to uncertainty is a set of sequential measures using psychodiagnostic tools. This methodology has been tested by researchers in the study of mental expectancies in various activities²⁶ in modeling the social expectations of the personality²⁷ (Blynova et al., 2020; Popovych et al., 2020b; Popovych et al., 2019a; 2019b; 2019c), in studies of sensory regulation in situations of uncertainty²⁸ (Popovych et al., 2020a), and in the study of social and psychological factors of students' migration readiness²⁹. All the experimental and empirical studies outlined contained an element of uncertainty.

1.1. Participants

The study involved students of the second – fourth year of study at Drohobych Ivan Franko State Pedagogical University and Kherson State University, totaling 71 people. Students have acquired a specialty: “elementary school teacher” and “teacher of foreign philology”. The mean sample age was 20.14 years (SD = 1.68, range 18-23 years). The sample is homogeneous in composition, all women.

²⁶ I. Popovych; O. Blynova; A. Zhuravlova; M. Toba; T. Tkach y N. Zavatska, “Optimization of development and psycho-correction of social expectations of students of foreign philology”, *Revista Inclusiones*. Vol: 7 num Especial, (2020): 82-94; I. Popovych; O. Kononenko; A. Kononenko; A. Stynska; N. Kravets; L. Piletska y O. Blynova, “Research of the Relationship between Existential Anxiety and the Sense of Personality's Existence”, *Revista Inclusiones*, Vol: 7 num Especial (2020): 41-59 y I. Popovych; L. Lymarenko; N. Tereshenko; T. Kornisheva; O. Yevdokimova; A. Koverznieva y M. Aleksieieva, “Research on the Effectiveness of Training Technologies' Implementation in Student Theater”, *Revista Inclusiones*, Vol: 7 num 2 (2020): 104-121.

²⁷ V. V. Khmill & I. S. Popovych, “Philosophical and Psychological Dimensions of Social Expectations of Personality”, *Anthropological Measurements of Philosophical Research*, num 16 (2019): 55-65; I. Popovych; O. Blynova; M. Aleksieieva; P. Nosov; N. Zavatska y O. Smyrnova. “Research of Relationship between the Social Expectations and Professional Training of Lyceum Students studying in the Field of Shipbuilding”, *Revista ESPACIOS*, Vol: 40 num 33 (2019): 21.

y I. Popovych; A. Borysiuk; L. Zahrai; O. Fedoruk; P. Nosov; S. Zinchenko y V. Mateichuk, “Constructing a Structural-Functional Model of Social Expectations of the Personality”, *Revista Inclusiones*, Vol: 7 num Especial (2020): 154-167.

²⁸ I. Popovych; I. Halian; O. Halian; I. Burlakova; Iy. Serbin; M. Toba; N. Buhaiova y Yu. Bokhonkova, “Sensory Regulation of Future Teachers in a Situation of Uncertainty”, *Revista ESPACIOS*, Vol: 41 num 2 (2020): 28.

²⁹ O. Ye. Blynova; I. S. Popovych; H. I. Bokshan; O. M. Tsilmak y N. Ye. Zavatska, “Social and Psychological Factors of Migration Readiness of Ukrainian Students”, *Revista ESPACIOS*, Vol: 40 num 36 (2019): 4.

1.2. Organization of Research

During the semester, psychodiagnostic tools were used to measure the studied parameters. Life-creation is a process in which personality identity plays a leading role. An empirical indicator that points out a person's tendency to perceive himself as a subject of his own actions and to control his own life is a positive attitude towards uncertainty. In psychology, such an integral personality trait indicates as tolerance. The "Mstat-I" Tolerance Scale³⁰ technique was used to diagnose tolerance to uncertainty. The basic diagnostic construct of the questionnaire is the following scales: attitude to novelty, attitude to difficult tasks, attitude to uncertain situation, preference for uncertainty, tolerance to uncertainty and general tolerance score³¹.

