

Kendall's W for 139 data:

1. comparing the difficulty 2. comparing the entropy
(diversity of responses) _____

SORT CASES BY HasValid.

SPLIT FILE SEPARATE BY HasValid. NPAR TESTS

/KENDALL=BBnJL95_1adol BBnJL95_1adults JLnB84_3 JLnS78_2a JLnS78_2b RNgG0

1 Acc

/STATISTICS DESCRIPTIVES QUANTILES

/MISSING LISTWISE.

NPar Tests

[DataSet1] C:\Users\Alice\Documents\Postdoc Freiburg\syllogism64\analysis\syllo64.sav

HasValid = N

Descriptive Statistics^a

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
BBnJL95_1adol	37	.1554	.17191	.00	.55	.0000	.1000	.2500
BBnJL95_1adults	37	.4432	.23955	.05	.90	.2250	.5000	.6500
JLnB84_3	37	.3932	.25527	.05	.90	.1750	.4500	.5500
JLnS78_2a	37	.6108	.19795	.15	.95	.4500	.6500	.7500
JLnS78_2b	37	.7095	.21980	.15	1.00	.6500	.7500	.8500
RNgG01	37	.3171	.16568	.00	.68	.1786	.3214	.4196
Acc	37	.3665175967	.1456323340	.0791366906	.6618705036	.2913669065	.3956834532	.4496402878

a. HasValid = N

Kendall's W Test

Ranks^a

	Mean Rank
BBnJL95_1adol	1.32
BBnJL95_1adults	4.28
JLnB84_3	3.73
JLnS78_2a	5.96
JLnS78_2b	6.39
RNgG01	2.85
Acc	3.46

a. HasValid = N

Test Statistics^a

N	37
Kendall's W ^b	.667
Chi-Square	147.988
df	6
Asymp. Sig.	.000

a. HasValid = N

b. Kendall's Coefficient of Concordance

HasValid = Y

Descriptive Statistics^a

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
BBnJL95_1adol	27	.3704	.34004	.00	.95	.0500	.2500	.7500
BBnJL95_1adults	27	.4241	.36568	.00	1.00	.1000	.2500	.8500
JLnB84_3	27	.3593	.35627	.00	1.00	.0000	.2000	.7000
JLnS78_2a	27	.5000	.33684	.00	1.00	.2000	.4500	.8500
JLnS78_2b	27	.6481	.28402	.00	1.00	.3500	.7000	.9000
RNnG01	27	.4226	.33249	.00	.89	.0893	.4107	.7857
Acc	27	.4788169464	.2922543028	.0431654676	.8848920863	.2661870504	.3525179856	.8057553957

a. HasValid = Y

Kendall's W Test

Ranks^a

	Mean Rank
BBnJL95_1adol	3.17
BBnJL95_1adults	3.65
JLnB84_3	2.48
JLnS78_2a	4.70
JLnS78_2b	5.94
RNnG01	3.50
Acc	4.56

a. HasValid = Y

Test Statistics^a

N	27
Kendall's W ^b	.296
Chi-Square	47.917
df	6
Asymp. Sig.	.000

a. HasValid = Y

b. Kendall's Coefficient of Concordance

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SPLIT FILE OFF.
SORT CASES BY syllogism(A).
DATASET ACTIVATE DataSet1.
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NPAR TESTS

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/KENDALL=E_BBnJL95_1adol E_BBnJL95_1adults E_JLnB84_3 E_JLnS78_2a E_JLnS78_2b E_RNnG01 Entropy
/STATISTICS DESCRIPTIVES QUANTILES
/MISSING LISTWISE.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
E_BBnJL95_1adol	64	1.3443	.44464	.29	2.25	1.0300	1.3190	1.5955
E_BBnJL95_1adults	64	1.1153	.53349	.00	2.20	.7476	1.0652	1.4184
E_JLnB84_3	64	1.4717	.47512	.29	2.28	1.1512	1.5832	1.8344
E_JLnS78_2a	64	1.6251	.51393	.29	2.50	1.2231	1.6216	2.0922
E_JLnS78_2b	64	1.4506	.47749	.29	2.36	1.1547	1.4372	1.8787
E_RNnG01	64	2.0065	.40164	1.10	2.62	1.7410	2.0334	2.3382
Entropy	64	2.1942	.28808	1.49	2.65	1.9615	2.2091	2.4552

Kendall's W Test

Ranks

	Mean Rank
E_BBnJL95_1adol	3.04
E_BBnJL95_1adults	2.23
E_JLnB84_3	3.45
E_JLnS78_2a	3.84
E_JLnS78_2b	3.07
E_RNnG01	5.89
Entropy	6.48

Test Statistics

N	64
Kendall's W ^a	.536
Chi-Square	205.929
df	6
Asymp. Sig.	.000

a. Kendall's Coefficient of Concordance

Kendall's W for 204 data:

SORT CASES BY HasValid.

