Correlations of indices of personality traits with indexes of finger and palmar dermatoglyphics of practically healthy Ukrainian men

Gunas V. I.
National Pirogov Memorial Medical University, Vinnytsya, Ukraine

The search for new psychodermatoglyphic correlations will greatly increase the possibilities of this method and will accelerate the introduction of scientific developments into the daily practice of clinicians, criminologists, police and other specialties. The purpose of the work is to establish the peculiarities of the relationship between the indexes of the finger and palmar dermatoglyphics and the characteristics of the personality traits of practically healthy Ukrainian men. From the data bank of the materials of the research center of National Pirogov Memorial Medical University, Vinnytsya were taken the primary questionnaires of indicators of personality characteristics and dermatoglyphic indicators of 92 practically healthy men residents of Podillia region of Ukraine in the third generation. Processing of indicators of finger and palmar dermatoglyphics was performed according to the method of Cummins H. and Midlo Ch. (1961) in the statement by Gladkova T. D. (1966). To assess the characteristics of personality characteristics we determined properties of temperament (according to Eysenck), anxiety (according to Spielberger), accentuated personality traits (according to Shmishek), motivational orientation of the personality (according to Rotter), as well as features of the emotional organization of personality, aggressiveness, level of personality manifestations (according to Luscher). Correlation analysis was performed in the "Statistica 6.1" license package using Pearson statistics. It has been established that in the majority of cases, indicators of personality traits and dermatoglyphic indices of almost healthy men show single direct and inverse, mostly weak forces (r=0.21 - 0.29 and r=-0.21 - -0.28, respectively) correlations. The multiple nature of such correlations is established only between the Luscher gray color index and the left hand I, III and IV fingers and the left hand I and II fingers ridge count, the total ridge count of both hands, the total ridge count and the left hand delta index (r=-0.23 - -0.28) and between most indicators by Rotter subjective scale and the presence of a pattern on the thenar of the corresponding palm (on the right hand - r=0.31 - 0.37 and on the left hand - r=0.22 - 0.29). The results of quantitative analysis of significant correlations showed that between the indexes of the finger dermatoglyphics and the indicators of personality traits according to Eysenck and Luscher, most relationships are inverse, and with Spielberger, Shmishek and Rotter - direct; between the indexes of the palmar dermatoglyphics and the indicators of personality traits according to Spielberger and Luscher, most reliable relationships are inverse, and with the indicators according to Eysenck, Shmishek and Rotter - direct. The results of the correlation analysis allowed us to determine the most significant relationships between the indexes of the finger and palmar dermatoglyphics and the characteristics of the personality traits of practically healthy Ukrainian men. Keywords: dermatoglyphic indices, indicators of personality traits, practically healthy men, correlations.

Introduction
Psychodermatoglyphics has been widely used in recent decades to identify a predisposition to many mental illnesses and to create a psychological portrait of criminals, drug addicts or other similar groups of the population [3, 11, 12]. S. N. Akbarova and G. A. Azimova [2] conducted studies...
to identify dermatoglyphical and psychological features of drug users. Among the psychic features such qualities as lack of kindness, inability to determine one's own benefit, lack of desire to engage in dialogue, poor tolerance of difficulties, etc. are noted. Specific dermatological and psychological markers were also identified in the analysis of fingerprints, namely, the predominance of the arch type on the first finger of the right hand, the first, third and fifth fingers of the left hand, and the whorls on the thenar of both the left and right palms.

