



## **INTERCORRELATION OF THE SIZE OF THE EYE SLIT AND THE ANTHROPOMETRIC PARAMETERS OF THE ORGANISM.**

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### **Abstract:**

Anthropometry is the science that defines physical measures of a person's size, form, and functional capacities. Applied to occupational injury prevention, anthropometric measurements are used to study the interaction of workers with tasks, tools, machines, vehicles, and personal protective equipment — especially to determine the degree of protection against dangerous exposures, whether chronic or acute[1,15].

Existing data on the size and shape of industrial workers is limited. Because of the lack of anthropometric data for the general worker population, safety researchers have generally relied on data drawn from studies of military personnel, most of which was collected during the 1950s to 1970s. However, substantial anthropometric variability exists among the various U.S. workforce populations, and they are quite different from the average military population[11,12,13]. Industrial workers, such as the agriculture, truck driver, and firefighter workforces, are also anthropometrically very different from the average civilian population (Hsiao et al, 2002).

Diverse workforces in many occupations, as well as new roles for women in the workforce, require body-size data for designing adequate workplaces, systems, and personal protective equipment. In the past, variance in body dimensions was typically reported as means and standard deviations for various body segments (Roebuck et al., 1975). This approach was successful in generating broad parameters for personal protective equipment (PPE) sizing but was deficient in generating the detailed fit information needed for workplace, PPE, and other equipment design[2,16,17].

Technological development in recent years has advanced the basic science of human size and shape studies in 3-dimensional forms (3D). Also, computer-generated human models are now available for anthropometric analysis[3,4,5]. These advances in anthropometric science and computer-based human-form modeling have opened various research avenues for improving workplace and protective equipment design as well as anthropometric fit within complex systems[14,18,19,20].

The development of modern medicine dictates the importance of studying the eye socket. In anatomy, dentistry and facial-jaw surgery, the emphasis on the morphology of the human body can be used to evaluate its health. In the article, the authors gave an assessment to the case of the hit of the autumn bowl and analyzed several studies[7,8,9,10].

**Keywords:** Eye socket, skull, vision nerve, morphology, craniology

**OBJECTIVE:** to evaluate and analyze the eye socket to the level of study in medicine as a result of the literature review.

**METHODS AND MATERIALS OF STUDY:** the study materials were the following authors articles and authorizations served as materials.

**RESULTS AND DISCUSSION:** It has been found that right and left tear transverse size in Girls has a high

positive correlation with age  $r=0.55$  ( $p<0.01$ ). weakly positively correlated with the head circumference  $R = 0.19$  ( $p>0.05$ ). the mean positive relation with height is  $r = 0.39$  ( $p<0.05$ ). The middle positive relation with mass is  $r = 0.4$  ( $p<0.05$ ).

The examination found that the vertical size of the tear in girls was moderately positively correlated with age  $R=0.45$  ( $p<0.01$ ). the mean negative dependence on the head circumference is  $r = 0.02$  ( $p>0.05$ ). The mean positive dependence on the edge is  $r=0.4$  ( $p<0.01$ ). The



mean positive dependence on the edge is  $r = 0.3$  ( $p < 0.05$ ). high positive dependence on the transverse size of the eye  $R = 0.5$  ( $p < 0.01$ ). weakly positive dependence on visual acuity  $R = 0.2$  ( $p > 0.05$ ).

Right ocular visual acuity in girls is weakly positively related to age  $R = 0.1$  ( $p > 0.05$ ). Weakly positive dependence on the head circumference  $R = 0.02$  ( $p > 0.05$ ). weakly positive-dependent  $R = 0.07$  ( $p > 0.05$ ). weakly positive dependence on mass  $R = 0.07$  ( $p > 0.05$ ). high negative dependence on the transverse cleft of the eye  $R = -0.06$  ( $p > 0.05$ ). the weak positive bond to the vertical dimension is  $r = 0.24$  ( $p > 0.05$ ).

In girls, left-eye visual stuttering is weakly positively associated with age  $R = 0.1$  ( $p > 0.05$ ). weak negative dependence on the head circumference  $R = -0.1$  ( $p > 0.05$ ). weak negative dependence on the neck  $R = -0.02$  ( $p > 0.05$ ). weak negative dependence on mass  $R = -0.1$  ( $p > 0.05$ ). weakly positive dependence on the transverse cleft of the eye  $R = 0.1$  ( $p > 0.05$ ). the weak positive bond to the vertical dimension is  $r = 0.23$  ( $p > 0.05$ ).

In boys, the size of the transverse cleft of the eye has a high positive age dependence  $r = 0.7$  ( $p < 0.01$ ). the mean positive relation to the head circumference is  $r = 0.35$  ( $p < 0.05$ ). high positive dependence on the neck  $R = 0.7$  ( $p < 0.01$ ). high positive dependence on mass  $R = 0.7$  ( $p < 0.01$ ). weak negative dependence on visual acuity  $R = -0.2$  ( $p > 0.05$ ). middle positive dependent on vertical dimension  $r = 0.3$  ( $p < 0.05$ ).

In boys, the vertical size of the tear is the middle positive age-dependent  $R = 0.3$  ( $p < 0.05$ ). weak negative dependence on the head circumference  $R = -0.001$  ( $p > 0.05$ ). medium positive dependence on the neck  $R = 0.4$  ( $p < 0.01$ ). medium positive dependence on mass  $R = 0.47$  ( $p < 0.01$ ). the mean positive dependence on the transverse size of the eye is  $r = 0.3$  ( $p < 0.05$ ). weakly positive dependence on visual acuity  $R = 0.1$  ( $p > 0.01$ ). In boys, the right eye visual acuity is weakly negative age-dependent  $r = -0.09$  ( $p > 0.05$ ). Weak negative dependence on the head circumference  $R = -0.18$  ( $p > 0.05$ ). weakly positive-dependent  $R = 0.006$  ( $p > 0.05$ ). weak negative dependence on mass  $R = -0.04$  ( $p > 0.05$ ). weak negative dependence on the transverse cleft of the eye  $R = -0.06$  ( $p > 0.05$ ). the weak positive bond to the vertical dimension is  $r = 0.1$  ( $p > 0.05$ ).

Left ocular visual acuity in boys is weakly positively associated with age  $R = 0.01$  ( $p > 0.05$ ). weak negative dependence on the head circumference  $R = -0.06$  ( $p > 0.05$ ). weak positive dependence on the neck  $R = 0.07$  ( $p > 0.05$ ). weakly positive dependence on mass  $R = 0.08$  ( $p > 0.05$ ). weak negative dependence on the transverse cleft of the eye  $R = -0.1$  ( $p > 0.05$ ). the weak

positive bond to the vertical dimension is  $r = 0.03$  ( $p > 0.05$ )

**CONCLUSION:** the analysis of the studied scientific work showed that it was determined that very many features of the eye socket were studied, but the need to study its morphology remains relevant until now and dictates the conduct of scientific work.

## REFERENCES

1. Zagarovskaya T.M., Aleshkina A.Yu, Sirova O.V. - *Izmenchivost morfometricheskix characteristic glaznisi v zavisimosti horse vozrasta* I Pola 2013.
2. Gayvaronsky I.V., Dolzhenkova M.P., - *Prostanstvennaya organization vxoda v glaznisiu* 2012.
3. Barinav E.F., Dupine S.A., - *Kolichestvennaya anotomiya glaznisi* 2014
4. Nikolaenko V.P. *Orbitalnie perelomi: 2012.* - 436 P.
5. Shot V.V. *Vozrastnie I individualnie razlichiya V stroenii glaznisi po dannim morphometrii I luchevoy diagnostiki: Avtoref.* 2008.- Twenty-one.
6. Tsipyashuk A.F. *Morphology glaznichnix tsheley he vzroslix ludey pri razlichnix kraniotipax: Avtoref.* 2008.- Twenty-five.
7. Mikhailyukov V.M. *Bezramnaya navigasiya v hirirgiceskom lechenii posttravmaticheskix defektov I deformation glaznis: Avtoref.* 2014.- 24 s.
8. Sheremeta M.S. *Clinic-radiologicheskie vzaimootnosheniya pri endokrinnoy-oftalmopatii.* 2009. 53-57 P.
9. Абдулазизова Ш. и др. *Влияние физических факторов на морфофункциональные особенности вилочковой железы (обзор литературы) //Центральноазиатский журнал образования и инноваций. – 2023. – Т. 2. – №. 10. – С. 5-9.*
10. Ш Абдулазизова. *Особенности применения противовирусных препаратов при H1N1-ассоциированной пневмонии. Современные медицинские исследования, 23-24, 2017*
11. Isaqova, N.R. *Influence of constipation on anthropometric indicators of children. Science and Innovation, Volume 1, Issue 8, pp. 888-892, 2022.*
12. Tilyakhodzhaeva G.B. *Hirodothrapy as a Method of Treatment of Arterial Hypertension, Бюллетень науки и практики 8(6), 452-455, 2022.*



13. N.X. Fattaxov, A.R. Abdulkakimov, G.B.Tilyaxodjayeva. Effects of diet on hirudotherapy. New day in medicine. 181-183. 2021
14. Isakova N.R. The effect of constipation due to diseases of the colon on the anthropometric parameters of children. Asian journal of multidimensional research, Volume:10, Issue 5, pp. 666-669
15. IN Raxmatjonovna. Effects of colonic diseases on children's health. World bulletin of public health 23, 101-103, 2023
16. Y.Nishonov., A.Abdulhakimov., N.Madrahimova. Scientific bases of methods for studying anthropometry of the eye bowl. Science and Innovation, Volume 1, Issue 8, pp. 1001-1006, 2022.
17. 7-18 ёшли болаларнинг кўз косаси антропометриясини ўрганиш. Ю.Н.Нишонов., А.Р.Абдулхакимов., Н.Р.Мадрахимова. Scientifiac impulse 1(5), 910-913, 2022.
18. Palvanova M.S. Morphological changes in the bone tissue of the child's body in the age aspect. World Bulletin of Public Health, 94-96, 2023
19. P.T.Юсупова, О.Е. Шаланкова Репродуктивное здоровье девочек-подростков, проживающих в условиях Ферганской долины. Университетская наука: взгляд в будущее, 612-614, 2020
20. Palvanova M.S., Akhmatov B.K. Chronic myeloid leukemia epidemiology in the Fergana region over decade from 2010 until 2020. Science and innovation, Volume1, issue 8, pp. 1020-1025