

Program created by DETECT

MULTIPLE RELATIONSHIP ANALYSIS FROM SECTION 6.3

13 1 1 2 2 3 0 3 4 4 3 0 1 0 0

STRUCTUR

CULTURE

PERFORMC

(3F2.0,1F1.0,1X,3F2.0)

DDDDDDD	EEEEEEEE	TTTTTTTT	EEEEEEEE	CCCCC	TTTTTTTT	
DDDDDDDD	EEEEEEEE	TTTTTTTT	EEEEEEEE	CCCCCCC	TTTTTTTT	
DD	DD	EE	TT	EE	CC	TT
DD	DD	EE	TT	EE	CC	TT
DD	DD	EEEE	TT	EEEE	CC	TT
DD	DD	EEEE	TT	EEEE	CC	TT
DD	DD	EE	TT	EE	CC	TT
DD	DD	EE	TT	EE	CC	TT
DDDDDDDD	EEEEEEEE	TT	EEEEEEEE	CCCCCCC	TT	
DDDDDDD	EEEEEEEE	TT	EEEEEEEE	CCCCC	TT	

DATA ENQUIRY THAT TESTS ENTITY AND
 CORRELATIONAL/CAUSAL THEORIES
 PROGRAM TITLE
 MULTIPLE RELATIONSHIP ANALYSIS FROM SECTION 6.3

TABLE I
GENERAL INFORMATION LINE

ENTRY	MEANING	CODE
ONE	DATA INPUT FROM FILE	13,
TWO	OUTPUT TO FILE 8 ONLY. OPTION	1,
THREE	REGULAR TABLES OUTPUT. OPTION	1,
FOUR	SELECTED TABLES OUTPUT. OPTION	2,
FIVE	POSITION OF FIRST CELL INDICATOR	2,
SIX	POSITION OF SECOND CELL INDICATOR	3,
SEVEN	NUMBER OF ADDITIONAL LEVELS OF ANALYSIS	0,
EIGHT	BETWEEN- AND WITHIN-CELL MULTIPLE-VARIABLE ANALYSIS. OPTION	3,
NINE	POSITION OF MULTIPLE-RELATIONSHIP ANALYSIS INDICATOR	4,
TEN	NUMBER OF VARIABLES NOT TO BE ANALYZED	4,
ELEVEN	NUMBER OF VARIABLES TO BE ANALYZED	3,
TWELVE	LABELS INPUT WITH PROGRAM. OPTION	0,
THIRTEEN	NUMBER OF LINES READ FOR FORMAT STATEMENT	1,
FOURTEEN	NO MISSING VALUES. OPTION	0,
FIFTEEN	DATA TRANSFORMATIONS DELETED. OPTION	0

TABLE II
DETAILED INFORMATION LINE

ENTRY	MEANING	CODE
ONE	TOTAL NUMBER OF LINES PER PAGE	61,
TWO	INFORMATION TABLES PRINTED (TABLES I,II AND III) OPTION	1,
THREE	NUMBER OF ENTRIES FOR CELL FREQUENCIES (TABLE CF)	23,
	NUMBER OF ENTRIES IN AVERAGE AND DISPERSION TABLES	
FOUR	ACROSS ALL CASES (TABLE AT)	20,
FIVE	BY CELLS (TABLE AC)	0,
SIX	BY VARIABLES (TABLE AV)	0,
	NUMBER OF ENTRIES IN WABA TABLES	
SEVEN	WABA I (TABLE WI)	15,
EIGHT	WABA II (TABLES WIID,WIIM AND WTC)	15,
	NUMBER OF ENTRIES IN MULTIPLE-VARIABLE ANALYSIS	
NINE	WITHIN-CELL (TABLE MVAW)	2,
TEN	BETWEEN-CELL (TABLE MVAB)	2,
ELEVEN	CORRELATION MATRIX DELETED. OPTION	0,
TWELVE	DEVIATIONS NOT OUTPUT. OPTION	0,
THIRTEEN	ENTRIES IN MULTIPLE-RELATIONSHIP ANALYSIS (TABLE MRA)	2,
FOURTEEN	SEQUENCING PACKAGE CALLED. OPTION	1,
FIFTEEN	EXTRA ROUNDING DELETED. OPTION	0

TABLE III
ADDITIONAL INFORMATION

ADDITIONAL CELL INDICATOR LINE(S) GIL ENTRY SEVEN = 0
NO LINES READ
LABEL LINE(S) GIL ENTRY TWELVE = 0
STRUCTUR
CULTURE
PERFORMC
FORMAT LINE(S) GIL ENTRY THIRTEEN = 1
(3F2.0,1F1.0,1X,3F2.0)

MISSING VALUES LINE(S) GIL ENTRY FOURTEEN = 0
NO LINES READ
DATA TRANSFORMATION LINE(S) GIL ENTRY FIFTEEN = 0
NO LINES READ
NUMBER OF CASES FOR ANALYSIS
80

TABLE CF
(LEVEL = 1 CONDITION = 1)
CELL FREQUENCIES

CELL ID NUMBER	CELL SIZE
1	3
3	3
5	3
7	3
9	3
11	3
13	3
15	3
2	2
4	2
6	2
8	2
10	2
12	2
14	2
16	2

TABLE AT
 (LEVEL = 1 CONDITION = 1)
 AVERAGES AND DISPERSIONS ACROSS ALL CASES

VARIABLE	AVERAGE	AVERAGE SUMS OF SQUARES		
	TOTAL SCORE	TOTAL	BETWEEN	WITHIN
STRUCTUR	4.60000	4.89000	4.62333	0.26667
CULTURE	7.40000	11.84000	11.63167	0.20833
PERFORMC	12.00000	77.75000	77.75000	0.00000

 TOTAL NUMBER OF CASES 40
 INDETERMINATE CORRELATION SET TO ZERO
 INDETERMINATE CORRELATION SET TO ZERO

TABLE WI
 (LEVEL = 1 CONDITION = 1)
 WITHIN AND BETWEEN ANALYSIS I

ETA CORRELATIONS				F RATIOS		
	BETWEEN	WITHIN	E RATIO INDUCTION	BETWEEN	WITHIN	PROB
STRUCTUR	0.97235	0.23352	4.16383 WHOLES-30	27.74000		0.0000
CULTURE	0.99116	0.13265	7.47208 WHOLES-30	89.33120		0.0000
E AND F SET EQUAL TO 99.00						
PERFORMC	1.00000	0.00000	99.00000 WHOLES-30	99.00000		0.0000
AVERAGES	0.98784	0.12206	36.87864	72.02373	0.00000	
PRACTICAL SIGNIFICANCE CRITERIA						
WHOLES - 15		E > OR =	1.30323			
WHOLES - 30		E > OR =	1.73205			
PARTS - 15		E < OR =	0.76733			
PARTS - 30		E < OR =	0.57735			
DEGREES OF FREEDOM FOR (BETWEEN)				F-RATIO =	15,	24
DEGREES OF FREEDOM FOR (WITHIN)				F-RATIO =	24,	15

TABLE WIID
 (LEVEL = 1 CONDITION = 1)
 WITHIN AND BETWEEN ANALYSIS II (DIFFERENCE TESTS)

 CORRELATIONS

	BETWEEN	WITHIN	A-VALUE	INDUCTION	Z-VALUE

STRUCTUR					
CULTURE	-0.28727	-0.03536	0.25602		0.74387
PERFORMC	-0.76874	0.00000	0.87687	WHOLES-30	2.90787**
CULTURE					
PERFORMC	0.75900	0.00000	0.86177	WHOLES-30	2.84097**
AVERAGES	-0.09901	-0.01179	0.66489		2.16424

 PRACTICAL SIGNIFICANCE CRITERIA

WHOLES - 15	A >	OR =			0.26180
WHOLES - 30	A >	OR =			0.52360
PARTS - 15	A <	OR =			-0.26180
PARTS - 30	A <	OR =			-0.52360

 *P < OR = .05

**P < OR = .01

TABLE WIIM
 (LEVEL = 1 CONDITION = 1)
 WITHIN AND BETWEEN ANALYSIS II (MAGNITUDE TESTS)

	BETWEEN			WITHIN				
	R TEST	IND*	T TEST	PROB	R TEST	IND*	T TEST	PROB
STRUCTUR								
CULTURE	0.29992	S-15	1.12219	0.2807	0.03538		0.16966	0.8668
PERFORMC	1.20199	S-30	4.49743	0.0005	0.00000		0.00000	1.0000
CULTURE								
PERFORMC	1.16572	S-30	4.36173	0.0007	0.00000		0.00000	1.0000
AVERAGES	0.88921		3.32712		0.01179		0.05655	
PRACTICAL SIGNIFICANCE CRITERIA								
S - 15	R > OR =				0.26795			
S - 30	R > OR =				0.57735			
DEGREES OF FREEDOM FOR (BETWEEN) T TEST = 1,					14			
DEGREES OF FREEDOM FOR (WITHIN) T TEST = 1,					23			

* INDICATES
INDUCTION

TABLE WTC
 (LEVEL = 1 CONDITION = 1)
 TOTAL CORRELATION AND COMPONENT ANALYSIS

	TOTAL				COMPONENTS		
	CORRELATION	R TEST	T TEST	PROB	BETWEEN	WITHIN	INDUCTION
STRUCTUR							
CULTURE	-0.27796	0.28936	1.78374	0.0825	-0.27686	-0.00110	
PERFORMC	-0.74749	1.12527	6.93661	0.0000	-0.74749	0.00000	WHOLES-30
CULTURE							
PERFORMC	0.75229	1.14185	7.03884	0.0000	0.75229	0.00000	WHOLES-30
AVERAGES	-0.09105	0.85216	5.25306		-0.09069	-0.00037	

