

CHAPTER VI

CONCLUSION

This study was made on sixty non-orthodontically treated northern Thai adults with normal occlusion. The sample group was consisted of 30 males and 30 females. The seven common cephalometric variables (SNA, SNB, SNPog, N angle, SN-MP, SN-OP and NSGn) were evaluated from lateral cephalograms and the crown inclination of each tooth were evaluated from impression models. The following conclusions were :

1. The only ANB angle was significant differences between sexes.
2. Crown inclination had no sex influence.
3. The means of the crown inclination of each tooth were described as the follows.

3.1 The means of the crown inclination in maxillary arch of central incisor, lateral incisor, canine, first premolar, second premolar, first molar and second molar were 7.90, 6.56, -5.74, -8.26, -8.82, -10.64 and -10.23 degrees respectively. The crown inclination of upper posterior teeth showed continuous lingual crown torque characteristic.

3.2 The means of the crown inclination in mandibular arch of central incisor, lateral incisor, canine, first premolar, second premolar, first molar and second molar were 5.02, 3.29, -4.07, -13.38, -18.27, -23.91 and -32.85 degrees respectively. The crown inclination of lower posterior teeth showed progressive lingual crown torque characteristic.

4. The Pearson correlation coefficient was used to quantify the linear relationship between the crown inclination and the seven cephalometric variables. The equations showed the crown inclination of lower central incisor (IL1) and lower lateral incisor (IL2) in both sexes could be predicted by the only ANB angle.

Predictable equations of the crown inclination of lower central and lateral incisor of males were as follows.

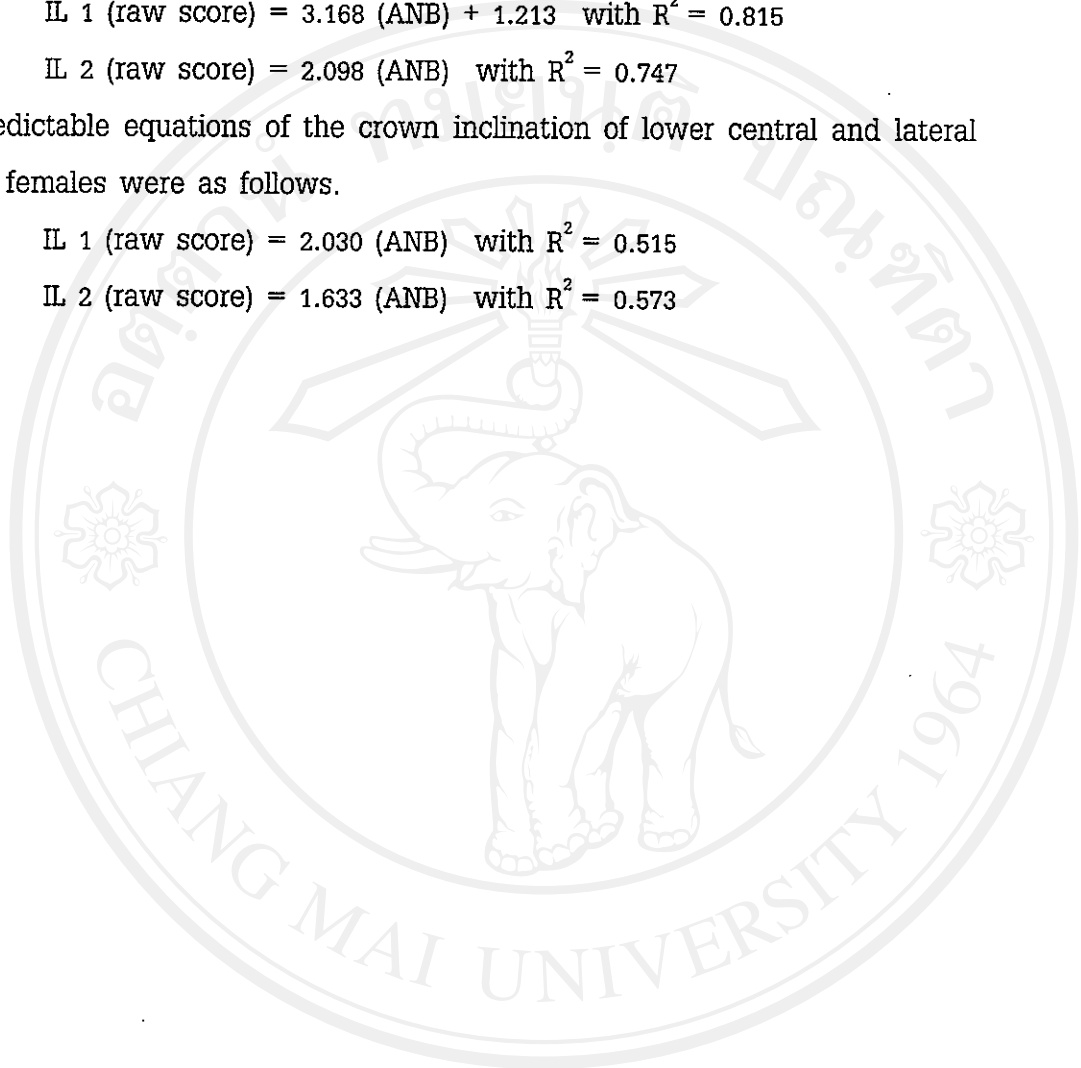
$$IL\ 1\ (\text{raw score}) = 3.168\ (\text{ANB}) + 1.213\ \text{with } R^2 = 0.815$$

$$IL\ 2\ (\text{raw score}) = 2.098\ (\text{ANB})\ \text{with } R^2 = 0.747$$

Predictable equations of the crown inclination of lower central and lateral incisor of females were as follows.

$$IL\ 1\ (\text{raw score}) = 2.030\ (\text{ANB})\ \text{with } R^2 = 0.515$$

$$IL\ 2\ (\text{raw score}) = 1.633\ (\text{ANB})\ \text{with } R^2 = 0.573$$



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved