```
CLUSTER   Acc ZAvgTFil ZAvgT
 /METHOD WARD
 /MEASURE=SEUCLID
 /PRINT SCHEDULE
 /PLOT NONE.
```

Hierarchical Cluster

Case Processing Summary[a,b]

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
64	100.0	0	.0	64	100.0

a. Squared Euclidean Distance used

b. Ward Linkage

Ward Linkage

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	23	24	.000	0	0	31
2	32	56	.001	0	0	26
3	11	58	.001	0	0	21
4	21	26	.006	0	0	22
5	10	18	.013	0	0	10
6	27	37	.021	0	0	7
7	27	57	.033	6	0	14
8	25	28	.045	0	0	30
9	44	63	.058	0	0	23
10	10	19	.072	5	0	50
11	16	22	.087	0	0	28
12	47	64	.103	0	0	36
13	40	54	.120	0	0	26
14	27	59	.139	7	0	32
15	42	49	.157	0	0	19
16	41	48	.179	0	0	40
17	30	31	.202	0	0	37
18	2	5	.227	0	0	31
19	42	46	.262	15	0	38

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
20	4	15	.298	0	0	33
21	11	60	.338	3	0	29
22	21	52	.378	4	0	32
23	44	45	.420	9	0	40
24	51	62	.462	0	0	38
25	1	12	.507	0	0	49
26	32	40	.557	2	13	42
27	14	20	.608	0	0	44
28	16	29	.669	11	0	48
29	11	61	.730	21	0	36
30	25	39	.793	8	0	44
31	2	23	.856	18	1	39
32	21	27	.923	22	14	55
33	4	13	.994	20	0	46
34	35	50	1.070	0	0	46
35	33	43	1.164	0	0	45
36	11	47	1.259	29	12	54
37	30	55	1.361	17	0	50
38	42	51	1.501	19	24	47
39	2	7	1.644	31	0	52
40	41	44	1.808	16	23	45
41	3	9	1.975	0	0	51
42	32	36	2.148	26	0	56
43	8	34	2.324	0	0	58
44	14	25	2.509	27	30	48
45	33	41	2.823	35	40	49
46	4	35	3.153	33	34	51
47	6	42	3.537	0	38	57
48	14	16	3.983	44	28	53
49	1	33	4.453	25	45	60
50	10	30	5.088	10	37	53
51	3	4	5.779	41	46	52
52	2	3	6.756	39	51	54
53	10	14	7.926	50	48	55
54	2	11	9.405	52	36	57
55	10	21	10.956	53	32	58
56	32	38	12.754	42	0	59
57	2	6	14.711	54	47	60
58	8	10	17.380	43	55	59
59	8	32	23.204	58	56	62
60	1	2	29.271	49	57	63

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
61	17	53	37.726	0	0	62
62	8	17	74.089	59	61	63
63	1	8	129.181	60	62	0

```
DATASET ACTIVATE DataSet1.

SAVE OUTFILE='C:\Users\Alice\Documents\Postdoc Freiburg\syllogism64\analysis\syllo64.sav'
  /COMPRESSED.
QUICK CLUSTER Acc ZAvgTFil ZAvgT
  /MISSING=LISTWISE
  /CRITERIA=CLUSTER(2) MXITER(10) CONVERGE(0)
  /METHOD=KMEANS(NOUPDATE)
  /SAVE CLUSTER
  /PRINT ID(syllogism) INITIAL ANOVA CLUSTER DISTAN.
```

2 Clusters, K-Means

Initial Cluster Centers

	Cluster	
	1	2
Acc	.4964028777	.3021582734
Zscore(AvgTFil)	-.90500	5.35071
Zscore(AvgT)	-1.83210	4.01727

Iteration History[a]

Iteration	Change in Cluster Centers	
	1	2
1	1.879	2.660
2	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 2. The minimum distance between initial centers is 8.567.