"Purpose in Life Test" ("PIL")³² assessed the source of *meaning* for the life of higher education applicants. The diagnostic construct is the integral scale "Thinking about life" and a number of subscales such as: purpose in life (in relation to the future); process of life or interest and emotional saturation of life (in relation to the present); life efficiency or satisfaction with self-realization (in relation to the past); locus of control – Self (I am the master of my own life); locus of control (confidence in the possibility of independent exercise of life choices).

Using the methodology ("Scale of Psychological Well-being") ("SPW")³³, the subjective sense of wholeness and meaningfulness of the students of higher education of their being was diagnosed, which in existential humanistic psychology is referred to as psychological well-being³⁴.

The diagnostic construct of the methodology consists of the following scales: positive attitude, autonomy, environmental management, and personal growth, goals in life, self-acceptance and psychological well-being.

1.3. Procedures

The study is organized according to the scheme of the ascertainment experiment. The diagnostic section was performed using the following methods: "Mstat-I", "PIL", "SPW" psychological content parameters were determined. The honesty and non-randomness of the answers was ensured by the voluntary participation of the students in the experiment and the confidentiality of the results.

³⁰ D. L. Mclain, "The Mstat-I: A New Measure of an Individual's Tolerance for Ambiguity", Educational and Psychological Measurement, Vol: 53 num 1 (1993): 183-189.

³¹ E. Osin, "The factor structure of the Russian-language version of the scale of general tolerance to uncertainty D. McLane", Psychological Diagnostics, num 2 (2010): 65-86.

³² D. A. Leontyev, Test of life-meaningful orientations ("LMO"). Psychodiagnostic series. (Moscow: Smysl. 2006).

³³ C. D. Ryff, "Psychological well-being in adult life", Current Direction in Psychological Science, num 4 (1995): 99-104.

³⁴ N. Lepeshinsky, "Adaptation of the questionnaire "Scale of psychological well-being" K. Riff", Psychological Journal, num 3 (2007): 24-37.

The obtained results were interpreted separately by each method, and then a causal link between the diagnosed psychic phenomena was searched. The depth of the relationship between the individual features of the studied phenomenon and their structure was determined by factor analysis using the principal components with Varimax rotation.

1.4. Statistical Analysis

Statistical processing of the empirical data and graphical presentation of the results were performed using statistical programs “SPSS” v. 21.0 and “MS Excel”.

2. Results and Discussion

Students’ propensity for cognitive / uncertainty perception has been investigated. It is shown that 71.9% of the respondents from the whole sample are tolerant to uncertainty. In 53.1% this integral personal characteristic is low. And 28.1% of the students showed intolerant characteristics. Respondents demonstrated a medium level of tolerance on “the novelty scale” (Tabl. 1).

Scale	Descriptive statistics for empirical results					
	M	S	SD	D	A	E
Attitude to novelty	12.82	.41	3.27	10.72	.39	-.67
Attitude to complex tasks	29.31	.74	5.95	35.40	-.33	.23
The attitude to the uncertain situation	33.71	1.64	13.21	174.5	5.60	39.67
Preference for uncertainty	43.17	1.04	8.39	70.39	-.43	.26
Tolerance to uncertainty	35.81	1.00	8.02	64.31	.67	.65

Note: M – arithmetic mean; S – standard error; SD – mean-square deviation; D – dispersion; A – asymmetry of values; E – excess.

Table 1

Descriptive statistics for empirical results using the “Mstat-I” method

Descriptive statistics presented in Table 1 make it possible to consider the obtained results as being in accordance with the normal distribution. The ratios of the obtained empirical mean values to the mean values of the methodology are presented below in Figure 1.

We associate the choice of tolerant or intolerant tendencies with their meaningful life orientations. Therefore, it became necessary to determine the meaningful life orientations of the students studying in higher education institution. Based on the data obtained through the “Purpose in Life Test”

diagnostic methodology (“PIL”)³⁵, it can be stated that young people are interested in the processes of life. As it can be seen from Table 2, the obtained empirical mean values do not differ significantly from the mean values of the methodology.

Scale	Descriptive statistics for empirical results							
	Empirical results			By the method		Empirical results		
	M _{emp}	S _{emp}	SD _{emp}	M _m	SD _m	D _{emp}	A _{emp}	E _{emp}
Goals in life	28.40	.85	6.39	29.38	±6.24	40.89	-.44	-.67
The process of life	29.11	.72	5.46	28.80	±6.14	29.81	-.91	2.50
Productivity of life	22.41	.59	4.48	23.30	±4.95	20.10	-.29	-.84
Locus of control – Self	17.61	.55	4.13	18.58	±4.30	17.06	.15	-1.01
Locus of control – Life	26.14	.61	4.58	28.71	±6.10	21.02	-.33	-.29

Note: M_{emp} – arithmetic mean empirical; S_{emp} – standard error empirical; SD_{emp} – mean-square deviation empirical; D_{emp} – dispersion empirical; A_{emp} – asymmetry of values empirical; E_{emp} – excess empirical; M_m – arithmetic mean by method; SD_m – mean-square deviation by method.

Table 2

Descriptive statistics for empirical results using the “PIL” (n=71) method

The level of development of meaningful life orientations at future educators is at an average level. The desire to control the events of life, as well as their construction in accordance with the set goals and semantic ideas is stated. The results of the study using the “Scale of Psychological Well-being” (“SPW”)³⁶ indicate that our students are sufficiently open and trusting, ready to compromise individuals (the scale of “positive relationships”). Their openness is combined with dependence on the thought and assessment of the environment.

Scale	Descriptive statistics for empirical results					
	M	S	SD	D	A	E
Positive relationships	62.22	1.16	9.26	85.70	-.28	-.53
Autonomy	52.92	1.28	10.28	105.60	.24	.24
Environmental Management	55.72	0.81	6.46	41.70	-.43	1.60

³⁵ D. A. Leontyev, Test of life...

³⁶ C. D. Ryff, “Psychological well-being ...

Personal growth	63.73	.98	7.84	61.50	.20	-.06
Goals in life	65.58	1.02	8.17	66.69	-.69	-.04
Self-acceptance	57.80	1.20	9.62	92.48	-.20	-.15

Note: M – arithmetic mean; S – standard error; SD – mean-square deviation; D – dispersion; A – asymmetry of values; E – excess.

Table 3
Descriptive statistics for empirical results “SPW” (n=71)

This is reflected in the “autonomy” scale. Despite the low status of self-realization (Tabl. 3), the desire for continuous development does not leave our students, as evidenced by indicators on the scale of “life goals”. The descriptive statistics presented in Table 3 make it possible to consider the obtained results as being in accordance with the normal distribution.

Tolerance is a strategy of life-creation, life-building of the individual through the practice of setting life goals³⁷. The researcher G. Gutner states:

“Any practices need to be done, they do not happen by themselves. It is impossible to practice alone because the rules cannot be followed privately. Someone has to evaluate, perceive, understand, support. Practices are something that people do together and therefore purely individual practices do not happen, all practices are social in one way or another”³⁸.

Thus, tolerance, as a system of positive attitudes, personal and group values and an integral characteristic of the individual, will help the subject to rethink his or her own life tasks in the way of constructing his or her own life path.

One of the goals of our study was to find out the level of tolerance to uncertainty among young people who get teacher education. Tolerance is understood as accepting the conditions of uncertainty and the ability to act in them. And avoiding of uncertainty, striving for certainty we interpret as intolerance. At the same time, intolerance is seen in two planes: as a static component, reflecting attitudes toward uncertainty in the modern times (here and now) and as a dynamic, predictive component that reflects a view of the subjectively foreseeable future. The results presented in Table 1 suggest that uncertainty about the future, which pervades all spheres of educators’ lives in one way or another creates the discomfort of personal and professional self-actualization. And along with intolerant trends, this makes it possible for them to use a variety of coping strategies. The low indicators of the students on the “attitude to difficult tasks” scale indicate their low subjectivity in controlling their own lives and expectations (Fig. 1).

