



เอกสารอ้างอิง

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ภาคผนวก ก

ANALYSIS OF VARIANCE TABLE

1. S-N-A

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	488.3940	162.7980	10.294	0.0000
WITHIN GROUPS	396	6262.9414	15.8155		
TOTAL	399	6751.3320			

** P = .01

2. S-N-B

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	1098.3279	366.1091	25.725	0.0000
WITHIN GROUPS	396	5635.6501	14.2314		
TOTAL	399	6733.9766			

** P = .01

3. A-N-B

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	117.1963	39.0654	7.231	0.0001
WITHIN GROUPS	396	2139.4895	5.4028		
TOTAL	399	2256.6858			

** P = .01

4. N-A-Pog

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	581.6796	193.8932	7.799	0.0000
WITHIN GROUPS	396	9845.1348	24.8615		
TOTAL	399	10426.8125			

** P = .01

5 S-N-Pog

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	1290.4723	430.1572	30.084	0.0000
WITHIN GROUPS	396	5662.2778	14.2987		
TOTAL	399	6952.7500			

** P = .01

6. N-S-Gn

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	1524.0590	508.0195	42.701	0.0000
WITHIN GROUPS	396	4711.2774	11.8972		
TOTAL	399	6235.3359			

** P = .01

7. N-S-Ba

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	386.3698	128.7899	4.917	0.0023
WITHIN GROUPS	396	10372.8799	26.1941		
TOTAL	399	10759.2461			

** P = .01

8. Ar-Go-Me

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	3220.5898	1073.5298	30.147	0.0000
WITHIN GROUPS	396	14101.5823	35.6100		
TOTAL	399	17322.1719			

** P = .01

9. MP-SN

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	5684.1153	1894.7051	80.150	0.0000
WITHIN GROUPS	396	9361.2823	23.6396		
TOTAL	399	15045.3945			

** P = .01

10. PP-SN

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN CROUPS	3	239.8564	79.9521	8.435	0.0000
WITHIN GROUPS	396	3753.6175	9.4788		
TOTAL	399	3993.4739			

** P = .01

11. PP-MP

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	3439.0886	1146.3628	45.428	0.0000
WITHIN GROUPS	396	9992.9622	25.2347		
TOTAL	399	13432.0469			

** P = .01

12. $\bar{1}$ to MP

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	878.4308	292.8101	4.715	0.0030
WITHIN GROUPS	396	24594.4380	62.1072		
TOTAL	399	25472.8672			

** P = .01

13. $\underline{1}$ to SN

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	926.1579	308.7192	6.037	0.0005
WITHIN GROUPS	396	20250.6509	51.1380		
TOTAL	399	21176.8086			

** P = .01

14. $\underline{1}$ to $\bar{1}$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	346.7852	115.5950	1.068	0.3627
WITHIN GROUPS	396	42878.2739	108.2785		
TOTAL	399	43225.0586			

** P = .01

15. OP-SN

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	1354.0827	451.3608	23.469	0.0000
WITHIN GROUPS	396	7615.8660	19.2320		
TOTAL	399	8969.9453			

** P = .01

16. OP-MP

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	1962.7720	654.2573	34.233	0.0000
WITHIN GROUPS	396	7568.3774	19.1121		
TOTAL	399	9531.1484			

** P = .01

17. N-ANS'

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	63.3206	21.1068	2.468	0.0617
WITHIN GROUPS	396	3387.3484	8.5539		
TOTAL	399	3450.6689			

** P = .01

18. ANS¹-Me

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	888.1969	296.0654	12.467	0.0000
WITHIN GROUPS	396	9404.1531	23.7478		
TOTAL	399	10292.3477			

** P = .01

19. N-Me

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	1423.7475	474.5823	14.568	0.0000
WITHIN GROUPS	396	12900.7231	32.5776		
TOTAL	399	14324.4688			

** P = .01

20. S-Go

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	2695.2959	898.4319	27.779	0.0000
WITHIN GROUPS	396	12807.3579	32.3418		
TOTAL	399	15502.6523			