PRACTICAL SIGNIFICANCE CRITERIA

WHOLES-15	E (1) AND E (2) >	OR = 1.30323	AND A (1+2) >	OR = 0.26180
WHOLES-30	E (1) AND E (2) >	OR = 1.73205	AND A (1+2) >	OR = 0.52360
PARTS-15	E (1) AND E (2) <	OR = 0.76733	AND A (1+2) <	OR = -0.26180
PARTS-30	E (1) AND E (2) <	OR = 0.57735	AND A (1+2) <	OR = -0.52360

DEGREES OF FREEDOM FOR (TOTAL) T TEST = 1, 38

TABLE MVAW
 (LEVEL = 1 CONDITION = 1)
 MULTIPLE VARIABLE ANALYSIS (WITHIN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE = -0.0354	STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	0.0354		0.1173	0.908
STRUCTUR+ CULTURE = -0.0354	CULTURE + PERFORMC= 0.0000	STRUCTUR+ PERFORMC= 0.0000	0.0354		0.1173	0.908
STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	STRUCTUR+ CULTURE = -0.0354	0.0000		0.0000	1.000

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (WITHIN) T = 1, 22

* INDICATES INDUCTION

TABLE MVAB
 (LEVEL = 1 CONDITION = 1)
 MULTIPLE VARIABLE ANALYSIS (BETWEEN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+	STRUCTUR+	CULTURE +				
CULTURE =-0.2873	PERFORMC=-0.7687	PERFORMC= 0.7590	-0.5855	S-30	-5.5622	0.000
STRUCTUR+	CULTURE +	STRUCTUR+				
CULTURE =-0.2873	PERFORMC= 0.7590	PERFORMC=-0.7687	-0.5704	S-30	-5.4647	0.000
STRUCTUR+	CULTURE +	STRUCTUR+				
PERFORMC=-0.7687	PERFORMC= 0.7590	CULTURE =-0.2873	0.0151		0.0963	0.925

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (BETWEEN) T = 1, 13

* INDICATES INDUCTION

TABLE CF
(LEVEL = 2 CONDITION = 1)
CELL FREQUENCIES

CELL ID NUMBER	CELL SIZE
1	5
3	5
8	5
52	5
2	5
7	5
9	5
53	5

TABLE AT
 (LEVEL = 2 CONDITION = 1)
 AVERAGES AND DISPERSIONS ACROSS ALL CASES

VARIABLE	AVERAGE	AVERAGE SUMS OF SQUARES		
	TOTAL SCORE	TOTAL	BETWEEN	WITHIN
STRUCTUR	0.00000	4.62333	4.53000	0.09333
CULTURE	0.00000	11.63167	11.54000	0.09167
PERFORMC	0.00000	77.75000	77.75000	0.00000

 TOTAL NUMBER OF CASES 40
 INDETERMINATE CORRELATION SET TO ZERO
 INDETERMINATE CORRELATION SET TO ZERO

TABLE WI
 (LEVEL = 2 CONDITION = 1)
 WITHIN AND BETWEEN ANALYSIS I

ETA CORRELATIONS				F RATIOS		
	BETWEEN	WITHIN	E RATIO INDUCTION	BETWEEN	WITHIN	PROB
STRUCTUR	0.98985	0.14208	6.96676 WHOLES-30	55.46939		0.0000
CULTURE	0.99605	0.08877	11.22011 WHOLES-30	143.87532		0.0000
E AND F SET EQUAL TO 99.00						
PERFORMC	1.00000	0.00000	99.00000 WHOLES-30	99.00000		0.0000
AVERAGES	0.99530	0.07695	39.06229	99.44824	0.00000	
PRACTICAL SIGNIFICANCE CRITERIA						
WHOLES - 15		E > OR =	1.30323			
WHOLES - 30		E > OR =	1.73205			
PARTS - 15		E < OR =	0.76733			
PARTS - 30		E < OR =	0.57735			
DEGREES OF FREEDOM FOR (BETWEEN) F-RATIO =				7,	8	
DEGREES OF FREEDOM FOR (WITHIN) F-RATIO =				8,	7	

TABLE WIID
 (LEVEL = 2 CONDITION = 1)
 WITHIN AND BETWEEN ANALYSIS II (DIFFERENCE TESTS)

 CORRELATIONS

	BETWEEN	WITHIN	A-VALUE	INDUCTION	Z-VALUE

STRUCTUR					
CULTURE	-0.29045	-0.07207	0.22256		0.37464
PERFORMC	-0.77662	0.00000	0.88928	WHOLES-30	1.71222*
CULTURE					
PERFORMC	0.76200	0.00000	0.86640	WHOLES-30	1.65306*
AVERAGES	-0.10169	-0.02402	0.65941		1.24664