SPLIT FILE SEPARATE BY HasValid.

NPAR TESTS

/KENDALL=BBnJL95_1adol BBnJL95_1adults JLnB84_3 JLnS78_2a JLnS78_2b RNnG0

1 Acc204

/STATISTICS DESCRIPTIVES QUANTILES

/MISSING LISTWISE.

NPar Tests

HasValid = N

Descriptive Statistics^a

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
BBnJL95_1adol	37	.1554	.17191	.00	.55	.0000	.1000	.2500
BBnJL95_1adults	37	.4432	.23955	.05	.90	.2250	.5000	.6500
JLnB84_3	37	.3932	.25527	.05	.90	.1750	.4500	.5500
JLnS78_2a	37	.6108	.19795	.15	.95	.4500	.6500	.7500
JLnS78_2b	37	.7095	.21980	.15	1.00	.6500	.7500	.8500
RNnG01	37	.3171	.16568	.00	.68	.1786	.3214	.4196
Acc204	37	.261129	.1005443	.0539	.4804	.208333	.279412	.313725

a. HasValid = N

Kendall's W Test

Ranks^a

	Mean Rank
BBnJL95_1adol	1.46
BBnJL95_1adults	4.53
JLnB84_3	3.84
JLnS78_2a	5.99
JLnS78_2b	6.42
RNnG01	3.20
Acc204	2.57

a. HasValid = N

Test Statistics^a

N	37
Kendall's W ^b	.694
Chi-Square	154.058
df	6
Asymp. Sig.	.000

a. HasValid = N

b. Kendall's Coefficient of Concordance

HasValid = Y**Descriptive Statistics^a**

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
BBnJL95_1adol	27	.3704	.34004	.00	.95	.0500	.2500	.7500
BBnJL95_1adults	27	.4241	.36568	.00	1.00	.1000	.2500	.8500
JLnB84_3	27	.3593	.35627	.00	1.00	.0000	.2000	.7000
JLnS78_2a	27	.5000	.33684	.00	1.00	.2000	.4500	.8500
JLnS78_2b	27	.6481	.28402	.00	1.00	.3500	.7000	.9000
RNnG01	27	.4226	.33249	.00	.89	.0893	.4107	.7857
Acc204	27	.413217	.2607620	.0490	.7990	.215686	.294118	.720588

a. HasValid = Y

Kendall's W Test

Ranks^a

	Mean Rank
BBnJL95_1adol	3.35
BBnJL95_1adults	3.74
JLnB84_3	2.56
JLnS78_2a	4.70
JLnS78_2b	6.00
RNnG01	3.80
Acc204	3.85

a. HasValid = Y

Test Statistics^a

N	27
Kendall's W ^b	.266
Chi-Square	43.030
df	6
Asymp. Sig.	.000

a. HasValid = Y

b. Kendall's Coefficient of Concordance

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SPLIT FILE OFF.  
SORT CASES BY syllogism(A).  
NPAR TESTS  
  /KENDALL=E_BBnJL95_1adol E_BBnJL95_1adults E_JLnB84_3 E_JLnS78_2a E_JLnS7  
8_2b E_RNnG01  
  Entropy204  
  /STATISTICS DESCRIPTIVES QUANTILES  
  /MISSING LISTWISE.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
E_BBnJL95_1adol	64	1.3443	.44464	.29	2.25	1.0300	1.3190	1.5955
E_BBnJL95_1adults	64	1.1153	.53349	.00	2.20	.7476	1.0652	1.4184
E_JLnB84_3	64	1.4717	.47512	.29	2.28	1.1512	1.5832	1.8344
E_JLnS78_2a	64	1.6251	.51393	.29	2.50	1.2231	1.6216	2.0922
E_JLnS78_2b	64	1.4506	.47749	.29	2.36	1.1547	1.4372	1.8787
E_RNnG01	64	2.0065	.40164	1.10	2.62	1.7410	2.0334	2.3382
Entropy204	64	2.5684	.20674	2.07	2.90	2.4354	2.5563	2.7711

