*** Hypothesis ID: 14

Antecedent (empty)

Variable antecedent Before

Variable antecedent After

Succedent (empty)

Variable succedent Before

Total Alert

Variable succedent After

Total Warning

Quantifiers values:

a-frequency	11	11	a-frequency (BASE) from source contingency table
a-frequency	10	10	a-frequency (BASE) from source contingency table

Various interest measures from the four-fold tables:

	D%-Sum	0.69	0.69	Sum of differences of relative frequencies between state before
and aft	er			
	Df-Conf 0.29	0.2905	982906	Difference of values of Confidence
	Df-AFUI0.19	0.1942	045138	Difference of values of D-Confidence
	Df-FUE 0.34	0.3426	966292	Difference of values of E-Confidence
	Df-Avg 3.19	3.1921	855922	Difference of values of Average Difference
	R-Conf 1.52	1.5230	769231	Ratio of values of Confidence
	R-DFUI 2.88	2.8837	837838	Ratio of values of D-Confidence

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R-FUE 1.67 1.6703296703 Ratio of values of E-Confidence
R-Avg 29.73 29.7296703297 Ratio of values of Average Difference
H-Conf 1.52 1.5230769231 Higher of ratios of values of Confidence
H-DFUI 2.88 2.8837837838 Higher of ratios of values of D-Confidence
H-FUE 1.67 1.6703296703 Higher of ratios of values of E-Confidence
H-Avg 29.73 29.7296703297 Higher of ratios of values of Average Difference
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Values from STATE BEFORE:

a	11	11	ency from the contingency table			
b	2	2	b-frequ	ency from the contingency table		
С	24	24	c-frequ	ency from the contingency table		
d	141	141	d-frequ	ency from the contingency table		
r	13	13	r-frequ	ency (a+b) from the contingency table		
n	178	178	n-frequ	ency (a+b+c+d) from the contingency table		
Conf	0.85	0.8461	538462	Confidence (validity): a/(a+b)		
DConf	0.3	0.2972	972973	D-Confidence: a/(a+b+c)		
EConf	0.85	0.8539	325843	E-Confidence: (a+d)/(a+b+c+d)		
Supp	0.06	0.0617	977528	Support: a/(a+b+c+d)		
Cmplt	0.31	0.3142	857143	Completeness: a/(a+c)		
AvgDf	3.3	3.3032967033		Average difference: $a*(a+b+c+d)/((a+b)*(a+c))-1$ in <-1;inf)		
Lift	4.3	4.3032967033		Lift measure: $(a/(a+b))/((a+c)/(a+b+c+d)) = AvgDf + 1$		
LBound	0.87	0.8661	172452	Lower bound implication (p=0.9)		
UBoun	d	0.38	0.3786	550197 Upper bound implication (p=0.9)		
ELBour	nd	0.98 0.9809		239671 Lower bound equivalence (p=0.9)		
EUBou	nd	0.03 0.0321		490055 Upper bound equivalence (p=0.9)		
DLBour	nd	1	1	Lower bound double implication (p=0.9)		
DUBou	ound 0 0		0	Upper bound double implication (p=0.9)		
Fisher	0	0.000000236		Fisher test		
Chi-Sq	37.45	37.45472262		Chi-square test		

PSep	1.36	1.36363	363636 Paracor	nsistent separation index of ((b+c)/a)-1
bMean	0.8	0.8	Bayesian Mean	
bVAR	0.8	0.8	Bayesian Variar	nce
bStDev	0.1	0.1	Bayesian std. de	eviation
P(>=909	%)	0.16	0.1583600035	Bayesian Beta PDF integral (p=0.9)
P(>=959	%)	0.03	0.0300536518	Bayesian Beta PDF integral (p=0.95)

Values from STATE AFTER:

а	10	10 a-freque		ency from the contingency table		
b	8	8	b-frequ	ency from the contingency table		
С	79	79 c-frequ		ency from the contingency table		
d	81	81 d-frequ		iency from the contingency table		
r	18	18 r-freque		ency (a+b) from the contingency table		
n	178	178	n-frequ	ency (a+b+c+d) from the contingency table		
Conf	0.56	0.5555	555556	Confidence (validity): a/(a+b)		
DConf	0.1	0.1030	927835	D-Confidence: a/(a+b+c)		
EConf	0.51	0.5112	359551	E-Confidence: (a+d)/(a+b+c+d)		
Supp	0.06	0.0561797753		Support: a/(a+b+c+d)		
Cmplt	0.11	0.1123	595506	Completeness: a/(a+c)		
AvgDf	0.11	0.1111	111111	Average difference: $a*(a+b+c+d)/((a+b)*(a+c))-1$ in <-1;inf)		
Lift	1.11	1.1111	111111	Lift measure: $(a/(a+b))/((a+c)/(a+b+c+d)) = AvgDf+ 1$		
LBound	11	0.9999791174		Lower bound implication (p=0.9)		
UBound	d	0	0.0001	734573 Upper bound implication (p=0.9)		
ELBoun	nd	1	1	Lower bound equivalence (p=0.9)		
EUBoui	nd	0 0		Upper bound equivalence (p=0.9)		
DLBour	nd	1 1		Lower bound double implication (p=0.9)		
DUBou	nd	0 0		Upper bound double implication (p=0.9)		
Fisher	0.4	0.4022	027986	Fisher test		
Chi-Sq	0.25	0.2472	222222	Chi-square test		

PSep	7.7	7.7	Paraconsistent separation index of ((b+c)/a)-1
bMean	0.55	0.55	Bayesian Mean
bVAR	0.55	0.55	Bayesian Variance
bStDev	0.11	0.1085	620297 Bayesian std. deviation
P(>=909	%)	0	0.0000361403 Bayesian Beta PDF integral (p=0.9)

P(>=95%) 0 0.000000114 Bayesian Beta PDF integral (p=0.95)

Differences of absolute frequencies

Contingency table

Succedent NOT Succedent

Antecedent 1 6 7

NOT Antecedent 55 60 115

56 66 122

Row percentage

 Succedent
 NOT Succedent

 Antecedent
 14.29
 85.71
 100.00

 NOT Antecedent
 47.83
 52.17
 100.00

 45.90
 54.10
 100.00

Column percentage

Succedent NOT Succedent

Antecedent 1.79 9.09 5.74

NOT Antecedent 98.21 90.91 94.26

100.00 100.00 100.00

Total percentage

Succedent NOT Succedent

Antecedent 0.82 4.92 5.74

NOT Antecedent 45.08 49.18 94.26

45.90 54.10 100.00

Differences of relative frequencies

Contingency table

Succedent NOT Succedent

Antecedent 1 3 4

NOT Antecedent 31 34 65

32 37 69

Row percentage

Succedent NOT Succedent

Antecedent 25.00 75.00 100.00

NOT Antecedent 47.69 52.31 100.00

46.38 53.62 100.00

Column percentage

Succedent NOT Succedent

Antecedent 3.13 8.11 5.80

NOT Antecedent 96.88 91.89 94.20

100.00 100.00 100.00

Total percentage

Succedent NOT Succedent

Antecedent 1.45 4.35 5.80

NOT Antecedent 44.93 49.28 94.20

46.38 53.62 100.00

State Before Summary

Contingency table

Succedent NOT Succedent

Antecedent 11 2 13

NOT Antecedent 24 141 165

35 143 178

Row percentage

Succedent NOT Succedent

Antecedent 84.62 15.38 100.00

NOT Antecedent 14.55 85.45 100.00

19.66 80.34 100.00

Column percentage

Succedent NOT Succedent

Antecedent 31.43 1.40 7.30

NOT Antecedent 68.57 98.60 92.70

100.00 100.00 100.00

Total percentage

Succedent NOT Succedent

Antecedent 6.18 1.12 7.30

NOT Antecedent 13.48 79.21 92.70

19.66 80.34 100.00

State After Summary

Contingency table

Succedent NOT Succedent

Antecedent 10 8 18

NOT Antecedent 79 81 160

89 89 178

Row percentage

Succedent NOT Succedent

Antecedent 55.56 44.44 100.00

NOT Antecedent 49.38 50.63 100.00

50.00 50.00 100.00

Column percentage

Succedent NOT Succedent

Antecedent 11.24 8.99 10.11

NOT Antecedent 88.76 91.01 89.89

100.00 100.00 100.00

Total percentage

Succedent NOT Succedent

Antecedent 5.62 4.49 10.11

NOT Antecedent 44.38 45.51 89.89

50.00 50.00 100.00