

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Does Digit Ratio Varies In Individuals With Leo And Scorpio Signs.

**Yamini Nikitha M,<sup>1</sup> Kumar Sai Sailesh<sup>2\*</sup>, Gautami S Penumatsa<sup>3</sup>, Swathi Movva<sup>2</sup>, and Ravikanth Manyam<sup>4</sup>.**

<sup>1</sup>Second year BDS student, Vishnu Dental College, Bhimavaram, West Godavari District, Andhra Pradesh.

<sup>2</sup>Department of Physiology, Vishnu Dental College, Bhimavaram, West Godavari District, Andhra Pradesh.

<sup>3</sup>Department of Periodontics, Vishnu Dental College, Bhimavaram, West Godavari District, Andhra Pradesh.

<sup>4</sup>Department of Oral Pathology, Vishnu Dental College, Bhimavaram, West Godavari District, Andhra Pradesh

### ABSTRACT

The ratio of the digits that is index and which is considered as 2D and the ring finger which is considered as 4D is called 2D:4D ratio. The present study was undertaken to compare the digit ratio between the individuals with Leo and Scorpio signs. The ratio of the finger was measured using the verniercallipers. Data was analysed using SPSS 20.0. Student t test was applied to observe the significance of difference. P value less than 0.05 was considered as significant. There was no significant difference between the digit ratio among the individuals with LEO and Scorpio sign. We recommend further detailed studies to explore the effect of the sun sign on the digit ratio.

**Keywords:** Digit ratio, Scorpio, Leo.

\*Corresponding author

## INTRODUCTION

The ratio of the digits of different fingers is called digit ratio. Most commonly used ratio is 2D:4D. That is ratio of length of the second digit and the forth digit. This length is measured from the point where the fingers join the hands to the tip of the fingers (Mayhew TM et al., 2007). It was reported that the digit ratio is associated with the prenatal levels of hormones like testosterone and estrogen. Digit ratio was negatively associated with testosterone and positively correlated with the estrogen. It was reported that digit ratio is less in males when compared with females (Rebecca and Benson, 2006). Earlier studies reported correlation of the digit ratio with depression, anxiety and academic performance M.J. Brosnan et al., 2011; K.D. Smedley et al., 2014; C.E. Havarneanu et al., 2014). The present study was undertaken to observe the variation of the digit ratio varies in individuals with Leo and Scorpio signs.

## MATERIALS AND METHODS

**Study design:** Cross-sectional study

**Study participants:** 37 females within the age group of 18-24 were recruited for the research study. After obtaining the informed consent, the demographic data of the participants was obtained and then the measurements were performed. Unwilling participants were excluded from the study.

**2D:4D ratio:** Digit ratio was measured from the fingertip to the midpoint of the basal crease, on the ventral surface of the hand, using digital vernier calipers individually and the ratio of the two digits was measured (Bailey AA and Hurd PL., 2005).

**Ethical consideration:** The present study was approved by institutional research committee.

**Data analysis:** Data was analyzed using SPSS 20.0. Data was expressed and mean and SEM. Student t test was applied to observe the significance of difference. P value less than 0.05 was considered as significant.

## RESULTS

Results are presented in Table no 1. There is no significant difference in the demographic data among the individuals with Scorpio and Leo sign. The digit length (2D and 4D) are not significantly different among the individuals with Scorpio and Leo sign. Digit ratio (2D:4D) was not significantly different among the individuals with Scorpio and Leo sign.

**Table 1: Demographic data and digit ratio among Individuals with Scorpio and Leo signs**

	Scorpio (n=20)	Leo (n=17)	P value
Age (years)	19.3±0.16	19.24±0.24	0.8187
Height (cm)	164.45±1.81	164.88±1.49	0.8582
Weight (kg)	56.40±2.13	60.29±2.95	0.2827
2D (cm)	6.86±0.103	7.05±0.112	0.2127
4D (cm)	6.89±0.123	7.135±0.137	0.1913
2D:4D	0.9865±0.0117	0.9876±0.0072	0.9369

Data was presented as Mean and SEM. (\*P<0.05 is significant, \*\*P<0.01 is significant, \*\*\*P<0.001 is significant)

## DISCUSSION

The present study was undertaken to observe the variation of the digit ratio varies in individuals with Leo and Scorpio signs. There was no significant difference in the 2D:4D ratio between the individuals with Leo and Scorpio signs. The sun sign was reported to influence the personality and physical appearance of the person. It was hypothesized that the sun sign may have influence on the digit ratio. However, in the present study there was no difference in digit ratio among the individuals with Leo and Scorpio signs.

## CONCLUSION

There was no significant difference in the 2D:4D ratio between the individuals with Leo and Scorpio signs. The study emphasizes need of future studies in this area to understand the relationship between the sun sign and the digit ratio.

## REFERENCES

- [1] Mayhew TM, Gillam L, McDonald R, Ebling FJ (2007). Human 2D (index) and 4D (ring) digit lengths: their variation and relationships during the menstrual cycle. *Journal of Anatomy*. 211(5):pp.630–38.
- [2] Rebecca B, Benson PJ (2006). Digit ratio (2D: 4D) and the spatial representation of magnitude. *Hormones and Behavior*.50(2):pp.194–99.
- [3] M.J. Brosnan, V. Gallop, N. Iftikhar, E. Keogh (2011). Digit ratio (2D:4D), academic performance in computer science and computer – related anxiety *Personality Individ Differ*. 51: pp. 371-375
- [4] K.D. Smedley, K.J. McKain, D.N. McKain (2014). 2D:4D digit ratio predicts depression severity for females but not for males. *Personality Individ Differ*, 70 (2014), pp. 136-139
- [5] C.E. Havarneanu, A.R. Jilavu, G.M. Havarneanu (2014). Digit ratios as correlates of accident involvement and aggressive driving – a pilot study. *Procedia – Social BehavSci*, 127 (2014), pp. 575-580.
- [6] Bailey AA, Hurd PL (2005). Finger length ratio (2D: 4D) correlates with physical aggression in men but not in women. *Biological Psychology*. 68(3):215–22.
- [7] Rebecca (2018). How to Determine a Person's Astrological Sun Sign Using Physical & Personality Traits. <https://exemplore.com/astrology/Astrology-How-to-determine-a-sun-sign-by-physical-characteristics>( Accessed on 05-12-2018).