



เอกสารอ้างอิง

1. ไพฑูรย์ จินดาโรจนกุล. "การวิเคราะห์ภาพถ่ายรังสีด้านข้างของกะโหลกศีรษะด้วยรังสีเอกซ์ในเด็กไทย อายุ 8 - 16 ปี โดยใช้เกณฑ์ของริกเกตส์." วิทยานิพนธ์เพื่อปริญญาทันตแพทยศาสตรมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2525.
2. Christie, T.E. "Cephalometric Pattern of Adult with Normal Occlusion." Angle Orthod. 47 (1977) : 128 - 135.
3. Fishman, L.S. "A Longitudinal Cephalometric Study of the Normal Cranio-facial Profile Utilizing a Proportional Analysis of Skeletal, Soft Tissue and Dental Structure." Int. Dent. J. 19 (1969) : 351 - 379.
4. Krogman, W.M. and Sassouni, V. "Syllabus in Roentgenographic Cephalometry." Philadelphia Center for Research in Child Growth (1957).
5. รักพร เหล่าสุทธิวงษ์. "การคาดคะเนการเจริญเติบโตของใบหน้าจากความสูง." วิทยานิพนธ์เพื่อปริญญาทันตแพทยศาสตรมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2524.
6. Frish, R.E. and Revelle, R. "The Height and Weight of Girls and Boys at the Time of Initiation of the Adolescent Growth Spurt in Height and Weight and the Relationship to Menarche." Human Bio. 43 (1971) : 140 - 159.
7. Shuttleworth, F.K. "The Adolescent Period : A Graphic Atlas." Monograph of the Society for Research in Child Development 1949.
8. Björk, A. and Helm, S. "Prediction of the Age of Maximum Pubertal Growth in Boy Height." Am. J. Orthod. 31 (1967) : 134 - 143.

9. Sinclair, D. "Human Growth after Birth." London : Oxford University Press. 1969.
10. Downs, W.B. "Analysis of the Dentofacial Profile." Angle Orthod. 26 (1956) : 191 - 212.
11. Petraitis, B.J. "A Cephalometric Study of Excellent Occlusion and Malocclusion of Children and Adult." Master of Science Thesis, University of Washington. 1951.
12. Baird, F.P. "A Cephalometric Evaluation of the Skeletal and Dental Pattern of Seven to Nine Year Old Children with Excellent Occlusion." Master of Science Thesis, University of Washington, 1952.
13. Barnes, J.Q. "A Serial Cephalometric Study of Children with Excellent Occlusion Using Angular and Linear Measurements." Master of Science Thesis, University of Washington, 1954.
14. Baum, A.T. "Age and Sex Difference in Dentofacial Change Following Orthodontic Treatment." Am. J. Orthod. 47 (1964) : 335.
15. สมศักดิ์ เจริญประชากร. "การศึกษาค่ามุมไบหน้าเด็กไทย อายุ 11 - 16 ปี ด้วยภาพถ่ายด้านข้างของกะโหลกศีรษะโดยรังสีเอกซ์." วิทยานิพนธ์เพื่อปริญญาทันตแพทยศาสตรมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย 2524.
16. Schudy, F.F. "Vertical Growth Versus Anteroposterior Growth as Related to Function and Treatment." Angle Orthod. 34 (1964) : 75.
17. Isaacson, R.J., Speidel, F.M. and Worms, F.W. "Extreme Variation in Vertical Facial Growth and Associated Variation in Skeletal and Dental Relations." Angle Orthod. 44 (1971) : 219 - 229.

