AUTHENTICITY OF THE ENGLISH LANGUAGE TEACHER'S: THE VALIDATION OF AUTHENTICITY QUESTIONNAIRE USING ITEM RESPONSE THEORY

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Introduction. The new Ukrainian school is in its consolidation phase. Modern reforms are intended to optimize teachers and students interaction, therefore the

problem of the teacher's authenticity development becomes relevant. Authenticity is an important quality of the teachers who, along with identity, forms the basis of their professional competence. However, in Ukraine there are no adapted diagnostic methods for personality authenticity study. In such circumstances, adaptation to the Ukrainian sample of Authenticity Scale (Wood & Linley, 2007) is very relevant.

Analysis of literature data and problem definition. The term "authenticity" became widespread in psychology in the second half of the twentieth century in connection with the development of humanistic and transpersonal psychology. By this period he was not actually used to be replaced by the terms "self", "identity of the individual", "I", "identification", "identity" and studied in the context of the problems of personality self-consciousness. According to Freud a person becomes a social subject through identification (the earliest manifestation of an emotional connection with another person, imitation and likeness to his parents). Authenticity is correlated with the archetype of the Shadow, as well as with the notion of personalization. Personalization is the process of person's evolution and, consequently, the personality's shadows, which is at the same time the process of involution of its image. The need for personalization is the need to be someone, to be a person; at the same time, as a result of the process of personalization, a person becomes: more closed, more separated from other people; less capable of empathy, empathy in relationships with other people; less prone to self-expression, revealing others to their own psychological problems, less congruent. Unlike personalization, personification does not manifest itself in an effort to be a person, but to try to be yourself. The process of personification is characterized by the refusal of the individual from the "masks," increasing the integrity of the individual, increasing the level of congruence and empathy, increasing the overall authenticity. Hence, the "personification syndrome" forms: positive insignificance, empathy and congruence. In Bugental's theory the notion of "subjectivity", under which, in essence, is understood the inner human nature [7].

The introduction of the term "identity" into social analysis and its widespread in social sciences occurred in the United States in the 1960s. The term of identification was drawn from the original, specific psychoanalytic context and correlated with the

ethnic belonging, where tolerance, in particular ethnic, is seen as a manifestation of the formed positive identity (the condition of which is the social interdependence), and with theories of sociological role and group standard [3]. The group to which the individual belongs directly or indirectly forces him to follow such a style of behavior that considered to be characteristic of group members and to avoid the non-peculiar group behavioural styles. R. A. Sherman considered identity in the context of interpersonal competencies, which primarily relate to the ability of an individual to perform various social roles [6].

Authenticity is a variant of moral identity that is determined either by socio-cultural norms, or a source of self-realization. We pay special attention to the notion of personal authenticity, emphasizing that it is manifested predominantly in problem situations, when it is necessary to make own choices, focusing on human's own priorities and values [2]. It is not necessary to idealize the authentic existence: the presence of "masks" in communication allows maintaining interpersonal relationships with significant internal resource savings.

Despite the numerous studies of authenticity, there was no clearly defined functional link between authenticity and personal identity, under such conditions a detailed study of various aspects of their use.

The humanistic model of authenticity, proposed by G. Barrett-Lennard considers authenticity as a sequence between three levels: the primary human experience, a symbolic understanding of this experience and behavior, directed from the outside and communications. At the interface between these three levels, the main elements of authenticity are defined: self-alienation (discrepancy between cognitive understanding and the actual experience of the individual); authentic life (a correspondence between the conscious perception of their own characteristics and emotional reactions of the individual), the tendency to external influences (acceptance of representations of others and the adoption of external influence) [9].

Item Response Theory is a set of methods that allows us to assess the probability of the correct answer of the subjects being studied for problems of varying complexity. It is used to get rid of non-informative questions in the survey and leave questions with