³⁷ T. Tytarenko, (Ed); O. Zlobina; L. Liepikhova; B. Lazorenko; O. Kochubainik; K. Cheremnyh; O. Klypeets; T. Larina; V. Kraichinska y Yu. Gundertaylo, “How to build ...

³⁸ G. Gutner, “The concept of practices and the nature of post-non-classical research. Postclassical practices: subject areas of research”. (Moscow: RAGS. 2008. 38-39).

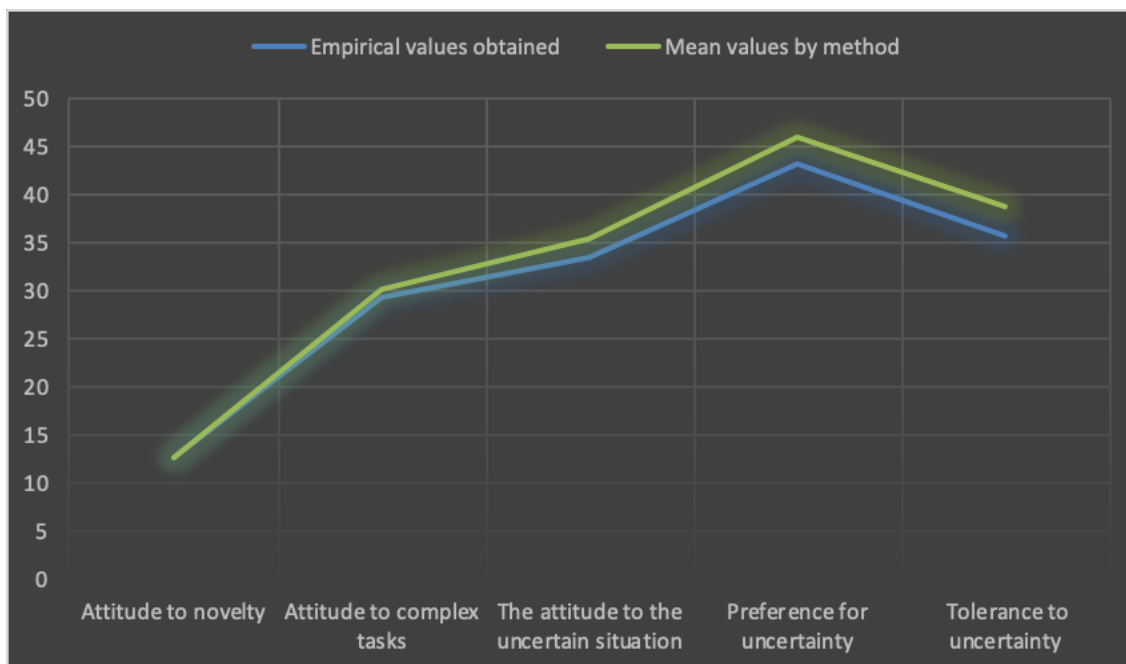


Figure 1

The ratio of the obtained empirical mean values and the mean value by the method “Mstat-I”

This tendency can also be seen in the “PIL” method, the ratio of the mean is presented in Figs. 2. Together with a low tolerance for uncertainty, they tend to avoid situations of choice, minimizing them.

At the same time, it should be noted that the choice depends on the system of personal values, so the complexity of the situation will be interpreted differently when students choose it depending on their personal meaning. That is to say, *meaning* is the structure of long-term and trans-state regulation that influences on responsible behavior³⁹, perfectionism⁴⁰ defines socially desirable patterns of personality behavior⁴¹. It is indirect influence through mental structures and processes that provide situational and operational regulation⁴².

