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| **Experiment 1 : designing an experiment**  **Student** : saif alawi\_1201821  **Assistant** : Ms. deema  **Doctor**: Mr.Abdallah  **Date : 28\_3\_2022/3\_4\_2022** |

Abstract

The aim of this experiment is to gather data in order to compare the proportions of height with specified body parts of infants to the same proportions of students (ourselves). The data for neonates are shown in Table 1.1 to see if the selected body parts grow at a different rate from the typical growth rate. Choose one human body part in connection to height, and based on the results, form a hypothesis regarding two body parts that are compared to each other's total height.

Introduction

The state of a creature depends to a limited extent on the general development paces of various body parts during advancement. The terms allometry and allometrie growth are utilized while depicting changing relative paces of development. In particular, heterogeneity is the peculiarity by what portions of a creature develop at various rates. This can be seen in people, and is an outline of differential development rates. Note this figure, in which the infant and grown-up are scaled to a similar stature, that the head is bigger with respect to the length of the body in the infant then in the grown-up. Differential growth diverges from isometric growth when two sections develop at a similar rate. This happens when the extents between body parts stay consistent as the organic entity develops. For instance, on the off chance that the arms and legs of an individual develop isometrically, their lengths will be like the body of an infant as in a grown-up.

Materials

Meter sticks

Short metric rulers (30cm)

Metric measuring tapes or cotton string

Calculator

Hypothesis

are average infant ratios larger as compared to body size and adult ratio size ?

Conclusion

We have compared the lengths of some parts of the body with the length of the body and the standard deveiation and ratio of baby and adult. We discovered that the bulk of the sections (Length/height, Head circumference, Upper limb, Hand length, Lower limb, Crown-rump length, Foot length) grow allometrically, however the Span grows largely isometrically. We also found out that the

Humans are generally similar in size in different regions.