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## MANIFESTATION OF ETHNIC IDENTITY IN AVERAGED MULTIPLE INTELLIGENCES PROFILE DURING RESEARCH IN JAPAN AND RUSSIA

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**Abstract:** *The purpose of this work is to analyze ethnic identity as a factor in differences in the profile of multiple intelligence among representatives of the Russian and Japanese ethnic communities. Some aspects of the emotional-axiological perception of the stimuli of the Gardner\_12 questionnaire in the assessment of multiple intelligence are considered.*

**Keywords:** *ethnic identity, stimuli, multiple intelligence, vibraimage technology.*

Ethnic identity increasingly understands as not only the stable emotional-cognitive process of awareness includes human beings [1], but also as a kind of emotional-axiological attitude of their belonging to an ethnic community [2]. Emotional-value and emotional-cognitive components of ethnic identity are in close connection and can probably manifest themselves in a selective attitude to the same events / incentives in people belonging to different ethnic communities. This factor should be taken into account when compiling and interpreting psychological tests or any other means of assessing and controlling personal achievements [3]. Howard Gardner is an adversary of the theories of indivisible intelligence and the traditional test approach to diagnostics [4, 5]. Most intelligence tests reflect the level of awareness that is positioned within a particular subculture. They have a “learning /awareness” factor, not abilities parameters. Gardner’s multiple intellects do not deny the social, emotional, and cognitive component of intellectual activity. Each of the intellects is important, forming a unique profile of a single person. “A deep understanding should be our main goal; we must strive to understand that in a given cultural context, it is considered true or false, beautiful or ugly, good or bad” [4]. However, intelligence tests can also be influenced by ethnic identity at the emotional-value level of the perception of test stimuli (we intentionally use the term test stimuli, rather than test items, because these are exactly the stimuli that form test items), even if we are talking about multiple intelligence.

### Methods and Materials

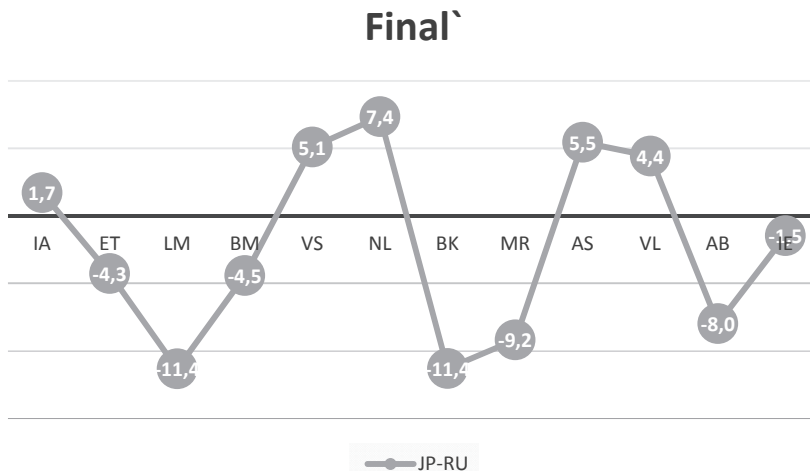
The first study part was conducted from 2017 to 2019 in Russia. A total of 1158 people, Russian citizens, were tested. The subjects were 14 years old and older. The proportion of adults was 63%, minors — 37%.

The tested group of the second study part was consisted mainly of Elsys-Japan company employees (155 persons including sales persons, technical staffs, office work staffs) from Kyushu to Hokkaido, Japan (age 20–71 years, male/female 83/17%) on questions from VibraMI programs with the Gardner12 questionnaire conducted from March to April, 2019.

The VibraMI program, based on the vibraimage technology, presents a supplemented and expanded to 12 types classification of G. Gardner's multiple intelligences, indicating the possibility for self-realization in a particular professional sphere [6, 7]. The respondent needs to answer 12 pairs of questions, supplemented by stimulus images. The content of each of the 24 questions is directly related to the potential interests of the respondent, and their formulation allows you to assess the orientation of the installations. The orientation of installations can be traced in the change of the information and energy component of the psychophysiological responses to the question posed. Vibraimage technology allows to obtain multidimensional dependences of the characteristics of the psycho-physiological state (PPS) and record the change in energy and the direction of this change. The change in energy released (consumed) by a person from the initial state to another energy state is measured in kcal / min [8]. Presumably, the emotional-axiological component of the ethnic identity of the representatives of the Russian and Japanese ethnic communities will manifest itself in individual differences in the perception of the stimuli of the Gardner\_12 test (VibraMI). These differences may be manifested in the fact that representatives of the Russian and Japanese ethnic communities may have different profiles of multiple intelligence (MI).

