

DOI:10.2478/cpp-2018-0007

A Psycholexical Classification of Ukrainian Descriptors of Individual Differences

Oleg Gorbaniuk^{1,2}ABCDEFG, Andrij Mirowich¹BD, Władysława Leoszko¹BD,
Julia Gorbaniuk¹BD, Aleksandra Kordon¹D, Maria Świdorska¹D,
Olena Kuts¹D, Anna Korczak¹EF

¹Institute of Psychology, John Paul II Catholic University of Lublin

²Institute of Psychology, University of Zielona Góra, Zielona Góra, Poland

Abstract

The aim of the psycholexical study was to classify the terms describing individual differences in the Ukrainian language.

Method. To accomplish this objective, we analysed 220,000 entries included in a universal dictionary of Ukrainian and identified 20,024 terms – adjectives, participles, type-nouns, and attribute-nouns – used to describe human characteristics. The identified person-descriptive terms were classified by a team of five trained judges into 13 categories and subcategories. The judges' taxonomic decisions were tested for validity and interjudge agreement.

Results. This procedure yielded lists of Ukrainian personality descriptors, consisting, respectively, of 2,426 adjectives, 2,255 participles, 1,653 attribute-nouns, and 1,474 type-nouns. The analysis of semantic redundancy of terms representing different parts of speech but having the same common morpheme among dispositional descriptors identified a total of 1,634 morphemes that differed in terms of meaning. The analysis identified 212 (22.0% of morphemes) type-nouns that could not be replaced by any different part of speech with the same morpheme to describe the same personality trait.

Conclusions. Ukrainian personality lexicon has a comparable or higher diversity of personality-descriptive vocabulary, attested to by the presence of 96% Big Factors markers from international comparative analyses of psycholexical structures of natural languages. The results of the study contribute to the debate on universals in the description of individual differences and constitute the basis for future questionnaire-based studies aimed at identifying the psycholexical structure of the Ukrainian language.

Keywords: individual differences, personality, psycholexical taxonomy, Ukrainian language

Streszczenie

Celem przeprowadzonych badań psycholeksykalnych była klasyfikacja terminów, które służą opisom różnic indywidualnych w języku ukraińskim. Są to pierwsze badania psycholeksykalne języka ukraińskiego.

Metoda. Aby ten cel zrealizować przeprowadzono analizę 220 tys. haseł zawartych w uniwersalnym słowniku języka ukraińskiego i wyodrębniono 20,024 terminów – przymiotników, imiesłów, rzeczowników typologicznych i rzeczowników atrybutywnych – używanych do opisu ludzkich właściwości. Zidentyfikowane deskryptory osobowe zostały poklasyfikowane przez zespół przeszkolonych pięciu sędziów do trzynastu kategorii i podkategorii. Decyzje taksonomiczne sędziów zostały zweryfikowane z uwagi na ich trafność i rzetelność.

Wyniki. W efekcie opracowano trzy listy deskryptorów osobowości języka ukraińskiego, zawierających odpowiednio 2,426 przymiotników, 2,255 imiesłów, 1,653 rzeczowników atrybutywnych i 1,474 rzeczowników typologicznych. Analiza semantycznej redundancji terminów reprezentujących różne części mowy, ale posiadających ten sam wspólny morfem wśród deskryptorów dyspozycji pozwoliła zidentyfikować ogółem 1,634 morfemów o odmiennym znaczeniu. Zidentyfikowano w ten sposób 212 (22.0%) rzeczowników typologicznych, które nie mogą być zastąpione przez inne części mowy z takim samym morfemem w opisie tej samej cechy osobowości.

Wnioski. Ukraiński leksykon osobowości posiada porównywalną lub większą różnorodność w porównaniu do innych języków. Wyniki badań wnoszą wkład w dyskusję na temat uniwersaliów w zakresie opisu różnic indywidualnych oraz stanowią podstawę dla przyszłych badań kwestionariuszowych zmierzających do identyfikacji struktury psycholeksykalnej języka ukraińskiego.