adequate scores based on their complexity. IRT models can be categorized by the number and form of responses received. The simplest model is G. Ras's model with a dichotomous answer ("yes" or "no"). In the case of even four or five variants, as before, only one answer option can be considered correct, and the rest is incorrect. Another class of models applies to political outcomes, where each answer has a different value. The multilevel task can be considered as a multi-step, for which the respondent can receive from 0 to m points. In order to reach the higher category m, the respondent must consistently overcome m steps, for the correct performance of each of which he receives a certain score. The difficulty of each step in the general case is different and does not depend on the complexity of the implementation of other steps. A typical instrument of political polling results is widely used in psychology Lykerta scale, where variants of responses are estimated, for example, from 1 to 5 [8]. Polytomic models are often used in psychological and pedagogical testing. In particular, they are used for tasks that require a sequence of steps in execution (tasks that allow step-by-step interpretation) [6]. In such models, a probabilistic hierarchy is used. For example, an investigated with a higher level of readiness (latent variable) with a higher probability will give correct answers to all test tasks (indicator variables), compared with the subjects with lower level of preparedness. Conversely, the probability of a correct answer to a lighter test task is higher than the probability of a correct answer to a more difficult task for each subject [2]. IRT models built on probabilistic judgments provide wider possibilities for analyzing test data. Such models allow more precisely to separate both the subjects being studied and to give a more accurate assessment of the test indicators. Due to the relatively simple structure of the models, there are effective computational procedures to check the adequacy of the model: for the entire set of test results, for each subject, for each task and for each specific answer. According to O. Kardanova, the very model of IRT is most suitable for constructing the test as a measuring instrument [4].

For a long time, authenticity or authentic personality was discussed in the psychological literature through the lack of authenticity or false behavior, which relates to the hiding of one's actual thoughts, making individuals say what others want to hear

instead of what they truly think [4]. Today the concept is related to the thoughts, emotions, needs, desires, preferences, and beliefs about themselves, which results in actions consistent with these experiences. Nowadays the most famous in foreign psychology is the concept of the authenticity of Kernis & Goldman (2005); Wood & Linley (2007), based on the theory of social construct of reality (Sheldon & Kasser, 2008), the model of authentic relations Lopez & Rice (2006), the Harter's (2004) integrative model of the authenticity.

The purpose and objectives of research. There is a need to analyze the problem of Ukrainian's teachers authenticity.

Main material and research results. Participants were 218 teachers (113 women and 105 men) with an average age of 39,5 years (SD = 2,4). All participants live in Kyiv, Cherkasy, Poltava, Khmelnytsky, Kherson and Chernihiv regions of Ukraine. This *research* was conducted during 2016, the data were collected in writing, each respondent marked the answers on the form using the evaluation scales.

Adaptation techniques consisted of seven stages:

1) primary translation of questionnaires from English into Ukrainian and text examination by philologists;

2) reverse translation (from the Ukrainian language to English) and assessment the original translation correspondence;

3) adjusting allegations, discussing the final version of the questionnaire;

4) assessment of conformity of assertions with the method scales;

5) commissioning of research on a sample of higher educational institutions Ukrainian teachers;

6) processing the results and comparing them with foreign studies;

7) conducting of factor analysis, approval of the final version of the questionnaire.

Measures

Authenticity. *The Authenticity Scale* [9]. The scale is a self-report questionnaire which is relatively short and designed for use in counseling psychology settings. Twelve questions are included in the questionnaire; four questions to assess each of the three components of authenticity with participants expressing agreement on a 1 (does

not describe me at all) to 7 (describes me very well) scale. Questions from the Authenticity Scale (A.Wood, et al., 2008) include: Self-alienation, Authentic living, Accepting external influence.

Well-being. *The scales of psychological well-being (Ryff & Keyes, 1995 Russian adaptation T. Shevelenkova and P. Fesenko)*. Self-report scale designed to measure psychological well-being. The 84-item instrument consists of six subscales: Autonomy, Environmental mastery, Personal growth, Positive relationships with others, Purpose in life, and Self-acceptance. Each subscale consists of 14 items divided approximately equally between positive and negative items. Participants respond on a 6-point scale that ranges from "strongly disagree" (1) to "strongly disagree" (6). Certain items are reverse coded. Scores are summed and subscale scores are obtained. The total score is the sum of the 84 items. Higher scores indicate higher psychological well-being within the respective dimension.

In order to assess and verify the factor structure of the questionnaire exploratory and confirmatory factor analysis (EFA, CFA) were used. For the analysis of scales, descriptive statistics, frequency analysis, correlation relations analysis using the Spirman correlation coefficient rank were used. The reliability assessment is based on the determination of the internal consistency of the method, its parts and individual scales (coefficient alpha (α) Kronbach). Mathematical data processing was performed using SPSS V. 21.