 PRACTICAL SIGNIFICANCE CRITERIA

WHOLES - 15	A	>	OR	=	0.26180
WHOLES - 30	A	>	OR	=	0.52360
PARTS - 15	A	<	OR	=	-0.26180
PARTS - 30	A	<	OR	=	-0.52360

 *P < OR = .05

**P < OR = .01

TABLE WIIM
 (LEVEL = 2 CONDITION = 1)
 WITHIN AND BETWEEN ANALYSIS II (MAGNITUDE TESTS)

	BETWEEN			WITHIN		
	R TEST IND*	T TEST	PROB	R TEST IND*	T TEST	PROB
STRUCTUR						
CULTURE	0.30353 S-15	0.74350	0.4853	0.07226	0.19119	0.8538
PERFORMC	1.23280 S-30	3.01972	0.0234	0.00000	0.00000	1.0000
CULTURE						
PERFORMC	1.17671 S-30	2.88234	0.0280	0.00000	0.00000	1.0000
AVERAGES	0.90435	2.21519		0.02409	0.06373	
PRACTICAL SIGNIFICANCE CRITERIA						
S - 15	R > OR =	0.26795		0.26795		
S - 30	R > OR =	0.57735		0.57735		
DEGREES OF FREEDOM FOR (BETWEEN) T TEST = 1, 6						
DEGREES OF FREEDOM FOR (WITHIN) T TEST = 1, 7						

* INDICATES
INDUCTION

TABLE WTC
 (LEVEL = 2 CONDITION = 1)
 TOTAL CORRELATION AND COMPONENT ANALYSIS

	TOTAL				COMPONENTS		
	CORRELATION	R TEST	T TEST	PROB	BETWEEN	WITHIN	INDUCTION
STRUCTUR							
CULTURE	-0.28727	0.29992	1.12219	0.2807	-0.28637	-0.00091	
PERFORMC	-0.76874	1.20199	4.49743	0.0005	-0.76874	0.00000	WHOLES-30
CULTURE							
PERFORMC	0.75900	1.16572	4.36173	0.0007	0.75900	0.00000	WHOLES-30
AVERAGES	-0.09901	0.88921	3.32712		-0.09870	-0.00030	

PRACTICAL SIGNIFICANCE CRITERIA

WHOLES-15	E (1) AND E (2) >	OR = 1.30323	AND A (1+2) >	OR = 0.26180
WHOLES-30	E (1) AND E (2) >	OR = 1.73205	AND A (1+2) >	OR = 0.52360
PARTS-15	E (1) AND E (2) <	OR = 0.76733	AND A (1+2) <	OR = -0.26180
PARTS-30	E (1) AND E (2) <	OR = 0.57735	AND A (1+2) <	OR = -0.52360

DEGREES OF FREEDOM FOR (TOTAL) T TEST = 1, 14

TABLE MVAW
 (LEVEL = 2 CONDITION = 1)
 MULTIPLE VARIABLE ANALYSIS (WITHIN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE =-0.0721	STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	0.0721		0.1252	0.904
STRUCTUR+ CULTURE =-0.0721	CULTURE + PERFORMC= 0.0000	STRUCTUR+ PERFORMC= 0.0000	0.0721		0.1252	0.904
STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	STRUCTUR+ CULTURE =-0.0721	0.0000		0.0000	1.000

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (WITHIN) T = 1, 6

* INDICATES INDUCTION

TABLE MVAB
 (LEVEL = 2 CONDITION = 1)
 MULTIPLE VARIABLE ANALYSIS (BETWEEN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE = -0.2904	STRUCTUR+ PERFORMC = -0.7766	CULTURE + PERFORMC = 0.7620	-0.5946	S-30	-3.7107	0.014
STRUCTUR+ CULTURE = -0.2904	CULTURE + PERFORMC = 0.7620	STRUCTUR+ PERFORMC = -0.7766	-0.5717	S-30	-3.6141	0.015
STRUCTUR+ PERFORMC = -0.7766	CULTURE + PERFORMC = 0.7620	STRUCTUR+ CULTURE = -0.2904	0.0229		0.0955	0.928

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (BETWEEN) T = 1, 5

* INDICATES INDUCTION

TABLE CF
(LEVEL = 1 CONDITION = 2)
CELL FREQUENCIES

CELL ID NUMBER	CELL SIZE
17	3
20	2
21	2
23	3
25	2
27	2
29	3
32	2
18	2
19	3
22	3
24	2
26	3
28	3
30	2
31	3

TABLE AT
 (LEVEL = 1 CONDITION = 2)
 AVERAGES AND DISPERSIONS ACROSS ALL CASES

VARIABLE	AVERAGE	AVERAGE SUMS OF SQUARES		
	TOTAL SCORE	TOTAL	BETWEEN	WITHIN
STRUCTUR	7.72500	22.69937	22.55771	0.14167
CULTURE	7.55000	5.29750	5.14750	0.15000
PERFORMC	8.87500	21.85937	21.85937	0.00000

TOTAL NUMBER OF CASES 40
 INDETERMINATE CORRELATION SET TO ZERO
 INDETERMINATE CORRELATION SET TO ZERO

TABLE WI
 (LEVEL = 1 CONDITION = 2)
 WITHIN AND BETWEEN ANALYSIS I

ETA CORRELATIONS			F RATIOS				
	BETWEEN	WITHIN	E RATIO	INDUCTION	BETWEEN	WITHIN	PROB
STRUCTUR	0.99687	0.07900	12.61867	WHOLES-30	254.76941		0.0000
CULTURE	0.98574	0.16827	5.85804	WHOLES-30	54.90667		0.0000
E AND F SET EQUAL TO 99.00							
PERFORMC	1.00000	0.00000	99.00000	WHOLES-30	99.00000		0.0000
AVERAGES	0.99421	0.08242	39.15890		136.22536	0.00000	
PRACTICAL SIGNIFICANCE CRITERIA							
WHOLES - 15		E > OR =	1.30323				
WHOLES - 30		E > OR =	1.73205				
PARTS - 15		E < OR =	0.76733				
PARTS - 30		E < OR =	0.57735				
DEGREES OF FREEDOM FOR (BETWEEN) F-RATIO =					15,	24	
DEGREES OF FREEDOM FOR (WITHIN) F-RATIO =					24,	15	

TABLE WIID
 (LEVEL = 1 CONDITION = 2)
 WITHIN AND BETWEEN ANALYSIS II (DIFFERENCE TESTS)

 CORRELATIONS

	BETWEEN	WITHIN	A-VALUE	INDUCTION	Z-VALUE
STRUCTUR					
CULTURE	0.25455	-0.11433	0.14280		0.41573
PERFORMC	0.75951	0.00000	0.86257	WHOLES-30	2.84447**
CULTURE					
PERFORMC	0.78658	0.00000	0.90525	WHOLES-30	3.03696**
AVERAGES	0.60021	-0.03811	0.63687		2.09905

 PRACTICAL SIGNIFICANCE CRITERIA

WHOLES - 15	A >	OR =			0.26180
WHOLES - 30	A >	OR =			0.52360
PARTS - 15	A <	OR =			-0.26180
PARTS - 30	A <	OR =			-0.52360

 *P < OR = .05

**P < OR = .01

TABLE WIIM
 (LEVEL = 1 CONDITION = 2)
 WITHIN AND BETWEEN ANALYSIS II (MAGNITUDE TESTS)

	BETWEEN			WITHIN		
	R TEST IND*	T TEST	PROB	R TEST IND*	T TEST	PROB
STRUCTUR						
CULTURE	0.26322	0.98487	0.3414	0.11509	0.55194	0.5863
PERFORMC	1.16760 S-30	4.36877	0.0006	0.00000	0.00000	1.0000
CULTURE						
PERFORMC	1.27385 S-30	4.76630	0.0003	0.00000	0.00000	1.0000
AVERAGES	0.90156	3.37331		0.03836	0.18398	
PRACTICAL SIGNIFICANCE CRITERIA						
S - 15	R > OR =	0.26795		0.26795		
S - 30	R > OR =	0.57735		0.57735		
DEGREES OF FREEDOM FOR (BETWEEN) T TEST = 1, 14						
DEGREES OF FREEDOM FOR (WITHIN) T TEST = 1, 23						

* INDICATES
INDUCTION

TABLE WTC
 (LEVEL = 1 CONDITION = 2)
 TOTAL CORRELATION AND COMPONENT ANALYSIS

	TOTAL				COMPONENTS		
	CORRELATION	R TEST	T TEST	PROB	BETWEEN	WITHIN	INDUCTION
STRUCTUR							
CULTURE	0.24861	0.25667	1.58223	0.1219	0.25013	-0.00152	
PERFORMC	0.75714	1.15903	7.14476	0.0000	0.75714	0.00000	WHOLES-30
CULTURE							
PERFORMC	0.77537	1.22779	7.56863	0.0000	0.77537	0.00000	WHOLES-30
AVERAGES	0.59371	0.88117	5.43187		0.59421	-0.00051	

PRACTICAL SIGNIFICANCE CRITERIA

WHOLES-15	E (1) AND E (2) > OR = 1.30323	AND A (1+2) > OR = 0.26180
WHOLES-30	E (1) AND E (2) > OR = 1.73205	AND A (1+2) > OR = 0.52360
PARTS-15	E (1) AND E (2) < OR = 0.76733	AND A (1+2) < OR = -0.26180
PARTS-30	E (1) AND E (2) < OR = 0.57735	AND A (1+2) < OR = -0.52360