Słowa kluczowe: różnice indywidualne, osobowość, taksonomia psycholeksykalna, język ukraiński

Introduction

The fundamental assumption of the psycholexical approach in personality theory is that the most important individual differences significant from the point of view of human social functioning have been discerned and appropriately named in the course of the evolution of natural language in a given culture; the more important a particular difference is, the more terms have been invented to describe it [1]. According to this assumption, the analysis of the psycholexical structure of natural languages makes it possible to identify the most important traits/dimensions in the description of human personality and to develop instruments for measuring them. The comparison of the results of psycholexical studies devoted to many natural languages makes it possible, on the one hand, to identify the universal dimensions of the perception of individual differences across cultures (etic approach), and on the other – to identify the traits that are significant only in some of them (emic approach). The outcomes of this search for universals include the Big Five [2,3], the Big Six [4], or the Big Seven [5].

Firstly, to make fully responsible assertions about the universality of a particular number of personality traits in a descriptive approach, it is necessary to conduct psycholexical studies of numerous natural languages diverse in cultural, geographical, civilisation, and other terms. Despite many efforts, the currently dominant trait models are still derived from studies on European languages. Secondly, these studies should follow compatible research procedures in order for cross-cultural comparisons to be possible.

A study can be called psycholexical and compared with the results of research devoted to other natural languages if (1) it is conducted on a representative sample of terms used for describing individual differences in a given language, and if (2) the factor structure of the list of trait descriptors is established based on a representative sample of descriptions generated by users of a given language in a particular culture. The first of the above stages determines the result of the second stage, which means it is crucial in psycholexical research [6].

A definite majority of the psycholexical studies conducted to date have been based on adjectival material, which puts them at risk of the error of reductionism: this would mean that only the one which can be described by means of adjectives is a personality trait. The results of studies on the Polish language [7,8] show that, in morphemic terms, adjectives do not account for all the words used to describe personality; for this reason, a complete psycholexical classification should cover all parts of speech.

The second important issue discussed in the literature

is that the number and content of the identified traits describing individual differences depend on the scope of the definition of personality trait [9]. In the restrictive (exclusive) approach, predominant in the literature on the subject, only descriptors of relatively stable behaviour patterns that are of mental origin are taken into account [10,11]. In the non-restrictive (inclusive) approach, by contrast, personality terms additionally include descriptors of mental states, social effects, worldview, pure evaluations, or even terms describing the specificity of external appearance [e.g. 5].

Research Objective

Ukrainian is one of a few thousand languages in the world whose psycholexical structure has not yet been explored. Together with Belarusian and Russian, Ukrainian belongs to the group of East Slavic languages, which is part of the Indo-European language family. The vocabulary of Ukrainian makes it the most similar to Belarusian, Polish, Slovak, and Russian. It is estimated that this language is spoken by 41 to 45 million people, of whom at least 70-75% live in Ukraine [12]. This means it ranks third among Slavic languages, after Russian and Polish.

The aim of the presented research was to systematise and classify the domain of Ukrainian personality descriptors based on homogeneous and up-to-date lexical data in order to provide the basis for broad and multifaceted research in the future. This main objective can be made more specific in the form of the following research questions:

Q1: How many person-descriptive terms are there in Ukrainian? What proportion does each type of linguistic unit account for (nouns, adjectives, and participles)?

Q2: What is the proportion of personality descriptors against other categories of person-descriptive terms in Ukrainian?

Q3: Does the psycholexical structure of person-descriptive terms in Ukrainian differ depending on the type of lexical unit?

Q4: Do dispositional adjectives in Ukrainian account for all the Big-Factor markers?

Due to the exploratory character of the study, we did not formulate research hypotheses.

Method

The Selection of Terms Describing Individual Differences.

We chose the unabridged electronic version of the Universal Dictionary of Modern Ukrainian, published in 2009 [13] as the most complete and up-to-date source of the

Ukrainian lexicon. It covers the vocabulary of the second half of the 20th century and the beginning of the 21st century. With proper names excluded, this dictionary contains approximately 220,000 entries. Because the author did not state the frequency of occurrence for words representing various parts of speech, we estimated the frequencies on the basis of randomly chosen pages in the printed version of the dictionary: 42,405 adjectives, 108,488 nouns, and 12,251 participles. In the process of classification, we used the information provided in the dictionary on which words were outdated and which had metaphorical meanings.