18. Bishara, S.E., Augspurger, E.F. "The Role of Mandibular Plane Inclination in Orthodontic Diagnosis." Angle Orthod. 45 (1975) : 273 - 281.
19. Beaton, W.D. and Cleall, J.F. "Cinefluorographic and Cephalometric Study of Class I Acceptable Occlusion." Am. J. Orthod. 64 (1973) : 469 - 479.
20. สมรศรี วิสิทธิ์. "บทบาทความลาดเอียงของระนาบขากรรไกรต่อการวินิจฉัยทางทันตกรรมจัดฟันในชาวไทย." วิทยานิพนธ์เพื่อปริญญาทันตแพทยศาสตรมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2525.
21. Tweed, C.H. "Frankfort Horizontal - Mandibular Incisor Angle (FMIA) in Orthodontic Diagnosis, Treatment Planning and Prognosis." Angle Orthod. 24 (1954) : 121.
22. Johnson, E.L. "The Frankfort Mandibular Plane Angle and the Facial Pattern." Am. J. Orthod. 36 (1950) : 516 - 533.
23. Hapak, F.M. "Cephalometric Appraisal of the Open Bite Case." Angle Orthod. 34 (1964) : 65 - 72.
24. Wylie, W.L. "The Relationship Between Ramus Height, Dental Height and Overbite." Am J. Orthod. 32 (1946) : 57.
25. Björk, A. "The Face in Profile." Berlinska Bok Tryckeriet, Lund 1947.
26. Schudy, F.F. "Cant of the Occlusal Plane and Axial Inclination of the Teeth." Angle Orthod. 33 (1963) : 69.
27. Ludwig, M. "Analysis of Anterior Overbite Relationship Changes During and Following Orthodontic Treatment." Angle Orthod. 36 (1966) : 204.
28. _____ . "Cephalometric Analysis of the Relationship Between Facial Pattern, Interincisal Angulation and Anterior Overbite Changes." Angle Orthod. 37 (1967) : 194 - 204.

29. Linder-Aronson, S. "Effect of Adenoidectomy on the Dentition and Facial Skeleton over a Period of Five Years." Transaction of the Third International Orthodontic Congress, Cosby Lockwood Staples, Long 1975 : 85 - 100.
30. Parlow, R.J. "A Radiographic Cephalometric Appraisal of the Proportional Relationship of the Molar and Incisor Heights in Hypodivergent, Hyperdivergent and Normal Patients." Am. J. Orthod. 64 (1972) : 399 - 10.
31. Lundström, A. and Woodside D.G. "Individual Variation in Growth Direction Express at the Chin and the Midface." European Journal of Orthodontics. 2 (1980) 65 - 79.
32. _____. "A Comparison of Various Facial and Occlusal Characteristics in Mature Individuals with Vertical and Horizontal Growth Direction Expressed at the Chin." European Journal of Orthodontics. 3 (1981) : 227 - 235.
33. Isaacson, R.J., Zapfel, R.J., Worms, F.W., Bevis, R.R., Speidel, T.M. "Some Effects of Mandibular Growth on the Dental Occlusion and Profile." Angle Orthod. 47 (1977) : 97 - 106.
34. Ricketts, R.M. "Introducing Computerized Cephalometrics." Rocky Mt. Data System Inc., March, 1969.
35. _____. "An Overview of Computerized Cephalometrics." Am. J. Orthod. 61 (1972) : 1 - 28.
36. Ricketts, R.M., Roth, R.H., Chaconas, S.J., Schulhof, R.J., Engel, G.A. Orthodontic Diagnosis and Planning Printed by Rocky Mountain Orthodontics 1983.

37. Ricketts, R.M. "A Foundation for Cephalometric Communication."
Am. J. Orthod. 46 (1960) : 330 - 357.
38. _____ . "New Perspective on Orientation and Their Benefits
to Clinical Orthodontics - Part. I." Angle Orthod.
45 (1975) : 238 - 248.
39. Ricketts, R.M., Bench, R.W., Gugino, C.F., Hilgers, J.M., Schulhof,
R.J. Bioprogressive Therapy Published and Distributed by
Rocky Mountain/Orthodontics.



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก

ANALYSIS OF VARIANCE TABLE (MALES)

1. INCISOR OVERJET

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	0.2040	0.1020	0.114	0.8924
WITHIN GROUPS	247	221.3110	0.8960		
TOTAL	249	221.5150			

** P = .01

2. INCISOR OVERBITE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	7.0076	3.5038	2.922	0.0557
WITHIN GROUPS	247	296.2318	1.1993		
TOTAL	249	303.2393			

** P = .01

3. LOWER INCISOR EXTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1.0882	0.5441	0.548	0.5788
WITHIN GROUPS	247	245.2595	0.9930		
TOTAL	249	246.3477			

** P = .01

4. INTERINCISAL ANGLE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	429.9089	214.9544	3.366	0.0361
WITHIN GROUPS	247	15773.8577	63.8618		
TOTAL	249	16203.7656			