Kendall's W Test

Ranks

	Mean Rank
E_BBnJL95_1adol	3.02
E_BBnJL95_1adults	2.22
E_JLnB84_3	3.45
E_JLnS78_2a	3.71
E_JLnS78_2b	3.05
E_RNnG01	5.58
Entropy204	6.97

Test Statistics

N	64
Kendall's W ^a	.598
Chi-Square	229.687
df	6
Asymp. Sig.	.000

a. Kendall's Coefficient of Concordance

CORRELATIONS :

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/VARIABLES=BBnJL95_1adol BBnJL95_1adults JLnB84_3 JLnS78_2a JLnS78_2b RNn
G01 Acc204 Acc
/PRINT=TWOTAIL NOSIG
/STATISTICS DESCRIPTIVES
/MISSING=PAIRWISE.

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Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
BBnJL95_1adol	.2461	.27578	64
BBnJL95_1adults	.4352	.29677	64
JLnB84_3	.3789	.29984	64
JLnS78_2a	.5641	.26881	64
JLnS78_2b	.6836	.24866	64
RNnG01	.3616	.25312	64
Acc204	.325291	.1989219	64
Acc139	.4138938849	.2247077485	64

Correlations

		BBnJL95_1adol	BBnJL95_1adults	JLnB84_3	JLnS78_2a	JLnS78_2b	RNnG01	Acc204	Acc139
BBnJL95_1adol	Pearson Correlation	1	.725**	.707**	.615**	.478**	.819**	.896**	.864**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	64	64	64	64	64	64	64	64
BBnJL95_1adults	Pearson Correlation	.725**	1	.850**	.807**	.678**	.793**	.803**	.860**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	64	64	64	64	64	64	64	64
JLnB84_3	Pearson Correlation	.707**	.850**	1	.737**	.641**	.787**	.770**	.822**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	64	64	64	64	64	64	64	64
JLnS78_2a	Pearson Correlation	.615**	.807**	.737**	1	.778**	.734**	.665**	.742**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	64	64	64	64	64	64	64	64
JLnS78_2b	Pearson Correlation	.478**	.678**	.641**	.778**	1	.622**	.629**	.712**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	64	64	64	64	64	64	64	64
RNnG01	Pearson Correlation	.819**	.793**	.787**	.734**	.622**	1	.897**	.906**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	64	64	64	64	64	64	64	64
Acc204	Pearson Correlation	.896**	.803**	.770**	.665**	.629**	.897**	1	.981**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	64	64	64	64	64	64	64	64
Acc139	Pearson Correlation	.864**	.860**	.822**	.742**	.712**	.906**	.981**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	64	64	64	64	64	64	64	64

** . Correlation is significant at the 0.01 level (2-tailed).

NONPAR CORR

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/VARIABLES=BBnJL95_1adol BBnJL95_1adults JLnB84_3 JLnS78_2a JLnS78_2b RNn
G01 Acc204 Acc
/PRINT=BOTH TWOTAIL NOSIG
/MISSING=PAIRWISE.

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Nonparametric Correlations

Correlations			BBnJL95_1adol	BBnJL95_1adults	JLnB84_3	JLnS78_2a	JLnS78_2b	RNg01	Acc204	Acc139
Kendall's tau_b	BBnJL95_1adol	Correlation Coefficient	1.000	.542**	.514**	.485**	.428**	.576**	.618**	.607**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	BBnJL95_1adults	Correlation Coefficient	.542**	1.000	.682**	.666**	.533**	.613**	.688**	.726**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	JLnB84_3	Correlation Coefficient	.514**	.682**	1.000	.614**	.524**	.609**	.597**	.642**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	JLnS78_2a	Correlation Coefficient	.485**	.666**	.614**	1.000	.608**	.559**	.554**	.599**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	JLnS78_2b	Correlation Coefficient	.428**	.533**	.524**	.608**	1.000	.458**	.539**	.579**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000
		N	64	64	64	64	64	64	64	64
Spearman's rho	BBnJL95_1adol	Correlation Coefficient	1.000	.701**	.672**	.647**	.544**	.722**	.768**	.753**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	BBnJL95_1adults	Correlation Coefficient	.701**	1.000	.842**	.826**	.695**	.779**	.847**	.876**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	JLnB84_3	Correlation Coefficient	.672**	.842**	1.000	.765**	.684**	.779**	.782**	.818**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	JLnS78_2a	Correlation Coefficient	.647**	.826**	.765**	1.000	.752**	.727**	.729**	.771**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	JLnS78_2b	Correlation Coefficient	.544**	.695**	.684**	.752**	1.000	.624**	.708**	.743**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	RNg01	Correlation Coefficient	.722**	.779**	.779**	.727**	.624**	1.000	.829**	.846**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.	.000	.000
		N	64	64	64	64	64	64	64	64
	Acc204	Correlation Coefficient	.768**	.847**	.782**	.729**	.708**	.829**	1.000	.989**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000
		N	64	64	64	64	64	64	64	64
	Acc139	Correlation Coefficient	.753**	.876**	.818**	.771**	.743**	.846**	.989**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.
		N	64	64	64	64	64	64	64	64

** . Correlation is significant at the 0.01 level (2-tailed).

CORRELATIONS

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/VARIABLES=E_BBnJL95_1adol E_BBnJL95_1adults E_JLnB84_3 E_JLnS78_2a E_JLnS78_2b E_RNg01 Entropy
Entropy204
/PRINT=TWOTAIL NOSIG
/STATISTICS DESCRIPTIVES
/MISSING=PAIRWISE.

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Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
E_BBnJL95_1adol	1.3443	.44464	64
E_BBnJL95_1adults	1.1153	.53349	64
E_JLnB84_3	1.4717	.47512	64
E_JLnS78_2a	1.6251	.51393	64
E_JLnS78_2b	1.4506	.47749	64
E_RNnG01	2.0065	.40164	64
entropy139	2.1942	.28808	64
Entropy204	2.5684	.20674	64

Correlations

		E_BBnJL95_1a dol	E_BBnJL95_1a adults	E_JLnB84_3	E_JLnS78_2a	E_JLnS78_2b	E_RNnG01	entropy139	Entropy204
E_BBnJL95_1adol	Pearson Correlation	1	.685**	.433**	.070	.436**	.248*	.611**	.525**
	Sig. (2-tailed)		.000	.000	.584	.000	.048	.000	.000
	N	64	64	64	64	64	64	64	64
E_BBnJL95_1adults	Pearson Correlation	.685**	1	.232	-.141	.227	-.124	.409**	.297*
	Sig. (2-tailed)	.000		.065	.268	.071	.329	.001	.017
	N	64	64	64	64	64	64	64	64
E_JLnB84_3	Pearson Correlation	.433**	.232	1	.239	.588**	.613**	.597**	.602**
	Sig. (2-tailed)	.000	.065		.058	.000	.000	.000	.000
	N	64	64	64	64	64	64	64	64
E_JLnS78_2a	Pearson Correlation	.070	-.141	.239	1	.521**	.689**	.357**	.439**
	Sig. (2-tailed)	.584	.268	.058		.000	.000	.004	.000
	N	64	64	64	64	64	64	64	64
E_JLnS78_2b	Pearson Correlation	.436**	.227	.588**	.521**	1	.699**	.646**	.673**
	Sig. (2-tailed)	.000	.071	.000	.000		.000	.000	.000
	N	64	64	64	64	64	64	64	64
E_RNnG01	Pearson Correlation	.248*	-.124	.613**	.689**	.699**	1	.575**	.668**
	Sig. (2-tailed)	.048	.329	.000	.000	.000		.000	.000
	N	64	64	64	64	64	64	64	64
entropy139	Pearson Correlation	.611**	.409**	.597**	.357**	.646**	.575**	1	.927**
	Sig. (2-tailed)	.000	.001	.000	.004	.000	.000		.000
	N	64	64	64	64	64	64	64	64
Entropy204	Pearson Correlation	.525**	.297*	.602**	.439**	.673**	.668**	.927**	1
	Sig. (2-tailed)	.000	.017	.000	.000	.000	.000	.000	
	N	64	64	64	64	64	64	64	64

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

NONPAR CORR

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/VARIABLES=E_BBnJL95_1adol E_BBnJL95_1adults E_JLnB84_3 E_JLnS78_2a E_JLnS78_2b E_RNnG01 Entropy
Entropy204
/PRINT=BOTH TWOTAIL NOSIG
/MISSING=PAIRWISE.