Represented in Figs. 2, the profile of meaningful life orientations demonstrates the young people's interest in the process of life, but not in its quality. This confirms the well-known theory that the only *meaning* of life is to

³⁹ I. M. Halian, “Personal determinants of responsibility of future educators”. *Insight: the psychological dimensions of society*, num 1 (2019): 15-21; I. Halian, “Motivational and value determinants of future physical culture teachers’ professional becoming”, *Science and education*, num 3 (2018): 36-42 y O. Halian, “Responsibility and emotional burnout of teachers”, *Insight: the psychological dimensions of society*, num 2 (2019): 16-23.

⁴⁰ K. V. Klenina, “Theoretical and methodological analyzing of content characteristics of an individual’s perfectionism”, *Insight: the psychological dimensions of society*, num 1 (2019): 84-89.

⁴¹ A. V. Shevchenko, “Research on the correlation between social desirability and value orientations in adolescence”, *Insight: the psychological dimensions of society*, num 1 (2019): 90-94.

⁴² I. M. Halian, “Methodological bases ...

live. At the same time, this process is hedonistic in its essence without reliance on its own strengths and strategic vision for the future.



Figure 2

The ratio of the obtained empirical mean values and the mean value by the method "PIL"

We consider such distribution of priorities in the system of values of future educators (students) natural, because their lives are filled with educational activities, professional development, preparation for family life, where not everything depends on themselves. At the same time, experiencing psychological well-being in such a situation does not force them to change their lifestyles significantly.

We used factor analysis to assess the systemic personality formations that most fully reveal the content of life-creation processes. It distinguishes the relationship between the individual features of the studied phenomenon and their structure. Factor analysis was based on the scales which were described above (Tabl. 4).

The components of the process of life-creation		F1	F2	F3	F4
" SPW"	Self-acceptance	.861			
	Management of others	.846			
	Affect balance	-.769			
	Autonomy	.421			
	Goals in life	.648			

	Understanding the life	.628			
	Man as an open system				.861
	Positive Relationships				.712
	Personal Growth				.356
“ Mstat-I”	Tolerance to indefinite		.859		
	The attitude to the uncertain situation		.842		
	Attitude to complex tasks		.839		
	Preference for uncertainty		.805		
	Attitude to novelty		.736		
“ PIL”	Goals in life			.849	
	Productivity of life			.763	
	The process of life			.751	
	Locus Control – Self			.613	
	Locus of Control – Life			.497	
Dispersion, %		20.55	18.57	14.49	10.60
Σ dispersion, %		20.55	39.12	53.61	64.21
Value		3.904	3.528	2.753	2.014

Note: the loadings of the significant variables are given in bold type.

Table 4

The matrix of factor pressure of the life-creation process of future educators

The results show that there are four factors that determine the content of the process of young people’s life-creation, who study in higher education institutions. The first factor “Psychological well-being” explains 20.55% of the dispersion sieving. The second is “Uncertainty Tolerance” with a dispersion sieving index of 18.57%. The tendency of the students to the meaningfulness of life is indicated by the third factor which we call “Life awareness” (14.49% of the dispersion sieving). The desire for self-development is reflected in the fourth factor – “Self-development of personality”. The dispersion sieving index is 10.60%. Altogether, four factors account for 64.21% of the dispersion sieving, which is sufficient to make such a structure statistically significant.

The following factors F insignificant (ΣFI) in our empirical study have pressure equal to and less than .984 (see Fig. 3).