** P = .01

5. CONVEXITY

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	365.7042	182.8521	25.569	0.0000
WITHIN GROUPS	247	1766.3983	7.1514		
TOTAL	249	2132.1023			

** P = .01

6. LOWER FACE HEIGHT

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	2356.4857	1178.2427	135.266	0.0
WITHIN GROUPS	247	2151.5144	8.7106		
TOTAL	249	4508.0000			

** P = .01

/ANOVA Males

7. UPPER MOLAR POSITION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	165.7357	82.8679	7.218	0.0009
WITHIN GROUPS	247	2835.6880	11.4805		
TOTAL	249	3001.4236			

** P = .01

8. MANDIBULAR INCISOR PROTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	251.0932	125.5466	25.332	0.0000
WITHIN GROUPS	247	1224.1599	4.9561		
TOTAL	249	1475.2529			

** P = .01

9. MAXILLARY INCISOR PROTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	261.2813	130.6406	25.867	0.0000
WITHIN GROUPS	247	1247.4778	5.0505		
TOTAL	249	1508.7590			

** P = .01

/ANOVA Males

10. MANDIBULAR INCISOR INCLINATION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	16.5846	8.2923	0.422	0.6565
WITHIN GROUPS	247	4857.9246	19.6677		
TOTAL	249	4874.5078			

** P = .01

11. MAXILLARY INCISOR INCLINATION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	583.7296	291.8647	12.848	0.0000
WITHIN GROUPS	247	5610.9319	22.7163		
TOTAL	249	6194.6602			

** P = .01

12. OCCLUSAL PLANE TO RAMUS

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	2.3779	1.1889	0.136	0.8732
WITHIN GROUPS	247	2165.3708	8.7667		
TOTAL	249	2167.7485			

** P = .01

13. OCCLUSAL PLANE INCLINATION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1011.4221	505.7109	45.520	0.0000
WITHIN GROUPS	247	2744.0911	11.1097		
TOTAL	249	3755.5129			

** P = .01

14. LIP PROTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	281.4804	140.7402	26.523	0.0000
WITHIN GROUPS	247	1310.6640	5.3063		
TOTAL	249	1592.1443			

** P = .01

15. UPPER LIP LENGTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	66.4165	33.3082	4.659	0.0103
WITHIN GROUPS	247	1760.4270	7.1272		
TOTAL	249	1826.8433			

** P = .01

16. LIP EMBRASSURE - OCCLUSAL PLANE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	122.2740	61.1370	20.474	0.0000
WITHIN GROUPS	247	737.5711	2.9861		
TOTAL	249	859.8450			

** P = .01

17. FACIAL DEPTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	973.5084	486.7542	78.451	0.0000
WITHIN GROUPS	247	1532.5304	6.2046		
TOTAL	249	2506.0386			

** P = .01

18. FACIAL AXIS

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	2089.8429	1044.9214	122.305	0.0000
WITHIN GROUPS	247	2110.2546	8.5435		
TOTAL	249	4200.0938			

** P = .01

19. FACIAL TAPER

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1727.9280	863.9639	71.198	0.0000
WITHIN GROUPS	247	2997.2590	12.1347		
TOTAL	249	4725.1836			

** P = .01

20. MAXILLARY DEPTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	204.6799	102.3399	12.288	0.0000
WITHIN GROUPS	247	2057.1184	8.3284		
TOTAL	249	2261.7981			

** P = .01

21. MAXILLARY HEIGHT

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	437.9975	218.9987	23.649	0.0000
WITHIN GROUPS	247	2287.2988	9.2603		
TOTAL	249	2725.2961			

** P = .01

22. PALATAL PLANE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	144.2274	72.1137	8.175	0.0004
WITHIN GROUPS	247	2178.8538	8.8213		
TOTAL	249	2323.0811			

** P = .01

23. MANDIBULAR PLANE ANGLE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	6018.0195	3009.0095	197.588	0.0
WITHIN GROUPS	247	3761.4959	15.2287		
TOTAL	249	9779.5117			

** P = .01

24. CRANIAL DEFLECTION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	9.2487	4.6244	0.814	0.4443
WITHIN GROUPS	247	1403.5314	5.6823		
TOTAL	249	1412.7800			