Results of research and their discussion. The application Barlett's Test of sphericity for the Authenticity Scale (Wood, Linley) showed the possibility of using EFA: χ^2 (66) = 28915,21, p <0,001, and according to the Kaiser-Meyer-Olkin Measure of Sampling Adequacy the sample size is adequate (0,86).
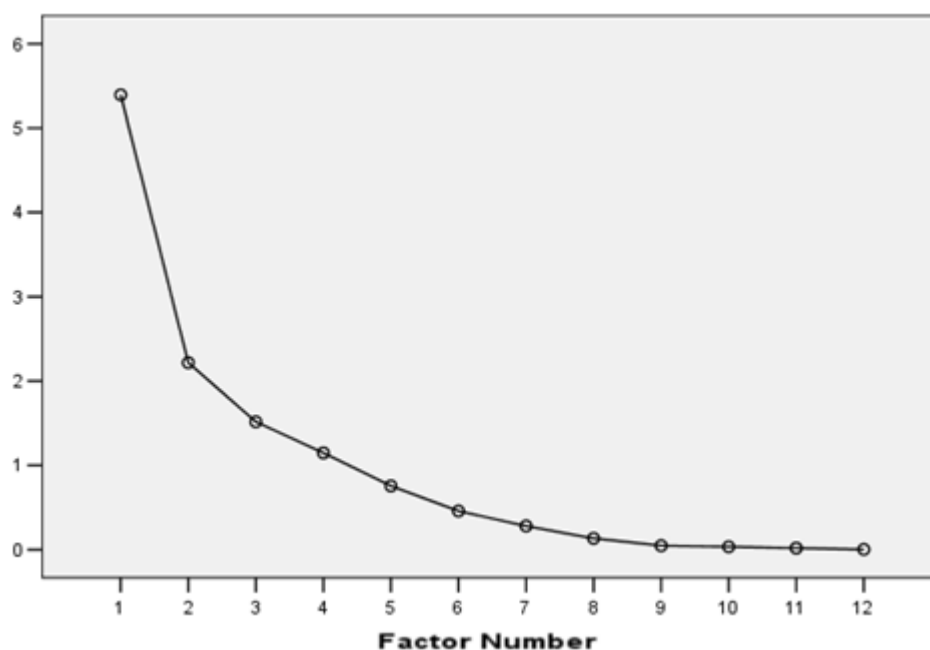
Figure 1. Exploitation factor analysis for the Authenticity Scale (Wood & Linley, 2007)

All points of the questionnaire are one factor - that is, it completely authenticates the concept of authenticity. The following three factors were obtained for three factors: 4.92, 1.62 and 1.51. Such results were detected in 77,10 % of all respondents. That is, in this method it is possible to allocate three subscales (as in the original version of the questionnaire). "Self-alienation" correlates with "Authentic living" (0,52) and "Accepting external influence" (0,54), "Accepting external influence" positively correlates with "Authentic living" (0.45).

The most reliable were Self-alienation" (α = 0.95) and "Accepting external influence" (α = 0.93), and the high level of reliability (α = 0.87) was also found on the subscale "Authentic living". Consequently, according to the results of an examination of the reliability of the questionnaire of authenticity (Wood & Linley, 2007) in the Ukrainian translation, it has been established that this technique is a reliable tool for the study of authenticity, and the subscales of the questionnaire are consistent with each other.

Using the three-component model of authenticity (similar to the Wood & Linley questionnaire), the three factors have a dispersion of 29.60%, 33.42%, and 34.67%, respectively, with each subscale consisting of a variety of allegations - from 6 to 17.

When applying the three-factor model, the first and second factors consist mainly of assertions concerning self-awareness and behavior, and the third factor is the objective perception of the surrounding reality. When applying the four-factor model, the first factor relates above all to the sphere of relations, the second factor - mainly behavioral aspects, the third factor - self-awareness and the fourth - an objective assessment of the surrounding reality.

Table 1

Factor load for the questionnaire of Authenticity Scale (Wood & Linley, 2007)

Items	Knowledge and acceptance of yourself	Non-limitation of others	Authentic self-expression
1. I think it is better to be yourself, than to be popular	-0,08	0,07	0,55*
2. I don't know how I really feel inside	0,78*	0,01	-0,01
3. I'm worried about the opinions of myself about other people	0,09	0,68*	0,12
4. I usually do what other people tell me to do	0,31	0,73*	0,04
5. I feel pressured to behave in certain way	0,11	0,76*	-0,03
6. I'm dependent on the thoughts of other people	-0,06	0,89*	-0,01
7. I feel as if I don't know myself very well	0,88*	-0,01	0,01
8. I always stand by what I believe in	-0,08	0,02	0,79*
9. I make my own choices in life	0,08	0,01	0,71*
10. I feel out of touch with the "real me"	0,81*	-0,02	0,01