## Results

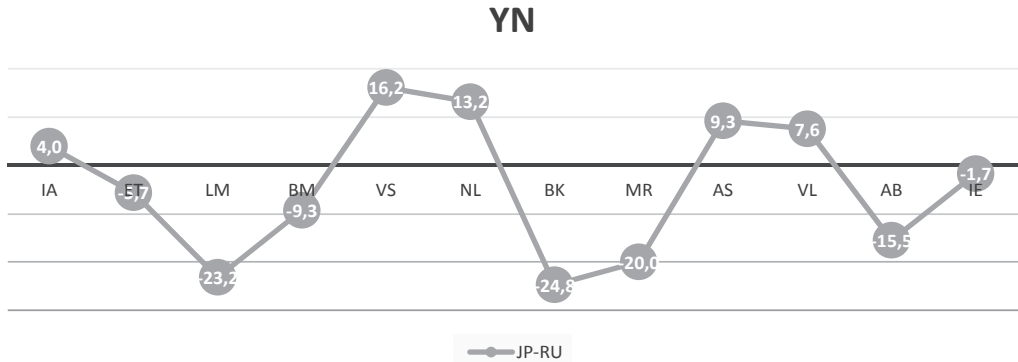
Differential Russian-Japanese MI profile is shown on figure 1. Data were captured by VibraMI program [8] and processed by VibraStatMI program [9].



**Fig. 1.** MI Differential Profile (Final`\_JP — Final`\_RU) of 1158 Russians and 155 Japanese

The maximum differences of the Japanese from the Russians appeared in relation to the logical-mathematical (LM), visual-spatial (VS), natural (NL), body-kinesics (BK) and musical-rhythmic (MR) types of MI, fig. 1. In the group of Russians, the

highest values for the general MI profile were obtained for the ascetic (AS = 68.4%), interpersonal (IE = 65.6%) and body-kinesics (BK = 62.8) MI (in descending order), fig. 1. The minimum values were obtained for business-mercenary (BM = 43.8%), verbal-linguistic (VL = 48.4%) and philosophical (ET = 51.8%) MI. In the Japanese group, the highest values were obtained for the ascetic (AS = 73.9%), interpersonal (IE = 64.1%) and natural (NL = 64.1%), (in decreasing order). The minimum values are obtained in relation to business-mercenary (BM = 39.3%), logical-mathematical (LM = 40.7%) and philosophical (PH = 47.5%) MI types. Let's compare the obtained results with the profile of conscious (YN) and unconscious (IE) attitudes.



**Fig. 2.** Differential profile (YN\_JP — YN\_RU) of the conscious responses of 1158 Russians and 155 Japanese MI testing

The maximum differences between the Japanese and the Russians (by analogy with the general profile of MI, fig. 1) appeared in relation to logical-mathematical (LM), visual-spatial (VS), natural (NL), body-kinesics (BK) and musical-rhythmic (MR) MI types, fig. 2. In the group of Russians, the highest values in the profile of the conscious reaction (YN) were obtained from the ascetic (AS = 85.6%), body-kinesics (BK = 74.4%) and natural (NL = 60.6%) MI (in descending order), fig. 1. The minimum values were obtained for business-mercenary (BM = 37.7%), verbal-linguistic (VL = 46.3%) and philosophical (ET = 51.7%) MI, fig. 2. In the Japanese group, the highest values were obtained for the ascetic (AS = 94.8%), interpersonal (IE = 82.8%) and visual-spatial (VS = 76.7%) MI (in descending order). The minimum values were obtained in relation to the business-mercenary (BM = 28.4%), logical-mathematical (LM = 30.5%) and philosophical (ET = 46%) MI type, see fig. 2.

An analysis of the unconscious reaction revealed minimal differences. Russian and Japanese at the unconscious level significantly differ only in the visual-spatial (VS) type of MI, fig. 3.

In Russians, visual-spatial (VS) MI = 52.3%, among Japanese, VS MI = 46.3%.

The maximum differences of the Japanese from the Russians (by analogy with the general and profile-conscious responses of MI, figs 1, 2) appeared in relation to logical-mathematical (LM), visual-spatial (VS), body-kinesics (BK) and musical-rhythmic (MR) MI types, fig. 4. The range of values on the differential profile of MI,

within 40 units (from 20 to -20) is considered the coincidence of the desired (YN) and real (IE), fig. 2. There is an assumption that positive values on the differential profile of MI primarily reflect socially significant benchmarks for the use of abilities, and negative values are individually significant benchmarks for the use of abilities. The highest values for the differential profile, in the group of Russians, were obtained by interpersonal (IE = 37.7%), ascetic (AS = 34.3%), motor-motor (BK = 23.2%) MI (in descending order), fig. 1. The minimum values were obtained by business-mercenary (BM = -12.1%) and verbal-linguistic (VL = -4.2%), fig. 4. In the Japanese group, the highest values for the differential profile were obtained in relation to the ascetic (AS = 42%), interpersonal (IE = 37.3%), visual-spatial (VS = 30.4%), and MI (in descending order). The minimum values were obtained in relation to business-mercenary (BM = -21.7%), logical-mathematical (LM = -20.4%) MI, fig. 4. Thus, the maximum differences in the group of Japanese and Russians, in the differential MI profile, were obtained mainly in relation to the visual-spatial (VS) MI, fig. 3.

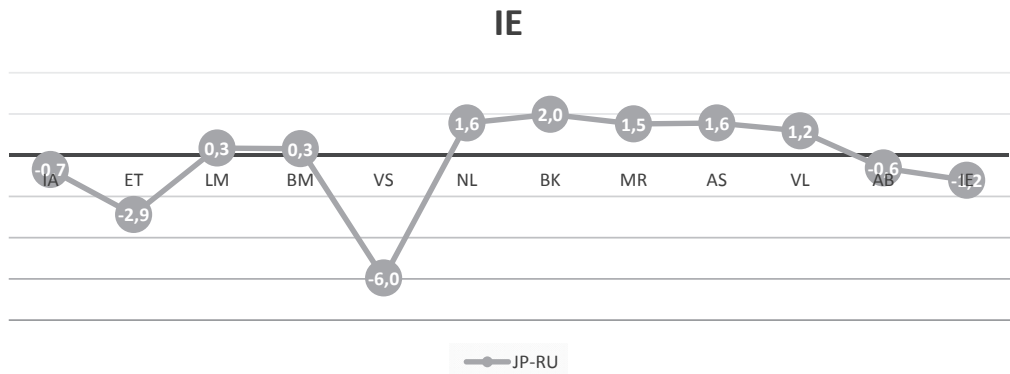


Fig. 3. Differential profile (IE<sub>JP</sub> — IE<sub>RU</sub>) of the unconscious responses of 1158 Russians and 155 Japanese MI testing

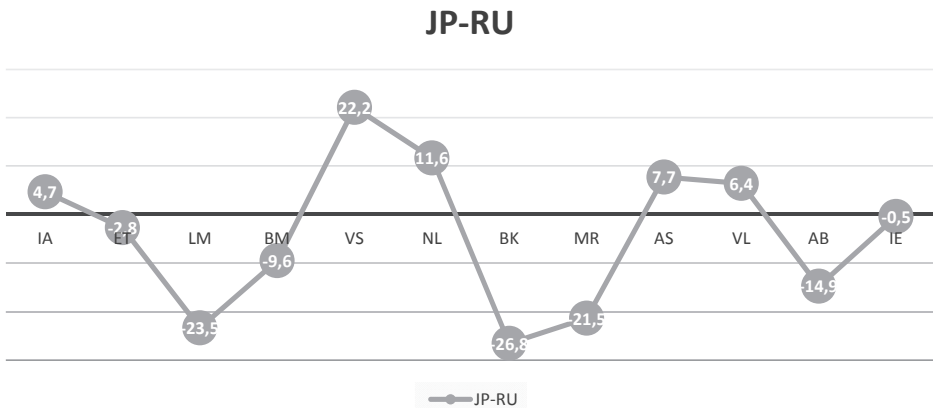


Fig. 4. Double differential profile (YN<sub>JP</sub>-IE<sub>JP</sub>) — (YN<sub>RU</sub>-IE<sub>RU</sub>) of 1158 Russians and 155 Japanese MI testing

## Results and discussion

Russians are typical representatives of the multinational Slavic ethnos. In this regard, the results of this study may spread to other representatives of the Slavic ethnos (Ukrainians, Belarusians, etc.), not being a modal-specific feature of the Russian ethnic community. The Japanese, by contrast, are predominantly a mononational ethnos. Many authors, in the framework of interdisciplinary research, noted the high spirituality inherent in both the Slavic and Japanese ethnos. In this regard, high values of the ascetic (AS) type of MI in both groups are fairly predictable. On the contrary, the differences obtained in the general profile of MI among Russians and Japanese are quite dispositive. For example, the ability to conduct business in both groups at an average level, significantly inferior to other types of MI. At the same time, Japan is the undisputed leader in the field of high-tech integration, and Russia is in the field of military-industrial (MIC) and fuel and energy (FEC) complexes. Therefore, it is impossible to judge the ability or inability to conduct business only by this indicator. Features of ethnic identity are manifested in the combination of ways of doing business.

Research activities in Japan are focused on advanced technology. Most innovations are brought in by improving the quality of life of the population and protecting the environment. Careful attitude to natural resources (NL) and the originality of the geographical location of Japan (archipelago, with limited land resources) determine the high importance of natural (NL) and motor-motor (BK) types of MI, and specialization in high technologies (microelectronics, robotics and others) are closely intertwined with the visual projection (VS) capabilities of the data. It is the combination of these types of MI that determines the specifics of the ethnic identity of the Japanese. The Russian model of the economy is also associated with technical advances, but in the fields of fuel, energy and military-industrial complexes, where preferable the combination of logical-mathematical (LM) and body-kinesics (BK) MI types.

## Conclusions

The results show that modern Russians and Japanese are in many ways similar in their ethnic identity and are focusing on achieving common socially significant goals. At the same time, the ways to achieve these goals are associated with the activation of various components of the MI profile: visual-spatial (VS) and motor-motor (BK) MI types in Japan, logical-mathematical (LM) and motor-motor (BK) types of MI in Russian.

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