O. M. Zoroastrov, A. N. Chistykin, and I. S. Efremov [22] investigated the features of a skin pattern in 231 persons who were in prison for murder or grievous bodily harm. Specific features were found that are characteristic of this category of persons, such as an increase in the number of whorls on the fourth finger of the right hand, the second and third fingers of the left hand, and a decrease in the number of ulnar loops on the third finger of the left hand. There was also an increase in the ridge count on the fourth finger of the right hand and the fifth and fourth fingers of the left hand. The findings will help create risk groups, among which preventive measures can be taken to reduce the number of serious crimes. The same group of authors [7] revealed the features of skin pattern in persons convicted of rape, namely, the reduction of the frequency of ulnar loops on the second finger of the right hand, the increase in the number of whorls and the ridge count on the fourth finger of the right hand, the reduction of the ridge count of the c-d line on the right hand, increase in the number of whorls on the second-fifth fingers of the left hand, decrease in the frequency of ulnar loops on the first and fourth fingers of the left hand, decrease in the number of radial loops on the second finger of the left hand, increasing the ridge count on the third and fourth fingers of the left hand, reducing of ridge count a-b on the left hand. In this way, it is possible to identify potential risk groups and preventive measures.

It has been found that specific features of a person's skin pattern can be used to detect a tendency for antisocial behavior related to social isolation, depressive mentality, lack of emotions and negativity [21].

I. Oron [16] aimed to identify specific dermatoglyphic markers in persons who were intentionally injured. A total of 160 dermatoglyphs were investigated during the study for the first time to intentionally injure a body in age of 13-16 years. The results of the analysis of the data obtained revealed 16 dermatoglyphic features that can be further used to identify risk groups.

The purpose of the work is to establish the peculiarities of the relationship between the indexes of the finger and palmar dermatoglyphics and the characteristics of the personality traits of practically healthy Ukrainian men.

Materials and methods

From the data bank of the materials of the research center of National Pirogov Memorial Medical University, Vinnytsya taken the primary questionnaires of personality characteristics and indexes of finger and palmar dermatoglyphics of 92 practically healthy men aged from 22 to 35 years, residents of Podillia region of Ukraine in the third generation (representatives of Vinnytsya, Khmelitzi, part of Temopol and Zhytomyr regions).

Processing of indicators of finger and palmar dermatoglyphics was performed according to the method of Cummins H. and Midlo Ch. [5] in the statement by Gladkova T. D. [9].

To evaluate the characteristics of personality it is possible to identify dermatoglyphical and psychological features of drug users. Among the psychic features such qualities as lack of kindness, inability to determine one's own benefit, lack of desire to engage in dialogue, poor tolerance of difficulties, etc. are noted. Specific dermatological and psychological markers were also identified in the analysis of fingerprints, namely, the predominance of the arch type on the first finger of the right hand, the first, third and fifth fingers of the left hand, and the whorls on the thenar of both the left and right palms.

O. M. Zoroastrov, A. N. Chistykin, and I. S. Efremov [22] investigated the features of a skin pattern in 231 persons who were in prison for murder or grievous bodily harm. Specific features were found that are characteristic of this category of persons, such as an increase in the number of whorls on the fourth finger of the right hand, the second and third fingers of the left hand, and a decrease in the number of ulnar loops on the third finger of the left hand. There was also an increase in the ridge count on the fourth finger of the right hand and the fifth and fourth fingers of the left hand. The findings will help create risk groups, among which preventive measures can be taken to reduce the number of serious crimes. The same group of authors [7] revealed the features of skin pattern in persons convicted of rape, namely, the reduction of the frequency of ulnar loops on the second finger of the right hand, the increase in the number of whorls and the ridge count on the fourth finger of the right hand, the reduction of the ridge count of the c-d line on the right hand, increase in the number of whorls on the second-fifth fingers of the left hand, decrease in the frequency of ulnar loops on the first and fourth fingers of the left hand, decrease in the number of radial loops on the second finger of the left hand, increasing the ridge count on the third and fourth fingers of the left hand, reducing of ridge count a-b on the left hand. In this way, it is possible to identify potential risk groups and preventive measures.

It has been found that specific features of a person's skin pattern can be used to detect a tendency for antisocial behavior related to social isolation, depressive mentality, lack of emotions and negativity [21].

I. Oron [16] aimed to identify specific dermatoglyphic markers in persons who were intentionally injured. A total of 160 dermatoglyphs were investigated during the study for the first time to intentionally injure a body in age of 13-16 years. The results of the analysis of the data obtained revealed 16 dermatoglyphic features that can be further used to identify risk groups.

The purpose of the work is to establish the peculiarities of the relationship between the indexes of the finger and palmar dermatoglyphics and the characteristics of the personality traits of practically healthy Ukrainian men.

Materials and methods

From the data bank of the materials of the research center of National Pirogov Memorial Medical University, Vinnytsya taken the primary questionnaires of personality characteristics and indexes of finger and palmar dermatoglyphics of 92 practically healthy men aged from 22 to 35 years, residents of Podillia region of Ukraine in the third generation (representatives of Vinnytsya, Khmelitzi, part of Temopol and Zhytomyr regions).

Processing of indicators of finger and palmar dermatoglyphics was performed according to the method of Cummins H. and Midlo Ch. [5] in the statement by Gladkova T. D. [9].

To evaluate the characteristics of personality it is possible to identify dermatoglyphical and psychological features of drug users. Among the psychic features such qualities as lack of kindness, inability to determine one's own benefit, lack of desire to engage in dialogue, poor tolerance of difficulties, etc. are noted. Specific dermatological and psychological markers were also identified in the analysis of fingerprints, namely, the predominance of the arch type on the first finger of the right hand, the first, third and fifth fingers of the left hand, and the whorls on the thenar of both the left and right palms.

O. M. Zoroastrov, A. N. Chistykin, and I. S. Efremov [22] investigated the features of a skin pattern in 231 persons who were in prison for murder or grievous bodily harm. Specific features were found that are characteristic of this category of persons, such as an increase in the number of whorls on the fourth finger of the right hand, the second and third fingers of the left hand, and a decrease in the number of ulnar loops on the third finger of the left hand. There was also an increase in the ridge count on the fourth finger of the right hand and the fifth and fourth fingers of the left hand. The findings will help create risk groups, among which preventive measures can be taken to reduce the number of serious crimes. The same group of authors [7] revealed the features of skin pattern in persons convicted of rape, namely, the reduction of the frequency of ulnar loops on the second finger of the right hand, the increase in the number of whorls and the ridge count on the fourth finger of the right hand, the reduction of the ridge count of the c-d line on the right hand, increase in the number of whorls on the second-fifth fingers of the left hand, decrease in the frequency of ulnar loops on the first and fourth fingers of the left hand, decrease in the number of radial loops on the second finger of the left hand, increasing the ridge count on the third and fourth fingers of the left hand, reducing of ridge count a-b on the left hand. In this way, it is possible to identify potential risk groups and preventive measures.

It has been found that specific features of a person's skin pattern can be used to detect a tendency for antisocial behavior related to social isolation, depressive mentality, lack of emotions and negativity [21].

I. Oron [16] aimed to identify specific dermatoglyphic markers in persons who were intentionally injured. A total of 160 dermatoglyphs were investigated during the study for the first time to intentionally injure a body in age of 13-16 years. The results of the analysis of the data obtained revealed 16 dermatoglyphic features that can be further used to identify risk groups.