Cluster Membership

Case Number	syllogism	Cluster	Distance
1	AA1	1	1.190
2	AA2	1	.445
3	AA3	1	.852
4	AA4	1	.620
5	AE1	1	.587
6	AE2	1	.853
7	AE3	1	.412
8	AE4	1	1.362
9	AI1	1	1.326
10	AI2	1	.701
11	AI3	1	.822
12	AI4	1	1.046
13	AO1	1	.518
14	AO2	1	.580
15	AO3	1	.416
16	AO4	1	1.168
17	EA1	2	1.751
18	EA2	1	.781
19	EA3	1	.876
20	EA4	1	.868
21	EE1	1	.413
22	EE2	1	1.187
23	EE3	1	.611
24	EE4	1	.607
25	EI1	1	.931
26	EI2	1	.492
27	EI3	1	.277
28	EI4	1	.979
29	EO1	1	.999
30	EO2	1	.932
31	EO3	1	1.020
32	EO4	1	1.644
33	IA1	1	1.707
34	IA2	1	1.643
35	IA3	1	.338
36	IA4	1	1.513
37	IE1	1	.364
38	IE2	2	1.837
39	IE3	1	.839
40	IE4	1	1.611
41	II1	1	1.614
42	II2	1	.483

Cluster Membership

Case Number	syllogism	Cluster	Distance
43	II3	1	1.879
44	II4	1	1.273
45	IO1	1	1.355
46	IO2	1	.617
47	IO3	1	.897
48	IO4	1	1.573
49	OA1	1	.634
50	OA2	1	.690
51	OA3	1	.203
52	OA4	1	.288
53	OE1	2	2.660
54	OE2	1	1.700
55	OE3	1	1.306
56	OE4	1	1.659
57	OI1	1	.245
58	OI2	1	.838
59	OI3	1	.260
60	OI4	1	.683
61	OO1	1	1.028
62	OO2	1	.458
63	OO3	1	1.180
64	OO4	1	1.026

Final Cluster Centers

	Cluster	
	1	2
Acc	.4264653851	.1582733813
Zscore(AvgTFil)	-.17409	3.53984
Zscore(AvgT)	-.10201	2.07427

Distances between Final Cluster Centers

Cluster	1	2
1		4.313
2	4.313	

ANOVA

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Acc	.206	1	.048	62	4.286	.043
Zscore(AvgTFil)	39.440	1	.380	62	103.790	.000
Zscore(AvgT)	13.543	1	.798	62	16.977	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Number of Cases in each Cluster

Cluster	1	61.000
	2	3.000
Valid		64.000
Missing		.000

```
QUICK CLUSTER Acc ZAvgTFil ZAvgT
 /MISSING=LISTWISE
 /CRITERIA=CLUSTER(3) MXITER(10) CONVERGE(0)
 /METHOD=KMEANS(NOUPDATE)
 /SAVE CLUSTER
 /PRINT ID(syllogism) INITIAL ANOVA CLUSTER DISTAN.
```

3 Clusters, K-Means

Initial Cluster Centers

	Cluster		
	1	2	3
Acc	.4964028777	.3021582734	.4172661871
Zscore(AvgTFil)	-.90500	5.35071	.47702
Zscore(AvgT)	-1.83210	4.01727	1.46834

Iteration History[a]

Iteration	Change in Cluster Centers		
	1	2	3
1	1.039	.000	.922
2	.081	.000	.087
3	.027	.000	.029
4	.000	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 4. The minimum distance between initial centers is 3.579.

Cluster Membership

Case Number	syllogism	Cluster	Distance
1	AA1	1	.520
2	AA2	1	.481
3	AA3	1	.370
4	AA4	1	.248
5	AE1	1	.578
6	AE2	3	1.086
7	AE3	1	.790
8	AE4	3	.793
9	AI1	1	.878
10	AI2	3	.663
11	AI3	1	.292
12	AI4	1	.466
13	AO1	1	.499
14	AO2	3	.469
15	AO3	1	.446
16	AO4	3	.306
17	EA1	3	3.197
18	EA2	3	.630
19	EA3	3	.628
20	EA4	3	.332
21	EE1	3	.575
22	EE2	3	.255
23	EE3	1	.282
24	EE4	1	.265
25	EI1	3	.198
26	EI2	3	.481
27	EI3	3	.696
28	EI4	3	.278

Cluster Membership

Case Number	syllogism	Cluster	Distance
29	EO1	3	.255
30	EO2	3	.698
31	EO3	3	.567
32	EO4	3	.847
33	IA1	1	1.002
34	IA2	3	1.338
35	IA3	1	.840
36	IA4	3	.788
37	IE1	3	.584
38	IE2	3	1.826
39	IE3	3	.470
40	IE4	3	.729
41	II1	1	.875
42	II2	1	.571
43	II3	1	1.141
44	II4	1	.533
45	IO1	1	.619
46	IO2	1	.685
47	IO3	1	.239
48	IO4	1	.830
49	OA1	1	.560
50	OA2	1	.881
51	OA3	1	.745
52	OA4	3	.756
53	OE1	2	.000
54	OE2	3	.829
55	OE3	3	.652
56	OE4	3	.851
57	OI1	3	.730
58	OI2	1	.291
59	OI3	3	.696
60	OI4	1	.290
61	OO1	1	.493
62	OO2	1	.826
63	OO3	1	.459
64	OO4	1	.332

Final Cluster Centers

	Cluster		
	1	2	3
Acc	.4521133094	.3021582734	.3780459503
Zscore(AvgTFil)	-.54629	5.35071	.39131
Zscore(AvgT)	-.74991	4.01727	.64452

Distances between Final Cluster Centers

Cluster	1	2	3
1		7.584	1.682
2	7.584		5.998
3	1.682	5.998	

ANOVA

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Acc	.050	2	.051	61	.980	.381
Zscore(AvgTFil)	21.463	2	.329	61	65.225	.000
Zscore(AvgT)	23.506	2	.262	61	89.682	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Number of Cases in each Cluster

Cluster	1	32.000
	2	1.000
	3	31.000
Valid		64.000
Missing		.000

```
 SORT CASES  BY valid.
SPLIT FILE SEPARATE BY valid.
QUICK CLUSTER Acc ZAvgTFil ZAvgT
  /MISSING=LISTWISE
  /CRITERIA=CLUSTER(3) MXITER(10) CONVERGE(0)
  /METHOD=KMEANS(NOUPDATE)
  /SAVE CLUSTER
  /PRINT ID(syllogism) INITIAL ANOVA CLUSTER DISTAN.
```

NVC

Initial Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.3021582734	.4964028777	.4172661871
Zscore(AvgTFil)	5.35071	-.90500	.47702
Zscore(AvgT)	4.01727	-1.83210	1.46834

a. 0=NVC; 1 =withVC = .00

Iteration History[a,b]

	Change in Cluster Centers		
Iteration	1	2	3
1	.000	1.026	.903
2	.000	.042	.068
3	.000	.000	.000

a. 0=NVC; 1 =withVC = .00

b. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is 3.579.

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
1	AA3	2	.423
2	AI1	2	.865
3	AI3	2	.227
4	AO1	2	.522
5	AO2	3	.408
6	EE1	3	.555
7	EE2	3	.366
8	EE3	2	.403
9	EE4	2	.386
10	EO1	3	.189
11	EO2	3	.536
12	EO3	3	.426
13	EO4	3	.825
14	IA2	3	1.471
15	IA3	3	.907
16	II1	2	.782
17	II2	2	.607
18	II3	2	1.067
19	II4	2	.467
20	IO1	2	.527
21	IO2	2	.710
22	IO3	2	.186
23	IO4	2	.732
24	OA1	2	.557
25	OA2	2	.951
26	OE1	1	.000
27	OE2	3	.849
28	OE3	3	.562
29	OE4	3	.834
30	OI1	3	.677
31	OI2	2	.215
32	OI3	3	.613
33	OI4	2	.317
34	OO1	2	.420
35	OO2	2	.882
36	OO3	2	.428
37	OO4	2	.293

a. 0=NVC; 1 =withVC = .00

Final Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.3021582734	.3816219751	.3473792395
Zscore(AvgTFil)	5.35071	-.63044	.22787
Zscore(AvgT)	4.01727	-.80754	.65940

a. 0=NVC; 1 =withVC = .00

Distances between Final Cluster Centers[a]

Cluster	1	2	3
1		7.685	6.125
2	7.685		1.700
3	6.125	1.700	

a. 0=NVC; 1 =withVC = .00

ANOVA[a]

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Acc	.007	2	.022	34	.324	.725
Zscore(AvgTFil)	18.667	2	.124	34	150.323	.000
Zscore(AvgT)	18.010	2	.300	34	59.986	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

a. 0=NVC; 1 =withVC = .00

Number of Cases in each Cluster[a]

Cluster	1	1.000
	2	22.000
	3	14.000
Valid		37.000
Missing		.000

a. 0=NVC; 1 =withVC = .00

with valid conclusion(s)

Initial Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.8633093525	.2661870504	.0431654676
Zscore(AvgTFil)	-.80534	.48937	3.55510
Zscore(AvgT)	-1.62643	1.35768	.32695

a. 0=NVC; 1 =withVC = 1.00

Iteration History[a,b]

	Change in Cluster Centers		
Iteration	1	2	3
1	.979	.832	.000
2	.088	.052	.000
3	.000	.000	.000

a. 0=NVC; 1 =withVC = 1.00

b. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is 3.242.

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
38	AA1	1	.551
39	AA2	1	.270
40	AA4	1	.369
41	AE1	1	.341
42	AE2	2	1.026
43	AE3	1	.586
44	AE4	2	.849
45	AI2	2	.579
46	AI4	1	.404
47	AO3	1	.404
48	AO4	2	.345
49	EA1	3	.000
50	EA2	2	.553
51	EA3	2	.557
52	EA4	2	.329
53	EI1	2	.245
54	EI2	2	.416
55	EI3	2	.623
56	EI4	2	.328
57	IA1	1	1.060
58	IA4	2	.800
59	IE1	2	.511
60	IE2	2	1.912
61	IE3	2	.474
62	IE4	2	.790
63	OA3	1	.703
64	OA4	2	.683

a. 0=NVC; 1 =withVC = 1.00

Final Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.6490807354	.4143038510	.0431654676
Zscore(AvgTFil)	-.40922	.32097	3.55510
Zscore(AvgT)	-.66725	.59972	.32695

a. 0=NVC; 1 =withVC = 1.00

Distances between Final Cluster Centers[a]

Cluster	1	2	3
1		1.481	4.132
2	1.481		3.267
3	4.132	3.267	

a. 0=NVC; 1 =withVC = 1.00

ANOVA[a]

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Acc	.261	2	.071	24	3.682	.040
Zscore(AvgTFil)	7.423	2	.199	24	37.273	.000
Zscore(AvgT)	4.736	2	.250	24	18.973	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

a. 0=NVC; 1 =withVC = 1.00

Number of Cases in each Cluster[a]

Cluster	1	9.000
	2	17.000
	3	1.000
Valid		27.000
Missing		.000

a. 0=NVC; 1 =withVC = 1.00

```
QUICK CLUSTER ZAvgTFil ZAvgT
 /MISSING=LISTWISE
 /CRITERIA=CLUSTER(3) MXITER(10) CONVERGE(0)
 /METHOD=KMEANS(NOUPDATE)
 /SAVE CLUSTER
 /PRINT ID(syllogism) INITIAL ANOVA CLUSTER DISTAN.
```

Cluster according to with-valid-conclusion or NVC, time only

NVC

Initial Cluster Centers[a]

	Cluster		
	1	2	3
Zscore(AvgTFil)	5.35071	.47702	-.90500
Zscore(AvgT)	4.01727	1.46834	-1.83210

a. 0=NVC; 1 =withVC = .00

Iteration History[a,b]

	Change in Cluster Centers		
Iteration	1	2	3
1	.000	.901	1.020
2	.000	.067	.042
3	.000	.000	.000

a. 0=NVC; 1 =withVC = .00

b. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is 3.578.

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
1	AA3	3	.419
2	AI1	3	.818
3	AI3	3	.206
4	AO1	3	.444
5	AO2	2	.365
6	EE1	2	.550
7	EE2	2	.357
8	EE3	3	.289
9	EE4	3	.287
10	EO1	2	.157
11	EO2	2	.536
12	EO3	2	.420
13	EO4	2	.823
14	IA2	2	1.446
15	IA3	2	.899
16	II1	3	.780
17	II2	3	.601
18	II3	3	1.061
19	II4	3	.457
20	IO1	3	.525
21	IO2	3	.710
22	IO3	3	.161
23	IO4	3	.732
24	OA1	3	.507
25	OA2	3	.919
26	OE1	1	.000
27	OE2	2	.846
28	OE3	2	.562
29	OE4	2	.832
30	OI1	2	.677
31	OI2	3	.186
32	OI3	2	.605
33	OI4	3	.305
34	OO1	3	.420
35	OO2	3	.881
36	OO3	3	.370
37	OO4	3	.198

a. 0=NVC; 1 =withVC = .00

Final Cluster Centers[a]

	Cluster		
	1	2	3
Zscore(AvgTFil)	5.35071	.22787	-.63044
Zscore(AvgT)	4.01727	.65940	-.80754

a. 0=NVC; 1 =withVC = .00

Distances between Final Cluster Centers[a]

Cluster	1	2	3
1		6.125	7.685
2	6.125		1.700
3	7.685	1.700	

a. 0=NVC; 1 =withVC = .00

ANOVA[a]

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Zscore(AvgTFil)	18.667	2	.124	34	150.323	.000
Zscore(AvgT)	18.010	2	.300	34	59.986	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

a. 0=NVC; 1 =withVC = .00

Number of Cases in each Cluster[a]

Cluster	1	1.000
	2	14.000
	3	22.000
Valid		37.000
Missing		.000

a. 0=NVC; 1 =withVC = .00

with valid conclusion(s)

Initial Cluster Centers[a]

	Cluster		
	1	2	3
Zscore(AvgTFil)	-.80534	3.55510	.48937
Zscore(AvgT)	-1.62643	.32695	1.35768

a. 0=NVC; 1 =withVC = 1.00

Iteration History[a,b]

	Change in Cluster Centers		
Iteration	1	2	3
1	.963	.000	.820
2	.078	.000	.051
3	.000	.000	.000

a. 0=NVC; 1 =withVC = 1.00

b. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is 3.234.

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
38	AA1	1	.529
39	AA2	1	.268
40	AA4	1	.022
41	AE1	1	.247
42	AE2	3	.974
43	AE3	1	.556
44	AE4	3	.817
45	AI2	3	.426
46	AI4	1	.372
47	AO3	1	.275
48	AO4	3	.297
49	EA1	2	.000
50	EA2	3	.322
51	EA3	3	.330
52	EA4	3	.121
53	EI1	3	.143
54	EI2	3	.416
55	EI3	3	.612
56	EI4	3	.293

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
57	IA1	1	1.038
58	IA4	3	.705
59	IE1	3	.507
60	IE2	3	1.891
61	IE3	3	.460
62	IE4	3	.776
63	OA3	1	.627
64	OA4	3	.674

a. 0=NVC; 1 =withVC = 1.00

Final Cluster Centers[a]

	Cluster		
	1	2	3
Zscore(AvgTFil)	-.40922	3.55510	.32097
Zscore(AvgT)	-.66725	.32695	.59972

a. 0=NVC; 1 =withVC = 1.00

Distances between Final Cluster Centers[a]

Cluster	1	2	3
1		4.087	1.462
2	4.087		3.246
3	1.462	3.246	

a. 0=NVC; 1 =withVC = 1.00

ANOVA[a]

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Zscore(AvgTFil)	7.423	2	.199	24	37.273	.000
Zscore(AvgT)	4.736	2	.250	24	18.973	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

a. 0=NVC; 1 =withVC = 1.00

Number of Cases in each Cluster[a]

Cluster	1	9.000
	2	1.000
	3	17.000
Valid		27.000
Missing		.000

a. 0=NVC; 1 =withVC = 1.00

```
QUICK CLUSTER Acc
 /MISSING=LISTWISE
 /CRITERIA=CLUSTER(3) MXITER(10) CONVERGE(0)
 /METHOD=KMEANS(NOUPDATE)
 /SAVE CLUSTER
 /PRINT ID(syllogism) INITIAL ANOVA CLUSTER DISTAN.
```

Cluster according to with-valid-conclusion or NVC, Acc only

NVC

Initial Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.6618705036	.0791366906	.3597122302

a. 0=NVC; 1 =withVC = .00

Iteration History[a,b]

	Change in Cluster Centers		
Iteration	1	2	3
1	.038	.044	.023
2	.000	.015	.006
3	.000	.000	.000

a. 0=NVC; 1 =withVC = .00

b. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is ....