** P = .01

/ANOVA Males

25. CRANIAL LENGTH ANTERIOR

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	25.3722	12.6861	1.471	0.2318
WITHIN GROUPS	247	2130.7368	8.6265		
TOTAL	249	2156.1089			

** P = .01

26. POSTERIOR FACIAL HEIGHT

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1128.7057	564.3528	16.549	0.0000
WITHIN GROUPS	247	8423.2297	34.1021		
TOTAL	249	9551.9336			

** P = .01

27. RAMUS POSITION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	92.2034	46.1017	5.524	0.0045
WITHIN GROUPS	247	2061.3967	8.3457		
TOTAL	249	2153.5999			

** P = .01

28. PORION LOCATION (TMJ)

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	2	15.5498	7.7749	0.919	0.4003
WITHIN GROUPS	247	2089.6785	8.4602		
TOTAL	249	2105.2280			

** P = .01

29. MANDIBULAR ARC

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	2	3184.8494	1592.4246	44.496	0.0000
WITHIN GROUPS	247	8839.6328	35.7880		
TOTAL	249	12924.4805			

** P = .01

30. CORPUS LENGTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	2	60.0993	30.0496	2.330	0.0994
WITHIN GROUPS	247	3185.1589	12.8954		
TOTAL	249	3245.2581			

** P = .01

/ANOVA Males

ANALYSIS OF VARIANCE TABLE (FEMALES)

1. INCISOR OVERJET

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	3.3852	1.6926	2.396	0.0932
WITHIN GROUPS	247	274.4981	0.7065		
TOTAL	249	177.8833			

** P = .01

2. INCISOR OVERBITE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	25.2004	12.6002	12.023	0.0000
WITHIN GROUPS	247	258.8541	1.0480		
TOTAL	249	284.0544			

** P = .01

3. LOWER INCISOR EXTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	14.8011	7.4006	7.650	0.0006
WITHIN GROUPS	247	238.9583	0.9674		
TOTAL	249	253.7594			

** P = .01

4. INTERINCISAL ANGLE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1587.3838	793.6917	11.738	0.0000
WITHIN GROUPS	247	16701.8047	67.6186		
TOTAL	249	18289.1875			

** P = .01

5. CONVEXITY

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	253.6544	126.8272	23.564	0.0000
WITHIN GROUPS	247	1329.4124	5.3822		
TOTAL	249	1583.0667			

** P = .01

6. LOWER FACE HEIGHT

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	2121.0982	1060.5491	135.167	0.0
WITHIN GROUPS	247	1938.0208	7.8462		
TOTAL	249	4059.1189			

** P = .01

/ANOVA Females

7. UPPER MOLAR POSITION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	266.8949	133.4475	17.895	0.0000
WITHIN GROUPS	247	1841.9841	7.4574		
TOTAL	249	2108.8789			

** P = .01

8. MANDIBULAR INCISOR PROTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	253.1459	126.5730	32.568	0.0000
WITHIN GROUPS	247	959.9487	3.8864		
TOTAL	249	1213.0945			

** P = .01

9. MAXILLARY INCISOR PROTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	230.6250	115.3125	28.099	0.0000
WITHIN GROUPS	247	1013.6233	4.1037		
TOTAL	249	1244.2483			

** P = .01

/ANOVA Females

10. MAXILLARY INCISOR INCLINATION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	253.8322	126.9161	6.512	0.0018
WITHIN GROUPS	247	4813.7947	19.4890		
TOTAL	249	5067.6250			

** P = .01

11. MAXILLARY INCISOR INCLINATION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	612.3467	306.1731	12.390	0.0000
WITHIN GROUPS	247	6103.6584	24.7112		
TOTAL	249	6716.0039			

** P = .01

12. OCCLUSAL PLANE TO RAMUS

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	61.6384	30.8192	4.138	0.0171
WITHIN GROUPS	247	1839.6873	7.4481		
TOTAL	249	1901.3254			

** P = .01

/ANOVA Females

13. OCCLUSAL PLANE INCLINATION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	884.5463	442.2729	66.093	0.0000
WITHIN GROUPS	247	1652.8398	6.6917		
TOTAL	249	2537.3860			

** P = .01

14. LIP PROTRUSION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	159.6598	79.8299	16.963	0.0000
WITHIN GROUPS	247	1162.4081	4.7061		
TOTAL	249	1322.0676			