DEGREES OF FREEDOM FOR (TOTAL) T TEST = 1, 38

TABLE MVAW
 (LEVEL = 1 CONDITION = 2)
 MULTIPLE VARIABLE ANALYSIS (WITHIN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE = -0.1143	STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	0.1146		0.3817	0.706
STRUCTUR+ CULTURE = -0.1143	CULTURE + PERFORMC= 0.0000	STRUCTUR+ PERFORMC= 0.0000	0.1146		0.3817	0.706
STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	STRUCTUR+ CULTURE = -0.1143	0.0000		0.0000	1.000

PRACTICAL SIGNIFICANCE CRITERIA

S - 15	A > OR = 0.26180
S - 30	A > OR = 0.52360

DEGREES OF FREEDOM FOR (WITHIN) T = 1, 22

* INDICATES INDUCTION

TABLE MVAB
 (LEVEL = 1 CONDITION = 2)
 MULTIPLE VARIABLE ANALYSIS (BETWEEN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE = 0.2545	STRUCTUR+ PERFORMC= 0.7595	CULTURE + PERFORMC= 0.7866	-0.6052	S-30	-8.2247	0.000
STRUCTUR+ CULTURE = 0.2545	CULTURE + PERFORMC= 0.7866	STRUCTUR+ PERFORMC= 0.7595	-0.6479	S-30	-8.5997	0.000
STRUCTUR+ PERFORMC= 0.7595	CULTURE + PERFORMC= 0.7866	STRUCTUR+ CULTURE = 0.2545	-0.0427		-0.3694	0.718

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (BETWEEN) T = 1, 13

* INDICATES INDUCTION

TABLE CF
(LEVEL = 2 CONDITION = 2)
CELL FREQUENCIES

CELL ID NUMBER	CELL SIZE
4	5
6	5
11	5
14	5
5	5
10	5
12	5
15	5

TABLE AT
 (LEVEL = 2 CONDITION = 2)
 AVERAGES AND DISPERSIONS ACROSS ALL CASES

VARIABLE	AVERAGE	AVERAGE SUMS OF SQUARES		
	TOTAL SCORE	TOTAL	BETWEEN	WITHIN
STRUCTUR	0.00000	22.55771	22.29938	0.25833
CULTURE	0.00000	5.14750	5.03750	0.11000
PERFORMC	0.00000	21.85937	21.85937	0.00000

TOTAL NUMBER OF CASES 40
 INDETERMINATE CORRELATION SET TO ZERO
 INDETERMINATE CORRELATION SET TO ZERO

TABLE WI
 (LEVEL = 2 CONDITION = 2)
 WITHIN AND BETWEEN ANALYSIS I

ETA CORRELATIONS				F RATIOS		
	BETWEEN	WITHIN	E RATIO INDUCTION	BETWEEN	WITHIN	PROB
STRUCTUR	0.99426	0.10701	9.29086 WHOLES-30	98.65161		0.0000
CULTURE	0.98926	0.14618	6.76723 WHOLES-30	52.33766		0.0000
E AND F SET EQUAL TO 99.00						
PERFORMC	1.00000	0.00000	99.00000 WHOLES-30	99.00000		0.0000
AVERAGES	0.99450	0.08440	38.35270	83.32976	0.00000	
PRACTICAL SIGNIFICANCE CRITERIA						
WHOLES - 15		E > OR =	1.30323			
WHOLES - 30		E > OR =	1.73205			
PARTS - 15		E < OR =	0.76733			
PARTS - 30		E < OR =	0.57735			
DEGREES OF FREEDOM FOR (BETWEEN) F-RATIO =				7,	8	
DEGREES OF FREEDOM FOR (WITHIN) F-RATIO =				8,	7	

TABLE WIID
 (LEVEL = 2 CONDITION = 2)
 WITHIN AND BETWEEN ANALYSIS II (DIFFERENCE TESTS)

CORRELATIONS

	BETWEEN	WITHIN	A-VALUE	INDUCTION	Z-VALUE
<hr/>					
STRUCTUR					
CULTURE	0.26005	-0.07910	0.18390		0.30867
PERFORMC	0.76390	0.00000	0.86934	WHOLES-30	1.66056*
CULTURE					
PERFORMC	0.79512	0.00000	0.91921	WHOLES-30	1.79217*
AVERAGES	0.60636	-0.02637	0.65748		1.25380
<hr/>					
PRACTICAL SIGNIFICANCE CRITERIA					
WHOLES - 15		A >	OR =		0.26180
WHOLES - 30		A >	OR =		0.52360
PARTS - 15		A <	OR =		-0.26180
PARTS - 30		A <	OR =		-0.52360

*P < OR = .05
 **P < OR = .01

TABLE WIIM
 (LEVEL = 2 CONDITION = 2)
 WITHIN AND BETWEEN ANALYSIS II (MAGNITUDE TESTS)