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
1	AA3	3	.051
2	AI1	2	.038
3	AI3	3	.100
4	AO1	2	.031
5	AO2	2	.027
6	EE1	3	.036
7	EE2	3	.036
8	EE3	1	.038
9	EE4	1	.016
10	EO1	3	.065
11	EO2	3	.050
12	EO3	3	.029
13	EO4	3	.007
14	IA2	2	.060
15	IA3	2	.091
16	II1	3	.072
17	II2	3	.093
18	II3	3	.108
19	II4	3	.087
20	IO1	3	.057
21	IO2	3	.029
22	IO3	3	.087
23	IO4	3	.007
24	OA1	2	.012
25	OA2	2	.002
26	OE1	3	.086
27	OE2	3	.029
28	OE3	3	.057
29	OE4	3	.007
30	OI1	3	.043
31	OI2	3	.115
32	OI3	3	.058
33	OI4	3	.079
34	OO1	3	.007
35	OO2	3	.022
36	OO3	1	.027
37	OO4	1	.027

a. 0=NVC; 1 =withVC = .00

Final Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.6241007194	.1387461459	.3882125069

a. 0=NVC; 1 =withVC = .00

Distances between Final Cluster Centers[a]

Cluster	1	2	3
1		.485	.236
2	.485		.249
3	.236	.249	

a. 0=NVC; 1 =withVC = .00

ANOVA[a]

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Acc	.320	2	.004	34	88.764	.000

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a. 0=NVC; 1 =withVC = .00

Number of Cases in each Cluster[a]

Cluster	1	4.000
	2	7.000
	3	26.000
Valid		37.000
Missing		.000

a. 0=NVC; 1 =withVC = .00

with valid conclusion(s)

Initial Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.8848920863	.5251798561	.0431654676

a. 0=NVC; 1 =withVC = 1.00

Iteration History[a,b]

	Change in Cluster Centers		
Iteration	1	2	3
1	.050	.100	.133
2	.015	.032	.000
3	.000	.000	.000

a. 0=NVC; 1 =withVC = 1.00

b. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is ....

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
38	AA1	1	.014
39	AA2	1	.137
40	AA4	3	.105
41	AE1	1	.065
42	AE2	3	.082
43	AE3	1	.014
44	AE4	3	.004
45	AI2	1	.014
46	AI4	1	.014
47	AO3	2	.040
48	AO4	2	.197
49	EA1	3	.133
50	EA2	1	.043
51	EA3	1	.043
52	EA4	3	.068
53	EI1	3	.040
54	EI2	2	.003
55	EI3	2	.091
56	EI4	3	.090
57	IA1	1	.043

Cluster Membership[a]

Case Number	syllogism	Cluster	Distance
58	IA4	1	.029
59	IE1	2	.048
60	IE2	3	.046
61	IE3	2	.091
62	IE4	3	.090
63	OA3	2	.062
64	OA4	2	.132

a. 0=NVC; 1 =withVC = 1.00

Final Cluster Centers[a]

	Cluster		
	1	2	3
Acc	.8201438849	.3929856115	.1758593125

a. 0=NVC; 1 =withVC = 1.00

Distances between Final Cluster Centers[a]

Cluster	1	2	3
1		.427	.644
2	.427		.217
3	.644	.217	

a. 0=NVC; 1 =withVC = 1.00

ANOVA[a]

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Acc	1.025	2	.007	24	144.114	.000

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a. 0=NVC; 1 =withVC = 1.00

Number of Cases in each Cluster[a]

Cluster	1	10.000
	2	8.000
	3	9.000
Valid		27.000
Missing		.000

a. 0=NVC; 1 =withVC = 1.00