The purpose of the work is to establish the peculiarities of the relationship between the indexes of the finger and palmar dermatoglyphics and the characteristics of the personality traits of practically healthy Ukrainian men.
Correlations of indices of personality traits with indexes of finger and palmar dermatoglyphics of practically...
as medium and weak force direct correlation (r=0.35 and r=0.29) with the presence of a pattern on the thenar of the right and left hand, weak direct force (r=0.25) correlation with the presence of the pattern in the IV inter-finger gap of the left hand and weak force feedback (r=-0.24) correlation with the presence of the pattern in the III inter-finger gap of the left hand; indicator of the level of subjective control in the field of family relations according to Rotter - weak force feedback (r=-0.22) correlation with the magnitude of the angle atb of the right hand, as well as medium and weak force direct correlation (r=0.37 and r=0.25) with the presence of a pattern on the thenar of the right and left hand; indicator of the level of subjective control in the field of interpersonal relations according to Rotter - weak force feedbacks (r=-0.24 and r=-0.26) correlation with the ridge count of the line c-d and the magnitude of the ctd angle of the left hand, medium and weak force direct correlation (r=0.31 and r=0.28) with the presence of a pattern on the thenar of the right and left hand, weak force direct correlation (r=0.28 and r=0.25) with the presence of a pattern in the I inter-finger gap of the right hand and IV inter-finger gap of the left hand, as well as the weak force feedback (r=-0.25) correlation with the presence of a pattern in the III between the left gap of the left hand; subject level of subjective control in the field of health and illness according to Rotter - only reliable weak force direct correlation (r=0.22) with the presence of a pattern on the thenar of the left hand; blue color by Luscher - only reliable weak force direct correlation (r=0.22) with the frequency of any combination of tri-radii right hand; blue-green color by Luscher - inverse of weak correlation force (r = -0.22 - -0.26) with line length ct and dat angle value of right and left hand; orange-red color by Luscher - weak force feedback (r=0.23 - -0.26) correlation with the frequency of the central axial tri-radii of the right and left hand and with the presence of a pattern on the thenar of the right hand; light yellow color by Luscher - weak force feedback (r=-0.25 and r=-0.28) correlation with the frequency of the central axial tri-radii and the presence of a pattern in the second inter-finger gap of the left hand and weak force direct correlation (r=0.22) with the presence of a pattern in the I inter-finger gap of the right hand; violet color by Luscher - reliable weak force feedback (r=-0.24) correlation with the magnitude of the ctd angle of the right hand and weak force feedback (r=-0.24) correlation with the index value of the main palmar lines of the right hand.

Discussion

According to a number of studies it is known that specific dermatoglyphic signs are diagnostic markers of the mental state of a person [1, 4, 14, 19]. Therefore, the search for new psychodermatoglyphic correlations will greatly increase the possibilities of this method and will accelerate the introduction of scientific developments into the daily practice of clinicians, criminologists, bodies of inquiry and other specialties.

In the analysis of reliable correlations of indices of personality characteristics with dermatoglyphic indices of practically healthy men of Podilia region of Ukraine, in most cases single and inverse, mostly weak correlations strengths are established. Multiple nature of the reliable correlations is established only: mainly weak force inverse correlation (r=-0.23 - -0.28) of the gray color by Luscher and the indexes of the ridge count I, III and IV fingers of the right hand and I and II fingers of the left hand, summary ridge count of the fingers of both hands, the total ridge count and the deltaic index of the left hand; on the right hand, mainly medium strength direct correlation (r=0.31 - 0.37); and on the left hand weak strength direct correlation (r=0.22 - 0.29) between most indicators of the Rotter subjective scale and the presence of a pattern on the thenar of the corresponding palm.

Quantitative analysis of significant correlations of personality characteristics with dermatoglyphic indices of healthy men showed the following distribution:

extraversion-introversion, neuroticism, and sincerity indicators according to Eysenck - with indexes of finger dermatoglyphics (5.56 % of the total number of these indicators on the right hand, 2.78 % of the average force of the inverse and 2.78 % of the weak force of the inverse; on the left hand 1 - 1.39 %, medium straight); with indexes of palmar dermatoglyphics (on the right hand 6 - 9.52 % of the total number of these indicators, of which 6.35 % of the weak force of the direct and 3.17 % of the weak force of the opposite; on the left hand 2 - 3.18 %, of which 1.59 % of the weak force of the direct and 1.59 % weak strength of the inverse);