** P = .01

15. UPPER LIP LENGTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	197.2995	98.6497	21.151	0.0000
WITHIN GROUPS	247	1152.0118	4.6640		
TOTAL	249	1349.3113			

** P = .01

/ANOVA Females



16. LIP EMBRASSURE - OCCLUSAL PLANE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	29.1655	14.5827	5.676	0.0039
WITHIN GROUPS	247	634.5468	2.5690		
TOTAL	249	663.7122			

** P = .01

17. FACIAL DEPTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	978.3416	489.1707	98.354	0.0000
WITHIN GROUPS	247	1228.4722	4.9736		
TOTAL	249	2206.8137			

** P = .01

18. FACIAL AXIS

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	2383.4505	1191.7251	160.939	0.0
WITHIN GROUPS	247	1828.9926	7.4048		
TOTAL	249	4212.4414			

** P = .01

/ANOVA Females

19. FACIAL TAPER

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1056.6080	528.3040	52.252	0.0000
WITHIN GROUPS	247	2497.3528	10.1107		
TOTAL	249	3553.9607			

** P = .01

20. MAXILLARY DEPTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	284.6707	142.3354	19.843	0.0000
WITHIN GROUPS	247	1771.7781	7.1732		
TOTAL	249	2056.4487			

** P = .01

21. MAXILLARY HEIGHT

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	468.8879	234.4439	25.000	0.0000
WITHIN GROUPS	247	2316.3450	9.3779		
TOTAL	249	2785.2327			

** P = .01

/ANOVA Females

22. PALATAL PLANE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	70.7732	35.3866	3.671	0.0268
WITHIN GROUPS	247	2380.6743	9.6384		
TOTAL	249	2451.4473			

** P = .01

23. MANDIBULAR PLANE ANGLE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	4778.3293	2389.1646	138.734	0.0
WITHIN GROUPS	247	4253.6372	17.2212		
TOTAL	249	9031.9648			

** P = .01

24. CRANIAL DEFLECTION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	28.1699	14.0850	2.671	0.0712
WITHIN GROUPS	247	1302.4774	5.2732		
TOTAL	249	1330.6472			

** P = .01

/ANOVA Females

25. CRANIAL LENGTH ANTERIOR

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	7.4008	3.7004	0.625	0.5362
WITHIN GROUPS	247	1462.9407	5.9228		
TOTAL	249	1470.3413			

** P = .01

26. POSTERIOR FACIAL HEIGHT

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	398.4361	199.2180	8.834	0.0002
WITHIN GROUPS	247	5570.1970	22.5514		
TOTAL	249	5968.6328			

** P = .01

27. RAMUS POSITION

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	168.7066	84.3533	10.860	0.0000
WITHIN GROUPS	247	1918.5754	7.7675		
TOTAL	249	2087.2820			

** P = .01

/ANOVA Females

28. PORION LOCATION (TMJ)

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	39.6076	19.8038	3.850	0.0226
WITHIN GROUPS	247	1270.4362	5.1435		
TOTAL	249	1310.0437			

** P = .01

29. MANDIBULAR ARC

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	1641.6846	820.8423	49.625	0.0000
WITHIN GROUPS	247	4085.6230	16.541q		
TOTAL	249	5727.3047			

** P = .01

30. CORPUS LENGTH

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.**
BETWEEN GROUPS	2	93.2404	46.6202	4.283	0.0148
WITHIN GROUPS	247	2688.4490	10.8844		
TOTAL	249	2761.6892			

** P = .01

/ANOVA Females



ประวัติผู้เขียน

นางสาว ศศิธร สุธนรักษ์ เกิดวันที่ 21 พฤศจิกายน 2499 ที่กรุงเทพมหานคร .
จบการศึกษาปริญญาทันตแพทยศาสตรบัณฑิต จากจุฬาลงกรณ์มหาวิทยาลัย เมื่อปีการศึกษา 2523
เข้าทำงาน เป็นทันตแพทย์ฝึกหัดที่คณะทันตแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย 1 ปี หลังจากนั้น
จึง เข้ามาศึกษาต่อในระดับบัณฑิตศึกษา สาขาวิชาทันตกรรมจัดฟัน ของบัณฑิตวิทยาลัย จุฬาลงกรณ์
มหาวิทยาลัย เมื่อปีการศึกษา 2525



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย