

Program written by DETECT for Windows

MULTIPLE (2) LEVEL ANALYSIS FROM SECTION 5.4

13 1 1 2 2 4 0 0 0 6 2 0 1 0 0

PERFORMC

TASKCLAR

(3F2.0,2F1.0,F2.0,4X,2F2.0)

DDDDDDDD	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	
DDDDDDDD	EEEEEEEE	TT	EEEEEEEE	CCCCC	TT	

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DATA ENQUIRY THAT TESTS ENTITY AND  
 CORRELATIONAL/CAUSAL THEORIES  
 PROGRAM TITLE  
 MULTIPLE (2) LEVEL ANALYSIS FROM SECTION 5.4

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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	4,
SEVEN	NUMBER OF ADDITIONAL LEVELS OF ANALYSIS	0,
EIGHT	MULTIPLE-VARIABLE ANALYSIS DELETED. OPTION	0,
NINE	MULTIPLE-RELATIONSHIP ANALYSIS DELETED. OPTION	0,
TEN	NUMBER OF VARIABLES NOT TO BE ANALYZED	6,
ELEVEN	NUMBER OF VARIABLES TO BE ANALYZED	2,
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)	0,
TEN	BETWEEN-CELL (TABLE MVAB)	0,
ELEVEN	CORRELATION MATRIX DELETED. OPTION	0,
TWELVE	DEVIATIONS NOT OUTPUT. OPTION	0,
THIRTEEN	MULTIPLE-RELATIONSHIP ANALYSIS DELETED (TABLE MRA)	0,
FOURTEEN	SEQUENCING PACKAGE CALLED. OPTION	1,
FIFTEEN	EXTRA ROUNDING DELETED. OPTION	0

TABLE III  
ADDITIONAL INFORMATION

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ADDITIONAL CELL INDICATOR LINE(S) GIL ENTRY SEVEN = 0  
NO LINES READ  
LABEL LINE(S) GIL ENTRY TWELVE = 0  
PERFORMC  
TASKCLAR  
FORMAT LINE(S) GIL ENTRY THIRTEEN = 1  
(3F2.0,2F1.0,F2.0,4X,2F2.0)

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  
40

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

CELL ID NUMBER	CELL SIZE
1	2
7	2
9	2
34	2
35	2
3	2
2	2
10	2
36	2
38	2
4	2
5	2
31	2
37	2
39	2
6	2
8	2
33	2
32	2
40	2

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

VARIABLE	AVERAGE	AVERAGE SUMS OF SQUARES		
	TOTAL SCORE	TOTAL	BETWEEN	WITHIN
PERFORMC	22.75000	133.58750	133.26250	0.32500
TASKCLAR	18.75000	51.78750	51.21250	0.57500
TOTAL NUMBER OF CASES	40			

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

ETA CORRELATIONS				F RATIOS		
	BETWEEN	WITHIN	E RATIO INDUCTION	BETWEEN	WITHIN	PROB
PERFORMC	0.99878	0.04932	20.24941 WHOLES-30	431.61943		0.0000
TASKCLAR	0.99443	0.10537	9.43744 WHOLES-30	93.75286		0.0000
AVERAGES	0.99661	0.07735	14.84342	262.68615	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 =				19,	20	
DEGREES OF FREEDOM FOR (WITHIN) F-RATIO =				20,	19	

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

-----  
 CORRELATIONS  
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	BETWEEN	WITHIN	A-VALUE	INDUCTION	Z-VALUE
PERFORMC					
TASKCLAR	-0.96793	-0.11566	1.20094	WHOLES-30	5.74288**
AVERAGES	-0.96793	-0.11566	1.20094		5.74288

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 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

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 \*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	
PERFORMC							
TASKCLAR	3.85298 S-30	16.34681	0.0000	0.11644	0.50757	0.6176	
AVERAGES	3.85298	16.34681		0.11644	0.50757		
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,		18	* INDICATES		
DEGREES OF FREEDOM FOR (WITHIN)		T TEST = 1,		19	INDUCTION		

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

		TOTAL			COMPONENTS		
		CORRELATION	R TEST	T TEST	PROB	BETWEEN	WITHIN INDUCTION
PERFORMC							
30	TASKCLAR	-0.96197	3.52180	21.70983	0.0000	-0.96137	-0.00060
	AVERAGES	-0.96197	3.52180	21.70983		-0.96137	-0.00060
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 CF  
(LEVEL = 2      CONDITION = 1)  
CELL FREQUENCIES

CELL ID NUMBER	CELL SIZE
1	12
2	8
4	8
3	12

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

VARIABLE	AVERAGE	AVERAGE SUMS OF SQUARES		
	TOTAL SCORE	TOTAL	BETWEEN	WITHIN
PERFORMC	0.00000	133.26250	130.66667	2.59583
TASKCLAR	0.00000	51.21250	50.31667	0.89583
TOTAL NUMBER OF CASES	40			

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

ETA CORRELATIONS				F RATIOS		
	BETWEEN	WITHIN	E RATIO INDUCTION	BETWEEN	WITHIN	PROB
PERFORMC	0.99021	0.13957	7.09486 WHOLES-30	268.46442		0.0000
TASKCLAR	0.99122	0.13226	7.49449 WHOLES-30	299.55969		0.0000
AVERAGES	0.99071	0.13591	7.29468	284.01205	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 =	3,	16
DEGREES OF FREEDOM FOR (WITHIN)				F-RATIO =	16,	3

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

-----  
 CORRELATIONS  
 -----

	BETWEEN	WITHIN	A-VALUE	INDUCTION	Z-VALUE
PERFORMC					
TASKCLAR	-0.98960	0.18307	1.24237	WHOLES-30	2.35919**
AVERAGES	-0.98960	0.18307	1.24237		2.35919

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 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	
PERFORMC							
TASKCLAR	6.88102 S-30	9.73123	0.0104	0.18621	0.72121	0.4819	
AVERAGES	6.88102	9.73123		0.18621	0.72121		
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,		2		* INDICATES	
DEGREES OF FREEDOM FOR (WITHIN)		T TEST = 1,		15		INDUCTION	

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

		TOTAL			COMPONENTS		
		CORRELATION	R TEST	T TEST	PROB	BETWEEN	WITHIN INDUCTION
PERFORMC							
30	TASKCLAR	-0.96793	3.85298	16.34681	0.0000	-0.97131	0.00338
	AVERAGES	-0.96793	3.85298	16.34681		-0.97131	0.00338
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,                      18							