indicators of situational (reactive) and personal anxiety according to Spielberger - with indexes of finger dermatoglyphics (on the left hand 2 - 8.34% of the total amount of these indicators, of which 4.17 % average strength of straight and 4.17 % weak strength of straight); with indexes of palmar dermatoglyphics (on the right hand 4 - 9.52 % of the total number of these indicators, of which 2.38 % of the weak force of the direct and 7.14 % of the weak force of the opposite; on the left hand 2 - 4.76 % of the total amount of these indicators, of which 2.38 % of the average reverse force and 2.38 % weak reverse force);

indices of accentuation of the character of hypertensive, stuck, emotional, pedantic, anxious, cyclothymic, demonstrative, excitable, dysthymic and exalted types according to Shmishek - with indexes of finger dermatoglyphics (on the right hand 4 - 3.34 % of total, straight and 1.67 % of weak force of the inverse; on the left hand 5 - 4.16 % of the total number of these indicators, of which 0.83 % of the average strength of the straight, 2.50 % of the weak force of the straight and 0.83 % of the weak force of the inverse); with indexes of palmar dermatoglyphics (on the right hand 12 - 5.72 % of the total number of these indicators, of which 2.38 % of the weak force of the direct, 0.48 % of the average force of the reverse and 2.86 % of the weak force of the reverse; on the left hand 17 - 8.10 % of the total amount of these indicators, of which 0.95 % of the average force of the straight, 4.29 % of the weak force of the straight and 2.86 % of the weak force of the reverse);
Correlations of indices of personality traits with indexes of finger and palmar dermatoglyphics of practically... The results obtained allow us to determine the most significant relationships between the indexes of the finger and palmar dermatoglyphics and the characteristics of the personality traits of healthy Ukrainian men.

Conclusions
1. In the majority of cases, the personality traits and the dermatoglyphic indices of practically healthy men, have single and inverse, mostly weak forces (r=0.21 - 0.29 and r=-0.21 - -0.28, respectively) correlations. A quantitative analysis of the correlations revealed that between the indices of Eysenck and Luscher personality traits and the finger dermatoglyphics, the majority of reliable correlations were inverse, and between Spielberger, Shmishek and Rotter and the dermatoglyphics indice - direct; between the Spielberger and Luscher personality traits and the palmar dermatoglyphics, most reliable relationships are inverse, and between the Eysenck, Shmishek, and Rotter and the dermatoglyphic indices - direct.

2. The multiple nature of the significant correlations is established only between the Luscher gray index and the left hand I, III and IV fingers ridge count, and left fingers I, II, the summary ridge count of both hands, the total left hand ridge count and delta index (r=-0.23 - -0.28) and between most indicators of the Rotter subjective control scale and the presence of a pattern on the thenar of the corresponding palm (on the right hand - r=0.31 - 0.37 and on the left hand - r=-0.22 - 0.29).

References
Дерматографические признаки особенности личности с показателями пальцевой и ладонной дерматоглифики.

Корреляции показателей особенностей личности с показателями пальцевой и ладонной дерматоглифики практически здоровых украинских мужчин

Гунас В. И.

Показано, что между показателями пальцевой и ладонной дерматоглифики и показателями особенностей личности практически здоровых мужчин существуют корреляционные связи. Множественные корреляции установлены между показателями пальцевой и ладонной дерматоглифики и показателями особенностей личности практически здоровых мужчин, в большинстве случаев, наблюдается линейная прямая и обратная, преимущественно слабой силы (соответственно r=0,21 - 0,29 и r=-0,21 - -0,28 связи). Множественность характер подобных корреляций установлен только между показателем серого цвета по Люшеру и показателем гребешковым счётом II пальца правой кисти (r=0,31 - 0,37) и между показателями пальцевой и ладонной дерматоглифики и показателями особенностей личности по Спилбергеру и Люшеру большинство которых имеют обратный характер.

Ключевые слова: dermatoglyphic features, показатели особенностей личности, практически здоровые мужчины, корреляции.