The selection of words describing personality characteristics was performed independently by two fifth-year students of psychology whose mother tongue was Ukrainian. The result of the selection was subsequently verified by a bilingual senior academic staff member. All judges were given theoretical and practical training. During the practical training, the judges performed two trial selections of 300 words; selection results were verified and differences in decisions were discussed in the light of the literature. The judges' task was to select all adjectives, participles, and nouns (divided into type-nouns and attribute-nouns) describing the individual characteristics of other people and make it possible to differentiate them. They took into account all the meanings of the words given in the dictionary as well as colloquial meanings not included in the dictionary. When deciding on whether a given word was a person-descriptive term, the judges applied the selection criteria proposed by Angleitner et al. [10]. The following categories of words were used as exclusion criteria: (1) words that do not differentiate people from one another and that describe the characteristics of all people; (2) words that refer to geographical origin, nationality, citizenship, and religious or professional affiliation; (3) terms that are rarely understood as describing human characteristics.

In the case of doubts regarding whether a given word meets the criteria for a person-descriptive term, the judge put it on the list because in subsequent stages the list was rated by a larger number of competent judges. All the words selected by at least one judge were preliminarily classified as person-descriptive terms. This procedure makes it possible to minimise the likelihood of overlooking words that can describe human characteristics. The final list contained 21,970 person-descriptive terms.

Psycholexical Taxonomy Procedure

Person-descriptive terms selected from the dictionary were rated by five individuals who had been users of the Ukrainian language since their childhood, co-authors of the present paper with psychological education as well as with

theoretical and practical background necessary for their role. Apart from thorough training, four of the five judges had previously taken part in the psycholexical classification of ten to twenty thousand person-descriptive terms in Russian or Polish (they were bilingual or trilingual). Their motivation to perform the task diligently can be regarded as high.

For the purpose of the study, we adapted the taxonomy procedure from a German psycholexical study [10], which is one of the most often used procedures in this kind of research and which offers the broadest possibilities of subsequent application of the results. First, the judges rated whether or not a given word was comprehensible to them. Next, the judge rated whether or not the word qualified as a person-descriptive term. In the third step, the judge rated the valence of the word on a 5-point scale (1 = strongly negative, 2 = negative, 3 = neutral, 4 = positive, 5 = strongly positive). After the judges' ratings were averaged, the words for which the mean rating ranged from 1.0 to 2.74 were classified as negative, those with mean ratings between 2.75 and 3.25 – as neutral, and those with mean ratings between 3.26 and 5.00 – as positive.

Every word classified as a person-descriptive term was further classified into one of 13 categories/subcategories: (1) dispositions; (1a) temperament and character; (1b) abilities, talents, or their absence; (2) temporary conditions; (2a) experiential states: emotions, moods, and cognitions; (2b) physical and bodily states; (2c) observable activities; (3) social and reputational aspects; (3a) roles and relationships; (3b) social effects: reactions of others; (3c) pure evaluations; (3d) attitudes and worldviews; (4) overt characteristics and appearance; (4a) anatomy, constitution, and morphology; (4b) appearance and looks; (5) specialist and technical terms; (6) metaphorical terms. The last category was non-classifiable terms. In the case of rating whether or not a given expression had a metaphorical meaning as well, the judges took into account the dictionary note, which facilitated the classification of terms into this category, supplemented by judges' decision if they discerned a metaphorical meaning despite the lack of this classification in the dictionary.

In accordance with the prototypical theory of concepts, we treated the borders of categories as blurred, and therefore each judge was allowed to classify some words into several categories at the same time (also due to their ambiguity). The rating process took from 16 to 20 weeks. Finally, a word was classified as belonging to a particular category/subcategory if it was classified into that category/subcategory by at least three of the five judges.