** P = .01

$$21. \frac{N \cdot \text{ANS}'}{N - \text{Me}} \times 100$$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	46.1343	15.3781	3.678	0.0123
WITHIN GROUPS	396	1655.5088	4.1806		
TOTAL	399	1701.6428			

** P = .01

$$22. \frac{\text{ANS}' - \text{Me}}{N - \text{Me}} \times 100$$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	46.2537	15.4179	3.305	0.0203
WITHIN GROUPS	396	1847.3562	4.6650		
TOTAL	399	1893.6099			

** P = .01

$$23. \frac{S - \text{Go}}{N - \text{Me}} \times 100$$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	3516.8031	1172.2676	69.336	0.0000
WITHIN GROUPS	396	6695.0013	16.9066		
TOTAL	399	10211.8008			

* P = .01

24. S-N

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	9.9369	3.3123	0.321	0.8102
WITHIN GROUPS	396	4085.9656	10.3181		
TOTAL	399	4095.9023			

** P = .01

25. S-Ba

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	92.2361	30.7454	2.876	0.0360
WITHIN GROUPS	396	4233.1486	10.6898		
TOTAL	399	4325.3828			

** P = .01

26. N-Ba

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	4.4033	1.4678	0.075	0.9732
WITHIN GROUPS	396	7715.1677	19.4827		
TOTAL	399	7719.5703			

** P = .01

$$27. \frac{S-N}{N-Ba} \times 100$$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	3.5855	1.1952	0.218	0.8841
WITHIN GROUPS	396	2174.0358	5.4900		
TOTAL	399	2177.6211			

** P = .01

$$28. \frac{S-Ba}{N-Ba} \times 100$$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	64.0868	21.3623	3.423	0.0173
WITHIN GROUPS	396	2471.5502	6.2413		
TOTAL	399	2535.6370			

** P = .01

$$29. \text{ANS-PNS}$$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	88.2026	29.4009	4.522	0.0039
WITHIN GROUPS	396	2574.7359	6.5019		
TOTAL	399	2662.9385			

** P = .01

30. Pog-Postp

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	138.3080	46.1027	2.039	0.1079
WITHIN GROUPS	396	8953.3408	22.6094		
TOTAL	399	9091.6484			

** P = .01

31. $\frac{ANS-PNS}{Pog-Postp} \times 100$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	14.1496	4.7165	0.367	0.7769
WITHIN GROUPS	396	5090.7092	12.8553		
TOTAL	399	5104.8555			

** P = .01

32. $\frac{S-N}{N-Me} \times 100$

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	338.9856	112.9952	12.339	0.0000
WITHIN GROUPS	396	3626.5211	9.1579		
TOTAL	399	3965.5066			

** P = .01

33. R Angle

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	94.2105	31.4035	4.822	0.0026
WITHIN GROUPS	396	2579.1124	6.5129		
TOTAL	399	2673.3228			

** P = .01

34. H Angle

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	400.2715	133.4238	6.235	0.0004
WITHIN GROUPS	396	8474.3049	21.3997		
TOTAL	399	8874.5742			

** P = .01

35. Lower Lip to E plane

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB. **
BETWEEN GROUPS	3	108.9853	36.3284	4.769	0.0028
WITHIN GROUPS	396	3016.8609	7.6183		
TOTAL	399	3125.8459			

** P = .01



ประวัติผู้เขียน

นางสาว สมรตรี วิถีพร เกิดเมื่อวันที่ 14 มิถุนายน 2495 ที่กรุงเทพมหานคร
สำเร็จการศึกษาทันตแพทยศาสตรบัณฑิต เกียรตินิยมอันดับ 2 จากคณะทันตแพทยศาสตร์
จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2518 เข้าศึกษาต่อในสาขาวิชาทันตกรรมจัดฟัน ภาค
วิชาทันตกรรมจัดฟัน บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2523