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Nonparametric Correlations

Correlations

			E_BBnJL95_1a dol	E_BBnJL95_1a dults	E_JLnB84_3	E_JLnS78_2a	E_JLnS78_2b	E_RNnG01	entropy139	Entropy204
Kendall's tau_b	E_BBnJL95_1adol	Correlation Coefficient	1.000	.471**	.254**	.042	.285**	.165	.429**	.394**
		Sig. (2-tailed)	.	.000	.003	.630	.001	.054	.000	.000
		N	64	64	64	64	64	64	64	64
	E_BBnJL95_1adults	Correlation Coefficient	.471**	1.000	.090	-.065	.175*	-.078	.281**	.211*
		Sig. (2-tailed)	.000	.	.299	.458	.045	.369	.001	.015
		N	64	64	64	64	64	64	64	64
	E_JLnB84_3	Correlation Coefficient	.254**	.090	1.000	.169	.361**	.421**	.394**	.406**
		Sig. (2-tailed)	.003	.299	.	.050	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	E_JLnS78_2a	Correlation Coefficient	.042	-.065	.169	1.000	.366**	.514*	.247**	.321**
		Sig. (2-tailed)	.630	.458	.050	.	.000	.000	.004	.000
		N	64	64	64	64	64	64	64	64
	E_JLnS78_2b	Correlation Coefficient	.285**	.175*	.361**	.366**	1.000	.462**	.430**	.439**
		Sig. (2-tailed)	.001	.045	.000	.000	.	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	E_RNnG01	Correlation Coefficient	.165	-.078	.421**	.514*	.462**	1.000	.383**	.458**
		Sig. (2-tailed)	.054	.369	.000	.000	.000	.	.000	.000
		N	64	64	64	64	64	64	64	64
	entropy139	Correlation Coefficient	.429**	.281**	.394**	.247**	.430**	.383**	1.000	.767**
		Sig. (2-tailed)	.000	.001	.000	.004	.000	.000	.	.000
		N	64	64	64	64	64	64	64	64
	Entropy204	Correlation Coefficient	.394**	.211*	.406**	.321**	.439**	.458**	.767**	1.000
		Sig. (2-tailed)	.000	.015	.000	.000	.000	.000	.000	.
		N	64	64	64	64	64	64	64	64
Spearman's rho	E_BBnJL95_1adol	Correlation Coefficient	1.000	.633**	.368**	.074	.395**	.229	.600**	.546**
		Sig. (2-tailed)	.	.000	.003	.562	.001	.069	.000	.000
		N	64	64	64	64	64	64	64	64
	E_BBnJL95_1adults	Correlation Coefficient	.633**	1.000	.152	-.095	.263*	-.113	.416**	.301*
		Sig. (2-tailed)	.000	.	.230	.455	.036	.372	.001	.015
		N	64	64	64	64	64	64	64	64
	E_JLnB84_3	Correlation Coefficient	.368**	.152	1.000	.259*	.498**	.615**	.544**	.561**
		Sig. (2-tailed)	.003	.230	.	.039	.000	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	E_JLnS78_2a	Correlation Coefficient	.074	-.095	.259*	1.000	.518**	.702**	.374**	.472**
		Sig. (2-tailed)	.562	.455	.039	.	.000	.000	.002	.000
		N	64	64	64	64	64	64	64	64
	E_JLnS78_2b	Correlation Coefficient	.395**	.263*	.498**	.518**	1.000	.646**	.599**	.621**
		Sig. (2-tailed)	.001	.036	.000	.000	.	.000	.000	.000
		N	64	64	64	64	64	64	64	64
	E_RNnG01	Correlation Coefficient	.229	-.113	.615**	.702**	.646**	1.000	.526**	.634**
		Sig. (2-tailed)	.069	.372	.000	.000	.000	.	.000	.000
		N	64	64	64	64	64	64	64	64
	entropy139	Correlation Coefficient	.600**	.416**	.544**	.374**	.599**	.526**	1.000	.922**
		Sig. (2-tailed)	.000	.001	.000	.002	.000	.000	.	.000
		N	64	64	64	64	64	64	64	64
	Entropy204	Correlation Coefficient	.546**	.301*	.561**	.472**	.621**	.634**	.922**	1.000
		Sig. (2-tailed)	.000	.015	.000	.000	.000	.000	.000	.
		N	64	64	64	64	64	64	64	64

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).