Categorisation Validity and Reliability

To assess the validity of the classification, we selected 195 adjectives that had been classified into subcategories in the course of psycholexical taxonomy of the Polish language by at least eight out of nine judges, recognizing them as prototypical of their respective categories, treating them as the external criterion in assessing the validity of judges' decisions. After thorough training, each of the five judges independently rated whether or not the adjectives met the criteria for person-descriptive terms and classified them into 12 categories/subcategories (the category of specific terms was not taken into account in validity assessment). Next, we computed the percentage of decisions consistent with the external criterion for 15 prototypical adjectives from a given subcategory as well as the kappa correlation coefficient between the judge's decision and the external criterion based on all 195 adjectives. The first two columns of Table 1 contain averaged validity indices for the five judges. Their values show that the mean percentage of correct classifications of adjectives as describing human characteristics was 90.0%, and the average kappa correlation coefficient, with false alarms taken into account, was 0.73. The validity of classifications into categories ranged from 79.3% to 95.3% (kappa: from 0.78 to 0.86) for higher-order categories and from 68.3% to 93.3% (kappa: from 0.54 to 0.90) for subcategories. These validity figures should be regarded as satisfactory.

The last column of Table 1 contains information concerning interrater consistency based on the classifications of the list of 20,024 terms by five judges. Alpha coefficients ranged from 0.85 to 0.93 for higher-order categories and from 0.72 to 0.94 for subcategories. In general, the interrater agreement coefficients should be regarded as satisfactory. Compared to the reliability figures in other similar taxonomies [10,14,15,16], they are also very good, with classification quality compensating for the smaller number of judges.

Results

Out of 220,000 terms included in the dictionary, 20,024 (9.1%) were finally classified by most judges as person-descriptive terms. This included 8,408 adjectives (3.8% of all dictionary entries) and 10,415 nouns (4.7%). Person-descriptive terms constituted 19.8% of all adjectives in the dictionary and 9.6% of all nouns. Among person-descriptive terms, 10.1% had at least one metaphorical meaning or played the role of person-descriptive terms when used metaphorically. Of all terms describing individual

differences in Ukrainian, 77.0% were classified into at least one subcategory, and 87.0% were classified into at least one higher-order category, where it was easier to achieve agreement among the judges. With terms with metaphorical

Table 1. Validity and Reliability of Judges' Decisions

Category/ subcategory	Correlation with criterion		Inter- judge agreement
	%	κ	α
Person-descriptive terms	90.0%	0.73	0.80
Valence	-	-	0.95
1. Dispositions	79.4%	0.75	0.88
1a. temperament and character	75.0%	0.69	0.88
1b. abilities, talents, or their absence	73.3%	0.70	0.77
2. Temporary conditions	91.1%	0.76	0.90
2a. experiential states	70.9%	0.51	0.82
2b. physical and bodily states	72.2%	0.74	0.91
2c. observable activities	80.0%	0.72	0.78
3. Social and reputational aspects	85.9%	0.81	0.85
3a. roles and relationships	63.3%	0.68	0.82
3b. social effects: reactions of others	86.7%	0.90	0.72
3c. pure evaluations	70.0%	0.67	0.77
3d. attitudes and worldviews	73.3%	0.89	0.92
4. Overt characteristics and appearance	96.7%	0.88	0.93
4a. anatomy, constitution, and morphology	86.7%	0.89	0.94
4b. appearance and looks	93.3%	0.82	0.90
5. Specialist and technical terms	-	-	0.90
6. Metaphorical terms	61.5%	0.69	0.69

Note. % – mean percentage of decisions consistent with the external criterion; κ – average kappa correlation with the external criterion, α – interrater consistency coefficient based on the classifications of 20,024 words

meanings excluded, 5.1% of person-descriptive terms were classified into two or more subcategories, and 4.4% – into two or more categories. The results of the classification are presented in Table 2.

The largest group among Ukrainian person-descriptive terms where terms describing the social aspects of individuals' functioning (31.4%), mainly social roles and relationships (8.0%) and pure social evaluations (9.5%). The second largest group was personality descriptors, which constituted 27.1% of terms describing individual differences; the predominant type of words in this category were those that described the specificity of individuals' temperament

category of words describing individuals' external attributes (12.1%). The smallest category was specialist terms (3.3%), which included terms describing mental and physical disorders usually used by specialists and often unknown to the average Ukrainian language user.

Personality characteristics may be analysed not only in terms of their descriptive aspect (see Table 2), but also in terms of the evaluative aspect, where interrater agreement was $\alpha = 0.95$ (see Table 3). The analyses reveal that the Ukrainian lexicon is marked by a predominance of terms referring to negative characteristics of individuals (53.4%), the predominance being more characteristic for nouns

Table 2. Results of Psycholexical Taxonomy of Person-Descriptive Terms Belonging to Four Categories of Lexical Units

Category/subcategory	All lexical units		Adjectives		Participles		Attribute-nouns		Type-nouns	
	f	%	f	%	f	%	f	%	f	%
1. Dispositions	5436	27.1%	2426	28.9%	81	3.6%	1653	35.1%	1474	25.8%
1a. temperament and character	4439	22.2%	2001	23.8%	53	2.4%	1348	28.6%	1187	20.8%
1b. abilities and talents	152	0.8%	79	0.9%	1	0.0%	52	1.1%	22	0.4%
2. Temporary conditions	3231	16.1%	1289	15.3%	1001	44.4%	1053	22.4%	248	4.3%
2a. experiential states	1875	9.4%	752	8.9%	493	21.9%	732	15.5%	103	1.8%
2b. physical and bodily states	884	4.4%	383	4.6%	315	14.0%	245	5.2%	93	1.6%
2c. observable activities	346	1.7%	108	1.3%	179	7.9%	49	1.0%	38	0.7%
3. Social and reputational aspects	6296	31.4%	2322	27.6%	246	10.9%	933	19.8%	3058	53.6%
3a. roles and relationships	1603	8.0%	444	5.3%	70	3.1%	110	2.3%	1067	18.7%
3b. social effects: reactions of others	643	3.2%	363	4.3%	57	2.5%	191	4.1%	70	1.2%
3c. pure evaluations	1894	9.5%	744	8.8%	32	1.4%	351	7.5%	862	15.1%
3d. attitudes and worldviews	692	3.5%	258	3.1%	16	0.7%	77	1.6%	351	6.2%
4. Overt characteristics and appearance	2424	12.1%	1385	16.5%	363	16.1%	448	9.5%	424	7.4%
4a. anatomy, constitution and morphology	1074	5.4%	687	8.2%	46	2.0%	218	4.6%	173	3.0%
4b. appearance and looks	1328	6.6%	690	8.2%	311	13.8%	224	4.8%	246	4.3%
5. Specialist and technical terms	669	3.3%	78	0.9%	7	0.3%	468	9.9%	131	2.3%
6. Metaphorical terms	2024	10.1%	776	9.2%	280	12.4%	282	6.0%	825	14.5%
Terms without majority classifications to categories	2603	13.0%	1196	14.2%	548	24.3%	395	8.4%	547	9.6%
Terms without majority classifications to subcategories	4609	23.0%	1964	23.4%	631	28.0%	829	17.6%	1339	23.5%
Terms in the initial pool	20024	100%	8408	100%	2255	100%	4710	100%	5705	100%

and character (22.2%). Descriptors of temporary conditions ranked as the third (16.1%), with emotional, cognitive, and motivational states (9.4%). The fourth place according to the frequency of occurrence in Ukrainian belonged to the

(nearly 60%) than for adjectives (less than 50% of the total number of person-descriptive adjectives). The category accounting for the lowest proportion of individual difference descriptors is positive person-descriptive terms (20.9%).

Table 3. Valence of Person-Descriptive Terms

Valence	All lexical units		Lexical units							
			Adjectives		Participles		Attribute-nouns		Type-nouns	
	f	%	f	%	f	%	f	%	f	%
negative	10699	53.4%	3957	47.1%	1127	50.0%	2799	59.4%	3405	59.7%
neutral	5133	25.6%	2498	29.7%	814	36.1%	772	16.4%	1307	22.9%
positive	4192	20.9%	1953	23.2%	314	13.9%	1139	24.2%	993	17.4%
Total	20024	100%	8408	100%	2255	100%	4710	100%	5705	100%

From the perspective of the taxonomy of individual differences, the greatest importance in psycholexical research is attached to dispositional descriptors. Table 4 shows the distribution of evaluations of terms describing personality differences for the entire dictionary and for particular parts of speech taken into account in selection. While the proportion of terms describing negative human characteristics is similar to their proportion among all person-descriptive terms (see Table 3), the proportion

of speech, but having the same common morpheme among dispositional descriptors. If we take into account antonyms (логічний (logical) vs. нелогічний (illogical)), shade of meaning (sociable: дружлюбний vs. дружній) and level gradation of the same trait (чутливий (sensitive) vs. надчутливий (hypersensitive)) as separate semantic groups, we identify 2,304 units with the same narrow meaning. If we treat terms with the same morpheme and representing the same continuum of the given trait

Table 4. Valence of Personality-Descriptive Terms

Valence	All lexical units		Lexical units							
			Adjectives		Participles		Attribute-nouns		Type-nouns	
	f	%	f	%	f	%	f	%	f	%
negative	2913	53.6%	1178	48.6%	27	33.3%	856	51.8%	960	65.0%
neutral	593	10.9%	296	12.2%	10	12.3%	176	10.6%	127	8.6%
positive	1933	35.5%	952	39.2%	44	54.3%	621	37.6%	390	26.4%
Total	5439	100%	2426	100%	81	100%	1653	100%	1477	100%

of descriptors referring to positive personality traits is higher by an average of 15% at the cost of terms describing personality traits socially perceived as neutral.

The analysis of the Ukrainian adjectives classified as personality descriptors in terms of the presence of 180 adjective-markers of the Big Factors from international comparative analyses of psycholexical structures of natural languages [17] revealed that the Ukrainian adjectives contained 172 of the 180 adjectival markers, including all markers of Agreeableness and Conscientiousness (30 in both cases), 29 out of 30 markers describing Emotional Instability, 27 out of 30 markers of Intellect, and 24 out of 30 markers of Extraversion.

Finally, we performed an analysis of semantic redundancy of terms representing different parts

as one group, we receive 1,634 units.

If we consider possible grammatical forms of terms (regardless of whether they were included in the particular dictionary or not) within each of the 1,634 units, we can assign almost every adjective an attribute-noun and we can assign the majority of attribute-nouns an appropriate adjective. However, it is relatively difficult to find equivalents (omitting the verbs) within the same morpheme of type-nouns. As many as 212 morphemes are represented only by type-nouns (e.g. рюмса (weeper), пристосованець (conformist), тринькало (blabber), зівача (gaping person), стогній (moaner)), which is 22.0% of morphemes with personality type-nouns and 13.0% of total unique personality morphemes.

Discussion

The qualitative study that we have conducted is the first and the most time-consuming stage of research on the Ukrainian lexicon of individual differences; this stage is also decisive for the results of the entire research project. The study was based on one of the largest dictionaries used in the history of psycholexical research (220,000 entries) – a larger dictionary had been used only in the studies of English language [18,19,20] and a comparatively large one had been used in a study of Dutch [21]. Comparing the results of analyses of the Ukrainian language with the languages examined so far based on the same research method (in studies covering adjectives), we should note that the proportion of personality-descriptive terms in Ukrainian is one of the highest (1.1% of dictionary contents). In a vast majority of languages this proportion does not exceed 1.0%, usually ranging between 0.5 and 0.7%.

The percentage of personality-descriptive terms in Ukrainian is also one of the highest, ranging between 25% and 35% for different parts of speech, whereas in a vast majority of languages this percentage for adjectives does not exceed 20%. As regards the possibility of making comparisons with the taxonomies of other languages, what should be noted is the comparable or higher diversity of personality-descriptive vocabulary, attested to by the presence of 96% of Big Six markers from cross-cultural comparisons [17]. On the one hand, this gives hope for a replication of these dimensions and for comparative analyses with other languages; on the other – it does not exclude the possibility of distinguishing other, culture-specific dimensions of personality.

The sources of Ukrainian personality lexicon should be sought in the history of the Ukrainian nation, in which there was a strong influence of Russian and Polish on the contents of that lexicon, though the common part of the Polish and Ukrainian lexicons is gradually going out of use and is classified as archaic or may be unfamiliar to the average language user. The large size of the dictionary used in the study and the correspondingly high number identified descriptors of individual differences, including personality-descriptive terms, stems not only from the diversity of language but also, partly, from the very structure given to the dictionary by its authors: the dictionary contains a large number of words formed on the basis of the same morphemes, including a broad array of diminutives and words with prefixes. This makes it necessary to reduce the list of words for the purposes of quantitative research not only based on their familiarity to potential respondents, unambiguous understanding, and frequency of occurrence (e.g. in the language corpus), but above all due to morphemic redundancy. In accordance with the lexical assumption, the

list used in research on the factor structure of personality lexicon should not contain terms that have an identical meaning and at the same time an identical morpheme. Research on the Ukrainian personality lexicon revealed 1,634 morphemes with different meanings, based on which there developed adjectives, nouns, and participles describing personality traits. If research on the Ukrainian personality lexicon was limited to adjectives only, this would mean excluding many morphemes that do not have an adjectival form but describe personality traits. The question arises of whether or not these are the same personality traits that are described by means of adjectives.

Because a definite majority of psycholexical studies are limited to this part of speech and follow the restrictive approach, the next stage in research on the Ukrainian personality lexicon may be a study of the structure of adjectival personality lexicon. This will make the obtained results compatible with the results of most existing psycholexical studies. However, due to the guiding idea of psycholexical research, consisting in the lexical assumption, research on individual differences should not be restricted to a narrow definition of personality trait, and much less to one part of speech (namely, adjectives), because this results in the danger of reductionism (the structure of personality traits would depend only on what can be expressed by means of adjectives). The identified and classified Ukrainian lexicon of individual differences opens up great possibilities of exploring its structure. First, it makes it possible to conduct a study using a non-restrictive approach, analogous to the one by De Raad and Barelds [9], and at the same time to include person-descriptive terms classified into various categories according to the German taxonomy. Second, it makes it possible to analyse personality structure described by means of various morphologically distinct parts of speech – namely, to analyse the factor structure of attribute-nouns [22] and type-nouns [23,24], which have been analysed only in a few languages to date. Third, individual analysis of non-dispositional categories and subcategories as understood in the German psycholexical taxonomy makes it possible to reach taxonomic consensus regarding individual differences in worldview [25], cognitive, emotional, and motivational reactions to other people [26,27], social evaluations [28], or emotional states [29]. On the one hand, the results of this kind of quantitative studies will directly contribute to the debate on universals in the description of individual differences; on the other, they will reveal the specificity of how the inhabitants of Ukraine using the Ukrainian language perceive their own and other people's dispositions, providing the basis for developing culture-specific models and research instruments for measuring individual differences.

Conflict of interest

The authors have declared no conflict of interest.

References

- Goldberg LR. Language and individual differences: The search for universals in personality lexicons. *Rev Pers Soc Psychol.* 1981; 2(2): 141–65.
- Goldberg LR. An Alternative „Description of Personality”: The Big-Five Factor Structure. *J Pers Soc Psychol.* 1990; 59(6): 1216–29.
- Peabody D, Raad BD. The substantive nature of psycholexical personality factors: A comparison across languages. *J Pers Soc Psychol.* 2002; 83(4): 983–97.
- Ashton MC, Lee K, Perugini M, Szarota P, Vries RED, Blas LD, et al. A Six-Factor Structure of Personality-Descriptive Adjectives: Solutions From Psycholexical Studies in Seven Languages. *J Pers Soc Psychol.* 2004; 86(2): 356–66.
- Almagor M, Tellegen A, Waller NG. The Big Seven model: A cross-cultural replication and further exploration of the basic dimensions of natural language trait descriptors. *J Pers Soc Psychol.* 1995; 69(2): 300–7.
- Saucier G. Effects of variable selection on the factor structure of person descriptors. *J Pers Soc Psychol.* 1997; 73(6): 1296–1312.
- Ivanova A, Gorbaniuk O, Jałoszewska M, Charezińska M, Krupa M. Taxonomy and Structure of Polish Personality-descriptive Type-Nouns. Conference of the International Society for the Study of Individual Differences ISSID 2017, Warsaw, 24-28.07.2017.
- Toruj N, Czarnejko A, Gorbaniuk O. Taxonomy and structure of Polish personality relevant verbs. Conference of the International Society for the Study of Individual Differences ISSID 2017, Warsaw, 24-28.07.2017.
- Raad BD, Barelds DPH. A new taxonomy of Dutch personality traits based on a comprehensive and unrestricted list of descriptors. *J Pers Soc Psychol.* 2008; 94(2): 347–64.
- Angleitner A, Ostendorf F, John OP. Towards a taxonomy of personality descriptors in German: A psycho-lexical study. *Eur J Personality.* 1990; 4(2): 89–118.
- Saucier G, Srivastava S. What makes a good structural model of personality? Evaluating the big five and alternatives. In: Mikulincer M, Shaver PR, Cooper ML, Larsen RJ. editors. *APA handbook of personality and social psychology. Volume 4: Personality processes and individual differences.* Washington, DC, US: American Psychological Association; 2015; 283–305.
- Ogienko I. *Istoria ukraińskiej literatury i mowy.* Kiev: Lybid; 2001. Ukrainian.
- Busel, VT. eds. *Velykyj tłumachnyj slovník suchasnoji ukrajinskoji mowy.* Kiev-Irpin: Perun; 2009. Ukrainian.
- Blas LD, Forzi M. An alternative taxonomic study of personality-descriptive adjectives in the Italian language. *Eur J Personality.* 1998; 12(2): 75–101.
- Mlačić B, Ostendorf F. Taxonomy and structure of Croatian personality-descriptive adjectives. *Eur J Personality.* 2005; 19(2): 117–52.
- Szarota P, Ashton MC, Lee K. Taxonomy and structure of the Polish personality lexicon. *Eur J Personality.* 2007; 21(6): 823–52.
- De Raad B, Barelds DPH., Levert E, Ostendorf F, Mlačić B, Di Blas L, et al. Only three factors of personality description are fully replicable across languages: A comparison of 14 trait taxonomies. *J Pers Soc Psychol.* 2010; 98(1): 160–73.
- Allport GW., Odbert HS. Trait-names: A psycho-lexical study. *Psychol Monogr.* 1936; 47(1): 1–171.
- Norman WT. 2,800 personality trait descriptors: Normative operating characteristics for a university population. Department of Psychology, University of Michigan; Ann Arbor Research Rep. Nr 08310-1-T, 1967.
- Goldberg LR. From Ace to Zombie: Some explorations in the language of personality. In: Spielberger CD, Butcher JN, editors. *Advances in personality assessment.* Hillsdale, NJ: Erlbaum; 1982; Vol. 1: 203–34.
- Raad BD, Hendriks AA, Hofstee WK. Towards a refined structure of personality traits. *Eur J Personality.* 1992; 6(4): 301–19.
- Blas LD. Personality-relevant attribute-nouns: a taxonomic study in the Italian language. *Eur J Personality.* 2005; 19(7): 537–57.
- Hess R. Type nouns and the five factor model of personality description. *Eur J Personality.* 1998; 12(1): 57–71.
- Saucier G. Factor structure of English-language personality type-nouns. *J Pers Soc Psychol.* 2003; 85(4): 695–708.
- Saucier G. Isms dimensions: Toward a more comprehensive and integrative model of belief-system components. *J Pers Soc Psychol.* 2013; 104(5): 921–39.
- Mlačić B. Social and reputational aspects of personality. *Int J Pers Psychol.* 2016; 2(1), 15–36.
- Saucier G. The structure of social effects: Personality as impact on others. *Eur J Personality.* 2010; 24(3): 222–40.
- Raad BD, Oudenhoven JPV, Hofstede M. Personality terms of abuse in three cultures: type nouns between description and insult. *Eur J Personality.* 2005; 19(2): 153–65.
- Gorbaniuk O, Macheta K. Taksonomia psycholeksykalna stanów emocjonalnych: badanie języka polskiego. Conference Closer to Emotions, Lublin, 18-19.05.2017. Polish.

Correspondence address

Oleg Gorbaniuk
Instytut Psychologii
Katolicki Uniwersytet Lubelski Jana Pawła II
Al.Raławickie 14, 20-950 Lublin
e-mail: oleg.gorbaniuk@gmail.com

Otrzymano: 28.02.2018
Zrecenzowano: 26.03.2018, 27.04.2018
Przyjęto do druku: 13.06.2018