11. I live in accordance with my values and beliefs	0,11	-0,04	0,78*
12. I feel alienated from myself	0,84*	0,03	-0,05

According to the results of the factor analysis, the subscales "knowledge and acceptance of yourself" include the following statements: 2, 7, 10, 12; to subscales "non-limitation of others" - 3, 4, 5, 6, and to the subclass, "authentic self-expression" - 1, 8, 9, 11. All points of the method are calculated by the direct key (only positive factor loadings are detected according to the statements). The factor loading of the subscale statements is quite high (from 0.55 to 0.89). In our study, three polytomic IRT models were applied: Graded response model ('graded') [11]; Generalized partial credit model ('gpcm') and Graded ratings scale model ('grsm') [11]. These models measured latent parameters - the level of authenticity of the respondents, as well as parameters of sub-levels of the indicators of authenticity (test questions) and their differentiation ability. For all three models, there are defined: authenticity parameters, sub-parameters of the indicators of authenticity, least and the highest value of the parameters of authenticity, the corresponding mean and variance, the verification of the parameter of authenticity for normality by the Kolmogorov-Smirnov criterion has been performed. The results are presented in Table 2.

Table 2

The value of the authenticity parameters

Authenticity parameters	Models		
	'graded'	'gpcm'	'grsm'
Min	-3,16409	-2,65395	-2,84885
Max	2,416554	2,473187	2,39694
Mean	-0.0008742234	0.003850627	-0.001214179
SD	0.9184080206	0.905582385	0.894113124
p-value	0.5298	0.5688	0.7443

Based on the calculation and analysis of latent parameters, we can draw the following conclusions.

1. The parameters calculated for the three models are close, so the classification of respondents in the level of authenticity for the three models is approximately the same.

2. Parameters are similar in value to selective characteristics.

3. Distributions of parameters are close to normal with similar parameters. The similarity of latent parameters for different models indicates the reliability of the results of the survey.

4. Analysis of the relevant indicators showed that in indicators with numbers 4,12 certain sublevels are not selected by any respondent. In the indicator 4 - it is 7 sublevels, and 12 - 6th.

5. The parameters of sublayers of indicators sufficiently evenly cover the interval from -5 to +5 logits and have high differentiating ability.

6. Analysis of the ensembles of the characteristic curves of the sub-levels of the indicators of authenticity, which represent the graphs of the dependence of the probability of selecting the appropriate sub-level of the indicator from the level of the respondent's authenticity, showed the similarity of the ensembles of the characteristic curves for all three models.

The results of correlation analysis of authentication questionnaires have shown the existence of significant positive relationships between these techniques, which proves their ability to apply in the comprehensive study of the authenticity of the individual.

Modern descriptions of authenticity or authentic functioning often depict a construct composed of many elements including autonomy, self-awareness, unbiased examination, social embeddedness and behavior congruent with values and beliefs. Being authentic means acting according to oneself in various activity contexts, which leads to the healthy development of individuals, groups, and institutions.

Teachers characterized by a relative balance of all aspects of psychological well-being, but above all a pronounced indicator of " Environmental mastery " (62,45). In addition, high rates on "positive relationships" (61.46), "personal growth" (55.57), "

Purpose in life " (55.48), while low scores were found on the scale of "autonomy" (48.92).

Conclusions. As a result of our research, we assume that the Authentication Questionnaire may be refined by inputting for the --- inverse key statements, thus respondents will better understand the issue and, accordingly, the results of the diagnosis will be more accurate. It is concluded that teachers are characterized by an average level of authenticity, which testifies to the understanding of the teachers of their true self, but the impossibility of its best to show, due to certain requirements for professional pedagogical activities, the need to meet more social role than to show their individuality. Teachers are characterized by such a component of authenticity as "orientation on relationships", that is, openness and honesty in interaction with other people. As in the case of an authentic self-declaration, the behavioral component of authenticity by AI-3 methodology is significantly less represented by teachers, that is, the performance of professional duties, first of all it concerns teachers of secondary schools, hinders and often makes it impossible for teachers to behave according to their own values and ideals.

The most authentic were teachers aged 31 to 49, characterized by aspiration for personal growth, formed goals in life, high level of empathy, self-acceptance, meaningfulness of life and average and high level of self-efficacy, have enough experience to perform professional duties, enjoy from their work and have formed professionally important qualities.

To sum up, translated and adapted Ukrainian versions of the Authenticity Scale can be considered as reliable tools for studying various aspects of the personality's authenticity.

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