

APPENDIX B

ANOVA RESULTS (TRIP SET SECOND FACTOR)

This appendix contains the results obtained from the analysis of variance described in chapter three using “set” as the second factor.

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The SAS System          09:20 Friday, March 13, 1998 590
                        General Linear Models Procedure
                        Class Level Information

Class   Levels   Values
ICCENBL 2       0 1
SET1    60      2 5 8 14 15 16 19 20 21 27 28 29 32 34 36 39 46 52 72 74 82 84 95 99 101
                102 103 104 114 115 124 127 128 157 162 165 217 219 226 227 243 244 260
                265 278 293 302 303 304 315 318 338 362 374 382 392 394 395 398 413
                Number of observations in data set = 120

Dependent Variable: MDIST
Source          DF          Sum of Squares      Mean Square  F Value  Pr > F
Model          60          106712.49622792    1778.54160380  351.17  0.0001
Error          59          298.81234482      5.06461601
Corrected Total 119          107011.30857274

                R-Square          C.V.          Root MSE          MDIST Mean
                0.997208          6.508568      2.25047018        34.57704101

Source          DF          Type III SS      Mean Square  F Value  Pr > F
ICCENBL         1          0.05412006      0.05412006   0.01    0.9180
SET1            59          106712.44210786  1808.68545946  357.12  0.0001

Dependent Variable: MRDIST
Source          DF          Sum of Squares      Mean Square  F Value  Pr > F
Model          60          574142.58366709    9569.04306112  69.19  0.0001
Error          59          8159.45270336     138.29580853
Corrected Total 119          582302.03637045

                R-Square          C.V.          Root MSE          MRDIST Mean
                0.985988          8.315220     11.75992383       141.42649802

Source          DF          Type III SS      Mean Square  F Value  Pr > F
ICCENBL         1          71.28189627      71.28189627   0.52    0.4756
SET1            59          574071.30177082  9730.02206391  70.36   0.0001

Dependent Variable: MENGAGE
Source          DF          Sum of Squares      Mean Square  F Value  Pr > F
Model          60          4.09653002         0.06827550    4.64    0.0001
Error          59          0.86796535        0.01471128
Corrected Total 119          4.96449536

                R-Square          C.V.          Root MSE          MENGAGE Mean
                0.825165          26.59142     0.12129005        0.45612474

Source          DF          Type III SS      Mean Square  F Value  Pr > F
ICCENBL         1          0.31826673        0.31826673    21.63   0.0001
SET1            59          3.77826329        0.06403836    4.35    0.0001
    
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Dependent Variable: MICCONP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	3960239.70421668	66003.99507028	0.95	0.5815
Error	59	4107636.08454069	69620.95058544		
Corrected Total	119	8067875.78875737			
	R-Square	C.V.	Root MSE	MICCONP Mean	
	0.490865	447.0190	263.85782267	59.02608153	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	5352.00188426	5352.00188426	0.08	0.7825
SET1	59	3954887.70233242	67031.99495479	0.96	0.5576

Dependent Variable: MRICCONP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	565214.86419747	9420.24773662	7.14	0.0001
Error	59	77878.75561797	1319.97890878		
Corrected Total	119	643093.61981544			
	R-Square	C.V.	Root MSE	MRICCONP Mean	
	0.878900	26.78092	36.33151399	135.66191138	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	7530.92732641	7530.92732641	5.71	0.0201
SET1	59	557683.93687106	9452.27011646	7.16	0.0001

Dependent Variable: MSETP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	2981448.41986397	49690.80699773	0.97	0.5456
Error	59	3020013.13557563	51186.66331484		
Corrected Total	119	6001461.55543960			
	R-Square	C.V.	Root MSE	MSETP Mean	
	0.496787	415.4947	226.24469787	54.45189022	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	36524.73079948	36524.73079948	0.71	0.4017
SET1	59	2944923.68906449	49913.96083160	0.98	0.5384

Dependent Variable: MRSETP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	486360.69494893	8106.01158248	4.88	0.0001
Error	59	97951.66083422	1660.19764126		
Corrected Total	119	584312.35578315			
	R-Square	C.V.	Root MSE	MRSETP Mean	
	0.832364	29.54125	40.74552296	137.92754960	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	5469.66985810	5469.66985810	3.29	0.0746
SET1	59	480891.02509083	8150.69534052	4.91	0.0001

