

## **Somatic size and maturity around menarcheal age.**

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**PURPOSE:** This report aims at presenting a relationship of sexual maturation to physical growth and maturation from the longitudinal growth data.

**METHODS:** The participants consisted of 36 girls. Items analyzed were absolute and percent mature sizes of stature (S), leg length (LL), sitting height (SH), arm length (AL), biacromial diameter (BA), biiliocrystal diameter (BC), weight (W) at three phases: 2 years before and after menarche and at menarche. Factor analysis was applied to the data.

**RESULTS:** 1) The size data was expressed by the two factors consisted of {S, SH, LL, AL} and {BA, BC, W} through all 3 stages. 2) The maturity data was sorted into 2 factors of {S, SH, LL, AL, W}, {BA, BC} at premenarcheal phase; into 2 factors of {S, SH, LL, AL}, {BA, BC, W} at menarcheal phase; and into 3 factors of {S, LL, BA, BC}, {SH, W} and {AL} at postmenarcheal phase.

**CONCLUSION:** This study suggested that sexual maturation has a different influence on the somatic maturation through pre- and postmenarcheal phases. As expected from an earlier study, though characteristic factor of biiliocrystal diameter factor representing sexual maturation was not detected.