	BETWEEN			WITHIN		
	R TEST IND*	T TEST	PROB	R TEST IND*	T TEST	PROB
STRUCTUR						
CULTURE	0.26932 S-15	0.65970	0.5339	0.07934	0.20992	0.8397
PERFORMC	1.18373 S-30	2.89954	0.0274	0.00000	0.00000	1.0000
CULTURE						
PERFORMC	1.31112 S-30	3.21157	0.0183	0.00000	0.00000	1.0000
AVERAGES	0.92139	2.25694		0.02645	0.06997	
PRACTICAL SIGNIFICANCE CRITERIA						
S - 15	R > OR = 0.26795			0.26795		
S - 30	R > OR = 0.57735			0.57735		
DEGREES OF FREEDOM FOR (BETWEEN) T TEST = 1, 6 * INDICATES						
DEGREES OF FREEDOM FOR (WITHIN) T TEST = 1, 7 INDUCTION						

TABLE WTC
 (LEVEL = 2 CONDITION = 2)
 TOTAL CORRELATION AND COMPONENT ANALYSIS

	TOTAL				COMPONENTS		
	CORRELATION	R TEST	T TEST	PROB	BETWEEN	WITHIN	INDUCTION
STRUCTUR							
CULTURE	0.25455	0.26322	0.98487	0.3414	0.25578	-0.00124	
PERFORMC	0.75951	1.16760	4.36877	0.0006	0.75951	0.00000	WHOLES-30
CULTURE							
PERFORMC	0.78658	1.27385	4.76630	0.0003	0.78658	0.00000	WHOLES-30
AVERAGES	0.60021	0.90156	3.37331		0.60063	-0.00041	

PRACTICAL SIGNIFICANCE CRITERIA

WHOLES-15	E (1) AND E (2) >	OR = 1.30323	AND A (1+2) >	OR = 0.26180
WHOLES-30	E (1) AND E (2) >	OR = 1.73205	AND A (1+2) >	OR = 0.52360
PARTS-15	E (1) AND E (2) <	OR = 0.76733	AND A (1+2) <	OR = -0.26180
PARTS-30	E (1) AND E (2) <	OR = 0.57735	AND A (1+2) <	OR = -0.52360

DEGREES OF FREEDOM FOR (TOTAL) T TEST = 1, 14

TABLE MVAW
 (LEVEL = 2 CONDITION = 2)
 MULTIPLE VARIABLE ANALYSIS (WITHIN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE = -0.0791	STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	0.0792		0.1374	0.895
STRUCTUR+ CULTURE = -0.0791	CULTURE + PERFORMC= 0.0000	STRUCTUR+ PERFORMC= 0.0000	0.0792		0.1374	0.895
STRUCTUR+ PERFORMC= 0.0000	CULTURE + PERFORMC= 0.0000	STRUCTUR+ CULTURE = -0.0791	0.0000		0.0000	1.000

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (WITHIN) T = 1, 6

* INDICATES INDUCTION

TABLE MVAB
 (LEVEL = 2 CONDITION = 2)
 MULTIPLE VARIABLE ANALYSIS (BETWEEN-CELL CORRELATIONS)

CORRELATIONS			DIFFERENCE (ONE - TWO)			
ONE	TWO	THREE	A	IND*	T	PROB
STRUCTUR+ CULTURE = 0.2601	STRUCTUR+ PERFORMC= 0.7639	CULTURE + PERFORMC= 0.7951	-0.6063	S-30	-5.9192	0.002
STRUCTUR+ CULTURE = 0.2601	CULTURE + PERFORMC= 0.7951	STRUCTUR+ PERFORMC= 0.7639	-0.6561	S-30	-6.2311	0.002
STRUCTUR+ PERFORMC= 0.7639	CULTURE + PERFORMC= 0.7951	STRUCTUR+ CULTURE = 0.2601	-0.0499		-0.3073	0.771

PRACTICAL SIGNIFICANCE CRITERIA

S - 15
 S - 30

A > OR = 0.26180
 A > OR = 0.52360

DEGREES OF FREEDOM FOR (BETWEEN) T = 1, 5

* INDICATES INDUCTION

TABLE MRA
(LEVEL = 1)
MULTIPLE RELATIONSHIP ANALYSIS

	CORRELATIONS		DIFFERENCES		
	CONDITION	CONDITION	A	INDUCTION	Z
	1	2			

STRUCTUR					
CULTURE	B = -0.28727	B = 0.25455	0.03400		0.09006
CULTURE	W = -0.03536	W = -0.11433	-0.07922		-0.26355
CULTURE	B = -0.28727	W = -0.11433	0.17680		0.51671
CULTURE	W = -0.03536	B = 0.25455	0.22202		0.64289
STRUCTUR					
PERFORMC	B = -0.76874	B = 0.75951	0.01431		0.05655
PERFORMC	W = 0.00000	W = 0.00000	0.00000		0.00000
PERFORMC	B = -0.76874	W = 0.00000	0.87687	WHOLES-30	2.90787**
PERFORMC	W = 0.00000	B = 0.75951	0.86257	WHOLES-30	2.84447**

DEGREES OF FREEDOM FOR Z					
BETWEEN-CELL	13	13			
WITHIN-CELL	22	22			
PRACTICAL SIGNIFICANCE CRITERIA					
S-15	A > OR =		0.26180		
S-30	A > OR =		0.52360		
WHOLES-15	A > OR =		0.26180		
WHOLES-30	A > OR =		0.52360		
PARTS-15	A < OR =		-0.26180		
PARTS-30	A < OR =		-0.52360		

NOTE B INDICATES BETWEEN-CELL CORRELATION, W INDICATES WITHIN-CELL CORRELATION
*P<.05 **P <. 01

TABLE MRA
 (LEVEL = 1)
 MULTIPLE RELATIONSHIP ANALYSIS

		CORRELATIONS		DIFFERENCES		
		CONDITION 1	CONDITION 2	A	INDUCTION	Z

CULTURE						
PERFORMC	B =	0.75900	B =	0.78658		-0.17480
PERFORMC	W =	0.00000	W =	0.00000		0.00000
PERFORMC	B =	0.75900	W =	0.00000	0.86177	WHOLEES-30 2.84097**
PERFORMC	W =	0.00000	B =	0.78658	0.90525	WHOLEES-30 3.03696**

DEGREES OF FREEDOM FOR Z						
BETWEEN-CELL		13		13		
WITHIN-CELL		22		22		
PRACTICAL SIGNIFICANCE CRITERIA						
S-15	A > OR =			0.26180		
S-30	A > OR =			0.52360		
WHOLEES-15	A > OR =			0.26180		
WHOLEES-30	A > OR =			0.52360		
PARTS-15	A < OR =			-0.26180		
PARTS-30	A < OR =			-0.52360		

NOTE B INDICATES BETWEEN-CELL CORRELATION, W INDICATES WITHIN-CELL CORRELATION
 *P<.05 **P <. 01

TABLE MRA
(LEVEL = 2)
MULTIPLE RELATIONSHIP ANALYSIS

	CORRELATIONS		DIFFERENCES		
	CONDITION	CONDITION	A	INDUCTION	Z
	1	2			

STRUCTUR					
CULTURE	B = -0.29045	B = 0.26005	0.03162		0.05200
CULTURE	W = -0.07207	W = -0.07910	-0.00704		-0.01223
CULTURE	B = -0.29045	W = -0.07910	0.21552		0.36298
CULTURE	W = -0.07207	B = 0.26005	0.19094		0.32033
STRUCTUR					
PERFORMC	B = -0.77662	B = 0.76390	0.01995		0.04946
PERFORMC	W = 0.00000	W = 0.00000	0.00000		0.00000
PERFORMC	B = -0.77662	W = 0.00000	0.88928	WHOLES-30	1.71222*
PERFORMC	W = 0.00000	B = 0.76390	0.86934	WHOLES-30	1.66056*

DEGREES OF FREEDOM FOR Z					
BETWEEN-CELL	5	5			
WITHIN-CELL	6	6			
PRACTICAL SIGNIFICANCE CRITERIA					
S-15	A > OR =		0.26180		
S-30	A > OR =		0.52360		
WHOLES-15	A > OR =		0.26180		
WHOLES-30	A > OR =		0.52360		
PARTS-15	A < OR =		-0.26180		
PARTS-30	A < OR =		-0.52360		

NOTE B INDICATES BETWEEN-CELL CORRELATION, W INDICATES WITHIN-CELL CORRELATION
*P<.05 **P <. 01

TABLE MRA
(LEVEL = 2)
MULTIPLE RELATIONSHIP ANALYSIS

		CORRELATIONS		DIFFERENCES		
		CONDITION 1	CONDITION 2	A	INDUCTION	Z

CULTURE						
PERFORMC	B =	0.76200	B =	0.79512		-0.13319
PERFORMC	W =	0.00000	W =	0.00000		0.00000
PERFORMC	B =	0.76200	W =	0.00000	0.86640	WHOLES-30 1.65306*
PERFORMC	W =	0.00000	B =	0.79512	0.91921	WHOLES-30 1.79217*

DEGREES OF FREEDOM FOR Z						
	BETWEEN-CELL	5		5		
	WITHIN-CELL	6		6		
PRACTICAL SIGNIFICANCE CRITERIA						
S-15	A > OR =				0.26180	
S-30	A > OR =				0.52360	
WHOLES-15	A > OR =				0.26180	
WHOLES-30	A > OR =				0.52360	
PARTS-15	A < OR =				-0.26180	
PARTS-30	A < OR =				-0.52360	

NOTE B INDICATES BETWEEN-CELL CORRELATION, W INDICATES WITHIN-CELL CORRELATION
*P<.05 **P <. 01