Psychological characteristics of ethnic groups in the South of Russia, diagnosed using the hand test

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Abstract. The aim of the work was to compare the psychological characteristics obtained using the Hands Test in representatives of various ethnic groups living in the South of Russia. We used the Wagner Hand Test. The study was carried out on respondents aged 15-16 and 17-30 years old, living in the Rostov region, the republics of Karachay-Cherkessia, Kabardino-Balkaria, Crimea, Adyghea. The total number of respondents was 689, of which 304 were men and 385 were women. As a result, data were obtained on sex differences in psychological characteristics identified using the hand test. Women were found to be more Affective than men. The age-related characteristics of the hand test indicators were also revealed in the groups of 15-16 years old and 17-30 years old. Comparison of age subgroups 15-16 and 17-30 years old showed that with age there is an increase in the severity of psychological traits of Direction, Communication, Active, the degree of personal Maladjustive and the sum of indicators of Aggressive and Direction, as well as the sum of indicators of Affection, Communication and Dependence. The manifestations of psychological characteristics are also determined by ethnicity, in particular, in terms of such indicators as Direction, the sum of indicators of Aggressive and Direction, the indicator of Activity, the total number of answers on the test and the total indicator of Aggressive.

1 Introduction

The South of Russia is a multinational region that includes various territorial formations, republics, regions, on whose territory a large number of representatives of various ethnic groups, belonging to different linguistic groups, live. The Russian language is a connecting and unifying language, providing opportunities for interethnic communication as a link for speakers of languages of different language groups. Education in schools and higher educational institutions is conducted mainly in Russian.

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E. Wagner's projective Hand Test allows, using the method of associations, to obtain information about many psychological characteristics of the subjects. For example, about the prevailing tendencies towards directive or aggressive behavior or tendencies towards communication, interaction, acceptance or dependence on other people, etc. Carrying out such a diagnosis does not require long reading of the subjects into the texts of the questionnaires, which facilitates the diagnostic procedure. Careful adherence to the instructions during testing, the conviction that the instructions are understood correctly, allows you to obtain reliable data.

The Hand Test has found wide application in clinical practice, when working with various categories of somatic patients [1].

The use of the hand test on groups of pediatric and psychiatric patients showed that the psychiatric group scored higher on the scales of aggression, tendency to escape from reality and psychopathology [2].

Delayed assessment of behavioral problems associated with breaking the law was carried out on a sample of Swedish girls who had committed offenses. At an early age, about ten years before the commission of offenses, their psychological characteristics were diagnosed using the Hand Test, which showed that they had severe tension and psychopathology [3].

The use of the Hand Test in the differential diagnosis of the severity of disorders in children aged 7-18 years with behavioral deviations in comparison with ordinary schoolchildren showed that there are significant differences in such indicators as Pathological (PATH) and Aggressive (AGG) [4].

We studied the features of verbal responses to hand test stimuli in men and women with different durations of paranoid schizophrenia and in the control group. It was found that for men with a disease lasting up to 5 years, in comparison with the control group, the indicator of Communication (COM) was significantly increased. In women, with an increase in the length of the disease, the tendency to open aggressive behavior increases [5].

In our previous works, we considered the association of the results of diagnostics of psychological characteristics of representatives of the Russian and Tatar ethnic groups using the Hand-test of E. Wagner and the genetic characteristics of carriers of the Val158Met polymorphism of the COMT gene (Catechol-O-methyltransferase) [6, 7].

This paper provides generalized data on testing the psychological characteristics of representatives of different ethnic groups living in the South of Russia, using E. Wagner's projective technique Hand-test.

2 Material and method

Schoolchildren aged 15-16 and adults aged 17-30, living in the Rostov Region, the republics of Karachay-Cherkessia, Crimea, Kabardino-Balkaria and Adygea, took part in the work. The total number of respondents was 689, of which 304 were men and 385 were women.

The total number of ethnic groups that took part in the study was 30. In view of the single representation of some ethnic groups, their data were not included in the final analysis, which was carried out for 14 ethnic groups, such as Russians, Adygs (including Circassians and Kabardians), Tabasaran, Avars (including Karatyans), Dargins, Kumyks, Lezgins (including Tsakhurs and Aguls), Rutuls, Laks, Tatars (including Nogays), Ukrainians, Chechens (including Ingush and Avakhs), Karachais, Armenians. The unification of representatives of different ethnic groups into one in the course of data analysis was justified by belonging to a common language group.

The Hand-test by E. Wagner, adapted by T.N. Kurbatova. This test is a hand gesture card that must be interpreted by answering questions about what the person who owns the hand might do. Nine cards represent certain gestures, the tenth card is empty, you need to imagine a gesture and answer questions in relation to it. The resulting associations are recorded by a

psychologist. Also, the time from the beginning of the presentation of the card to the beginning of the subject's speech production (reaction time) is noted. The received answers of the subject are assigned categories.