Dependent Variable: MCOASTP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	3034378.49337977	50572.97488966	0.99	0.5163
Error	59	3015131.05738998	51103.91622695		
Corrected Total	119	6049509.55076974			
	R-Square	C.V.	Root MSE	MCOASTP Mean	
	0.501591	339.0256	226.06175313	66.67984531	
Source	DF	Type III SS	Mean Square	F Value	Pr > F

ICCENBL	1	71826.49393169	71826.49393169	1.41	0.2406
SET1	59	2962551.99944808	50212.74575336	0.98	0.5268

Dependent Variable: MRCOASTP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	485402.29408565	8090.03823476	3.99	0.0001
Error	59	119511.83964577	2025.62440078		
Corrected Total	119	604914.13373142			
	R-Square	C.V.	Root MSE	MRCOASTP Mean	
	0.802432	33.35954	45.00693725	134.91474537	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	29306.68484883	29306.68484883	14.47	0.0003
SET1	59	456095.60923682	7730.43405486	3.82	0.0001

Dependent Variable: MRESUMP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	73809.10112545	1230.15168542	1.66	0.0270
Error	59	43812.76971297	742.58931717		
Corrected Total	119	117621.87083842			
	R-Square	C.V.	Root MSE	MRESUMP Mean	
	0.627512	153.5430	27.25049205	17.74778728	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	1003.12964945	1003.12964945	1.35	0.2498
SET1	59	72805.97147600	1233.99951654	1.66	0.0267

Dependent Variable: MRRESUMP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	383647.07327809	6394.11788797	2.53	0.0002
Error	59	149300.17289769	2530.51140505		
Corrected Total	119	532947.24617578			
	R-Square	C.V.	Root MSE	MRRESUMP Mean	
	0.719859	37.69310	50.30418874	133.45727513	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	2169.42979443	2169.42979443	0.86	0.3583
SET1	59	381477.64348366	6465.72277091	2.56	0.0002

Dependent Variable: MACCELP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	290647.90018199	4844.13166970	4.06	0.0001
Error	59	70332.46628010	1192.07569966		
Corrected Total	119	360980.36646209			
	R-Square	C.V.	Root MSE	MACCELP Mean	
	0.805163	77.47652	34.52644928	44.56375984	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	79.23402449	79.23402449	0.07	0.7974
SET1	59	290568.66615750	4924.89264674	4.13	0.0001

Dependent Variable: MRACCELP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	462741.63485204	7712.36058087	4.60	0.0001
Error	59	98886.66095219	1676.04510088		
Corrected Total	119	561628.29580423			
	R-Square	C.V.	Root MSE	MRACCELP Mean	

	0.823929	32.25105	40.93952981	126.94015873	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	779.54732445	779.54732445	0.47	0.4979
SET1	59	461962.08752759	7829.86589030	4.67	0.0001

Dependent Variable: MCANCLP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	51485.91399223	858.09856654	2.87	0.0001
Error	59	17655.41778137	299.24436918		
Corrected Total	119	69141.33177360			
	R-Square	C.V.	Root MSE	MCANCLP Mean	
	0.744647	259.1642	17.29868114	6.67479516	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	0.70426759	0.70426759	0.00	0.9615
SET1	59	51485.20972464	872.63067330	2.92	0.0001

Dependent Variable: MRCANCLP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	220083.42088931	3668.05701482	2.30	0.0008
Error	59	93941.80693947	1592.23401592		
Corrected Total	119	314025.22782879			
	R-Square	C.V.	Root MSE	MRCANCLP Mean	
	0.700846	29.24877	39.90280712	136.42558532	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	184.21393000	184.21393000	0.12	0.7350
SET1	59	219899.20695931	3727.10520270	2.34	0.0007

Dependent Variable: MBRAKEP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	531025.73887142	8850.42898119	9.53	0.0001
Error	59	54764.63725429	928.21419075		
Corrected Total	119	585790.37612571			
	R-Square	C.V.	Root MSE	MBRAKEP Mean	
	0.906512	23.23088	30.46660780	131.14700109	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	1511.50706557	1511.50706557	1.63	0.2069
SET1	59	529514.23180585	8974.81748823	9.67	0.0001

Dependent Variable: MCCBIP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	23742.74027228	395.71233787	1.36	0.1181
Error	59	17135.63660205	290.43451868		
Corrected Total	119	40878.37687433			
	R-Square	C.V.	Root MSE	MCCBIP Mean	
	0.580814	132.4807	17.04213950	12.86386249	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	250.41466171	250.41466171	0.86	0.3569
SET1	59	23492.32561056	398.17501035	1.37	0.1143