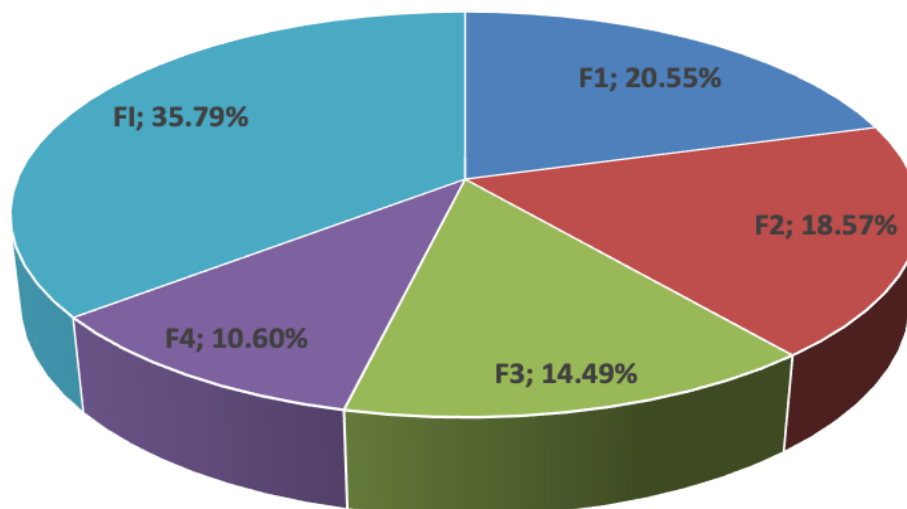


Figure 3

Factor structure of the life-creation process of future educators

We have assumed that tolerance to uncertainty is a part of the personality's life-creation structure as a separate component of it, providing for its psychological well-being. Conducted factor analysis (Table. 4) showed the priority for students studying in institutions of higher education, psychological well-being (F1). For them, the main value is self-acceptance (.861). Dependence on the thought of the environment is the result of lack of self-control and the desire for personal growth (this trait was only in the fourth factor). Dissatisfaction with the circumstances of one's life and lack of confidence in oneself to overcome life's obstacles prevents complete well-being (-.769). Tolerance to uncertainty (F2) became as a separate structural component. It is said that young people are not afraid of uncertainty (.842) and complexity (.839). Moreover they accept and seek it (uncertainty) (.805). And this testifies to the tolerance for uncertainty (.859) as one of the fundamental qualities that determines the content of life-creation processes. The third factor "Life awareness" reflects the life-giving preferences of young people. Yes, they set goals (.849), but their aspirations are not very convincing. It may be an underestimation of self-importance based on self-importance (.613), in which lived segments of life do not shine with bright colors. The fourth factor points to the "Self-development of the personality" in the structure of life-creation of future educators. Trusting relationships (.712) is not the prerogative of our students. Together with the lack of proper experience in obtaining new information, this affects the ability to form a holistic, realistic view of life, to be open to the new (.861). Average level of the indicator of personal growth (.656) does not contribute to a proper assessment of one's own condition and development prospects. We are not inclined to dramatize this situation; rather, we see it as a potential development opportunity. It is right to point out that for a moving,

changing personality; one's life is an unfinished harmonious work with an established composition, not a picture that has been finally completed. The constant self-learning of such a person, the increase of his / her readiness for change, the more constructive attitude towards his / her mistakes, ensure greater completeness of life and more productive interaction with himself, the world and other people⁴³.

3. Conclusions

1. The results of the study testify to the complexity and sometimes the contradictions, of the processes of life-creation of future educators. The desire for self-expression, autonomy and independence are not regarded as personal growth. And comprehension of life is not based on a holistic, realistic view of it.

2. In the structure of future educators' live-creation, tolerance to uncertainty as a separate component determines the *meaning* of meaningful processes, contributing to the proper acceptance of the environment and self-acceptance. The low level of tolerance in a number of students can be seen as a push for the renewal of life-creation practices.

3. Factor analysis established the structure of the process of life-creation of future educators consisting of four main factors (64.21%).

4. Our hypothesis is confirmed, the obtained data are important for the researchers to understand the tolerance to uncertainty as a component of the process of life-creation of future educators and the proper acceptance of their environment and self-acceptance.

5. The perspective is the study of existential motivation as a factor of meaningful completion of the life-creation's process.

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