The Hand Test is aimed at identifying a tendency to direct aggressive behavior (AGG), in this case, the subject gives associations representing the hand that is fighting or threatening someone with physical harm, Direction (DIR), in this case the hand participates in actions of an imperative nature: leads, directs, hinders, dominates other people. The total indicator (AGG + DIR) indicates the general aggressive tendencies of the subject. Opposite tendencies restraining aggressive behavior are characterized by the indicator (AFF + COM + DEP). The category of Affection (AFF) is revealed if the subject's associations indicate that the hand expresses love and a positive emotional attitude towards other people, the category of Communication (COM) is assessed if the hand is involved in a communicative action, the category of Dependence (DEP) is determined if, in the associations of the subject, the hand expresses submission or a request for help addressed to other people. The difference $I = (AGG + DIR) - (AFF + COM + DEP)$ determines the prevailing trend between aggressiveness and restraining tendencies. The degree of Maladjustive is reflected by the formula: $MAL = Ten + Crip + F$

The tendency to Withdrawal (WITH) from reality is reflected by the formula: $WITH = Des + Bas + Fail$

The presence of Pathological (PATH) is reflected by the formula: $PATH = MAL + 2WITH$

3 Results

The one-way analysis of variance (independent variable: gender, dependent variable - the Hand Test scales) showed the presence of statistically significant differences between men and women who took part in the study, in terms of Affection (AFF) ($F = 4.79$, $p = 0.03$) and the sum of the indicators of Affection (AFF), Communication (COM) and Dependence (DEP) ($F = 5.18$, $p = 0.02$). Moreover, these indicators were statistically significantly higher in women.

The conducted one-way analysis of variance showed the presence of statistically significant differences between the age subgroups of schoolchildren 15-16 years old and adults 17-30 years old, who took part in the study, in terms of Direction (DIR) ($F = 7.02$, $p = 0.008$), Communication (COM) ($F = 5.30$, $p = 0.021$), Active (Act) ($F = 23.28$, $p = 0.000002$) and the sum of indicators AGG + DIR ($F = 9.43$, $p = 0.002$), AFF + COM + DEP ($F = 10.44$, $p = 0.001$), the degree of Maladjustive (MAL) ($F = 4.42$, $p = 0.003$), the sum of responses ($F = 58.19$, $p = 0.000$). Moreover, these indicators were statistically significantly higher in the age subgroup of 17-30 years.

Fig. 1. Results of one-way analysis of variance (independent variable: ethnicity, dependent variable: Activity according to Hand-test).

Ethnicity of respondents: 1 - Russians; 2-Adygs (including Circassians and Kabardians); 3- tabasaran; 4 - Avars (including the Karata); 5- Dargins; 6 - Kumyks; 7 - Lezgins (including Tsakhurs and Aguls); 10- rutulians; 11 - Laks; 13 - Tatars (including Nogays); 14 - Ukrainians; 16 - Chechens (including Ingush and Avakhs); 17 - Karachais; 18 - Armenians.

The one-way analysis of variance (independent variable: ethnicity, dependent variable - indicators according to the Hand Test) showed a significant influence of the ethnicity factor on the Direction (DIR) indicator ($F = 1.92$, $p = 0.02$), the sum of indicators of Aggressive (AGG) and Direction (DIR) ($F = 1.98$, $p = 0.02$), the indicator of Active (ACT) ($F = 6.35$, $p = 0.00$), the sum of answers on the test ($F = 10.20$, $p = 0.00$) and the total indicator of Aggressiveness (I) ($F = 2.65$, $p = 0.00$).

4 Discussion

In our work, we obtained data on a statistically significant higher affectivity of women in comparison with men, as well as the total indicator of Affection (AFF), Communication (COM) and Dependence (DEP).

Earlier, in the works of other authors, attempts were made to highlight the features of reactions according to the hand test in boys and girls of different age groups [8]. Thus, it was shown that there are age-related differences in the indicators of the Hand Test [9].

In our work, age differences were also obtained between the compared subgroups 15-16 years old and 17-30 years old, which manifested themselves in higher indicators in the second age group of Direction (DIR), Communication (COM), Active (ACT), Maladjustive (MAL) and the sum of indicators of Aggressive (AGG) and Direction (DIR), as well as the sum of indicators of Affection (AFF), Communication (COM) and Dependence (DEP).

In our work, significant differences in Hand Test indices were obtained depending on ethnicity. Thus, significant differences were obtained in terms of Direction (DIR), the sum

of indicators of Aggressive (AGG) and Direction (DIR), the indicator of Active (ACT), the total number of answers on the Test and the total indicator of Aggressive (I).

In earlier studies, using the Hand Test, studies were carried out aimed at identifying ethnic differences [10, 11]. Studies using samples of different races and ethnic groups showed the presence of differences in the manifestation of aggression [12].

The works note that the influence of the media, as well as films demonstrating aggressive ways of solving problems, is possible as possible sources of recording aggressive forms of behavior in young people [13].

The level of aggressiveness can be determined not only by genetic factors, but also determined by environmental influences, such as, for example, the assimilation of habitual ways of behaving in a family in childhood, through identification of a child with a parent of the same sex. Thus, in the work of M.R.A. Muscatello et al. it was shown that young people with high indicators of aggressiveness according to E. Wagner's "Hand-test" have fathers with high indicators of aggressiveness according to this test, but the indicators of fathers' aggressiveness are lower than those of sons [14].

Belonging to a particular culture, cultural traditions leaves an imprint on human behavior [15]. Emotional intelligence, as the ability to understand and express emotions, plays an important role in the correct understanding of people of different ethnic groups [16].

5 Conclusion

The Hands Test allows you to get a broad picture of psychological characteristics regarding the prevailing behavioral tendencies, such as aggressive, directive behavior or affectivity, communication, dependence.

As a result of the study, it was found that there are differences between men and women, which are manifested in an even higher level of Affection of women in comparison with men, as well as the total indicator of Affection, Communication and Dependence.

Comparison of age subgroups 15-16 and 17-30 years old showed that with age there is an increase in the severity of psychological traits of Direction, Communication, Activity, the degree of personal Maladjustive and the sum of indicators of Aggressive and Direction, as well as the sum of indicators of Affection, Communication and Dependence.

The manifestations of psychological characteristics are also determined by ethnicity, in particular, in terms of such indicators as Direction, the sum of indicators of Aggressive and Direction, the indicator of Activity, the total number of answers on the test and the total indicator of Aggressiveness.

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