Dependent Variable: MCCNEP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	1152597.76966297	19209.96282772	0.98	0.5249
Error	59	1151754.79435211	19521.26770088		
Corrected Total	119	2304352.56401508			

	R-Square	C.V.	Root MSE	MCCNEP Mean	
	0.500183	767.8478	139.71853027	18.19612257	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	17445.19289589	17445.19289589	0.89	0.3483
SET1	59	1135152.57676708	19239.87418249	0.99	0.5221

Dependent Variable: MRCNEP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	60	271237.05958900	4520.61765982	1.79	0.0131
Error	59	148836.77686206	2522.65723495		
Corrected Total	119	420073.83645106			

	R-Square	C.V.	Root MSE	MRCNEP Mean	
	0.645689	38.06665	50.22606131	131.94242063	
Source	DF	Type III SS	Mean Square	F Value	Pr > F
ICCENBL	1	873.66893726	873.66893726	0.35	0.5584
SET1	59	270363.39065174	4582.43035003	1.82	0.0117

----- ICCENBL=0 -----

Variable	N	Mean	Std Dev	Minimum	Maximum
SET1	60	165.2166667	132.2450334	2.0000000	413.0000000
TYPE	60	0	0	0	0
FREQ	60	1.7166667	0.9758380	1.0000000	5.0000000
MDIST	60	34.5982778	29.9623389	8.2000000	148.1000000
MRDIST	60	142.1972222	69.0234443	9.0000000	259.0000000
MENGAGE	60	0.4046250	0.1977613	0.0020000	0.8800000
MICCONP	60	65.7044059	301.7718501	0.7672948	2347.42
MRICCONP	60	143.5838889	78.6860605	2.0000000	266.0000000
MSETP	60	71.8981723	301.6367513	0.7672948	2347.42
MRSETP	60	144.6788889	71.6805713	6.0000000	266.0000000
MCOASTP	60	91.1452110	301.8055926	0	2347.42
MRCOASTP	60	150.5423611	72.2978624	8.5000000	266.0000000
MRESUMP	60	20.6390524	35.3612819	0	218.3406114
MRRESUMP	60	137.7091667	71.5536811	56.0000000	264.0000000
MACCELP	60	43.7511815	53.4376545	0	241.6405434
MRACCELP	60	124.3913889	73.5713591	25.0000000	259.5000000
MCANCLP	60	6.5981864	15.4930017	0	75.6143667
MRCANCLP	60	137.6645833	55.3518239	104.5000000	264.0000000
MBRAKEP	60	134.6960703	74.5820689	20.9318028	363.4278464
MCCBIP	60	14.3084347	24.0216494	0	139.3402051
MCCNEP	60	6.1389004	10.3488716	0	37.8071834
MRCNEP	60	129.2441667	61.2657045	80.0000000	258.0000000

----- ICCENBL=1 -----

Variable	N	Mean	Std Dev	Minimum	Maximum
SET1	60	165.2166667	132.2450334	2.0000000	413.0000000
TYPE	60	0	0	0	0
FREQ	60	2.7166667	1.8048115	1.0000000	9.0000000
MDIST	60	34.5558042	30.2656294	8.2000000	148.6000000
MRDIST	60	140.6557738	71.4428583	9.8000000	262.5000000
MENGAGE	60	0.5076245	0.1990982	0.0080000	0.8375000
MICCONP	60	52.3477572	213.5104120	1.2012318	1526.72
MRICCONP	60	127.7399339	67.6812597	11.5000000	265.0000000
MSETP	60	37.0056082	100.5778029	1.6160515	763.3587786
MRSETP	60	131.1762103	68.3577990	14.7500000	265.0000000
MCOASTP	60	42.2144797	101.1436910	0	763.3587786
MRCOASTP	60	119.2871296	67.2984216	8.5000000	265.0000000
MRESUMP	60	14.8565222	26.9475152	0	174.8541626
MRRESUMP	60	129.2053836	62.2599783	56.0000000	262.5000000
MACCELP	60	45.3763382	57.1085408	0	341.8598402
MRACCELP	60	129.4889286	63.9778564	25.0000000	259.6666667
MCANCLP	60	6.7514039	30.5260862	0	235.4048964
MRCANCLP	60	135.1865873	47.4922605	104.5000000	266.0000000
MBRAKEP	60	127.5979319	65.8828253	23.3753430	300.9305515
MCCBIP	60	11.4192903	10.5626650	0	39.8724083
MCCNEP	60	30.2533448	196.6063141	0	1526.72
MRCNEP	60	134.6406746	57.8930137	80.0000000	266.0000000