```
DATASET ACTIVATE DataSet1.
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:09:23
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.52
	Elapsed Time	00:00:00.58

[DataSet1] C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine

definition survey\SPSS\NN_EN_covid_nominal_9D.sav

Case Processing Summary

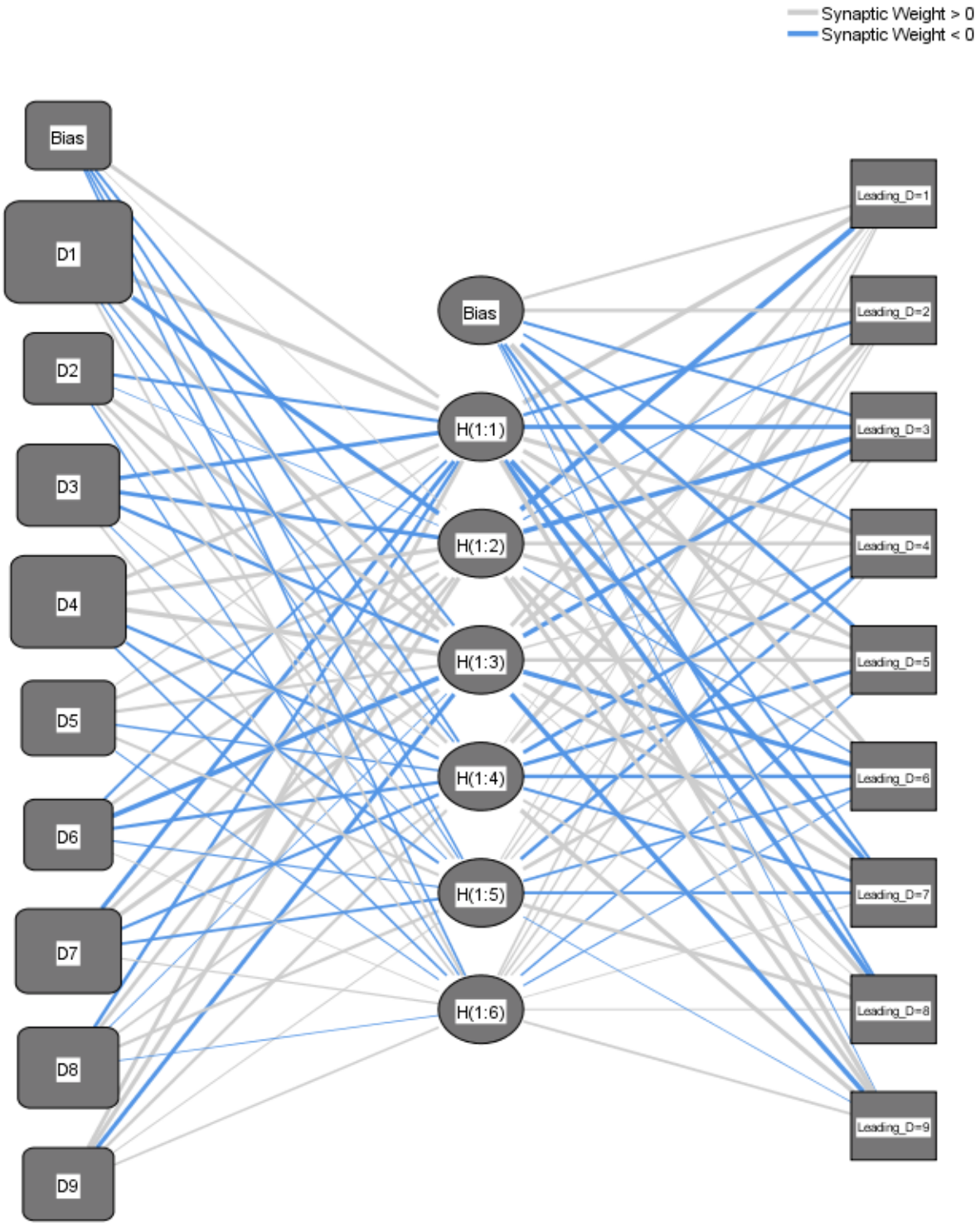
		N	Percent
Sample	Training	78	75.0%
	Testing	26	25.0%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		6
	Activation Function		Hyperbolic tangent

Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	20.536
	Percent Incorrect Predictions	11.5%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.07
Testing	Cross Entropy Error	11.264
	Percent Incorrect Predictions	11.5%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor		Predicted														
		Hidden Layer 1						Output Layer								
		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	1.370	.064	-.479	-.474	-.396	-.447									
	D1	2.998	-2.143	2.580	-.351	-.250	.471									
	D2	-.831	-.006	1.884	.893	.459	-.315									
	D3	-1.604	-1.484	-.993	.149	-.122	.358									
	D4	1.234	1.609	2.679	-.852	-.494	-.424									
	D5	.227	.855	.813	-.363	.536	-.172									
	D6	-.488	.969	-2.850	-.857	-.256	.096									
	D7	-1.605	1.225	1.814	-.786	-.513	.307									
	D8	-.928	1.186	-.088	.467	.749	-.083									
	D9	1.388	1.793	-1.493	.696	.125	.401									
Hidden Layer 1	(Bias)							.649	1.033	-.618	-.459	-1.468	2.956	-.550	-.521	-.103
	H(1:1)							2.864	-.888	-1.964	2.319	1.885	.483	-3.846	-2.906	2.645
	H(1:2)							-4.096	-.262	-3.661	1.132	1.441	-.260	2.556	3.274	2.068
	H(1:3)							1.239	3.085	-2.274	.397	1.209	-2.403	1.680	.106	-2.566
	H(1:4)							.021	2.267	.338	-1.287	-1.231	-1.126	-.573	.513	2.094
	H(1:5)							.147	.344	.119	-1.131	1.215	-.478	-.621	1.308	-.047
	H(1:6)							.442	.316	.428	.259	-.374	-.187	.111	.186	.473

Classification

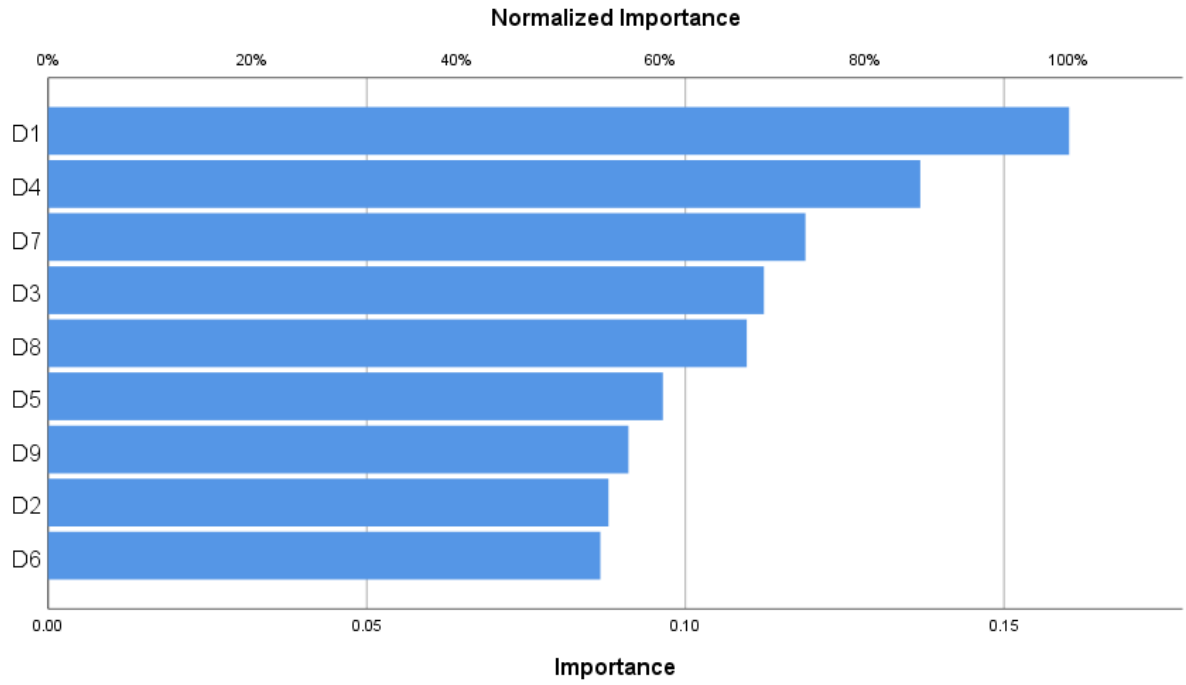
Sample	Observed	Predicted 1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	15	0	0	0	0	0	0	0	0	100.0%
	2	0	7	0	0	0	0	0	0	0	100.0%
	3	0	0	6	0	0	0	0	0	0	100.0%
	4	0	0	0	4	0	1	0	0	0	80.0%
	5	0	0	0	0	2	0	0	0	0	100.0%
	6	2	0	2	0	0	14	0	0	1	73.7%
	7	0	0	0	0	0	1	8	1	0	80.0%
	8	0	0	0	0	0	0	0	4	0	100.0%
	9	0	1	0	0	0	0	0	0	9	90.0%
	Overall Percent	21.8%	10.3%	10.3%	5.1%	2.6%	20.5%	10.3%	6.4%	12.8%	88.5%
Testing	1	5	0	0	1	0	0	0	0	0	83.3%
	2	0	0	0	0	0	0	0	0	0	0.0%
	3	0	0	4	0	0	0	0	0	0	100.0%
	4	0	0	0	2	0	0	0	0	0	100.0%
	5	0	0	0	0	2	0	0	0	0	100.0%
	6	0	0	1	1	0	4	0	0	0	66.7%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	0	0	0	0	0	1	0	100.0%
	9	0	0	0	0	0	0	0	0	2	100.0%
	Overall Percent	19.2%	0.0%	19.2%	15.4%	7.7%	15.4%	11.5%	3.8%	7.7%	88.5%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.160	100.0%
SANITATION AND HYGIENE	.088	54.9%
ISOLATION OF INFECTED	.112	70.1%
TOTAL ISOLATION	.137	85.4%
HEALTH CARE	.096	60.2%

VIRUS DISSEMINATION	.087	54.1%
LIFESTYLE CHANGES	.119	74.2%
RIGHTS AND FREEDOMS INFRINGEMENT	.110	68.4%
BUREAUCRATIC RESPONSE	.091	56.8%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:09:35
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.48

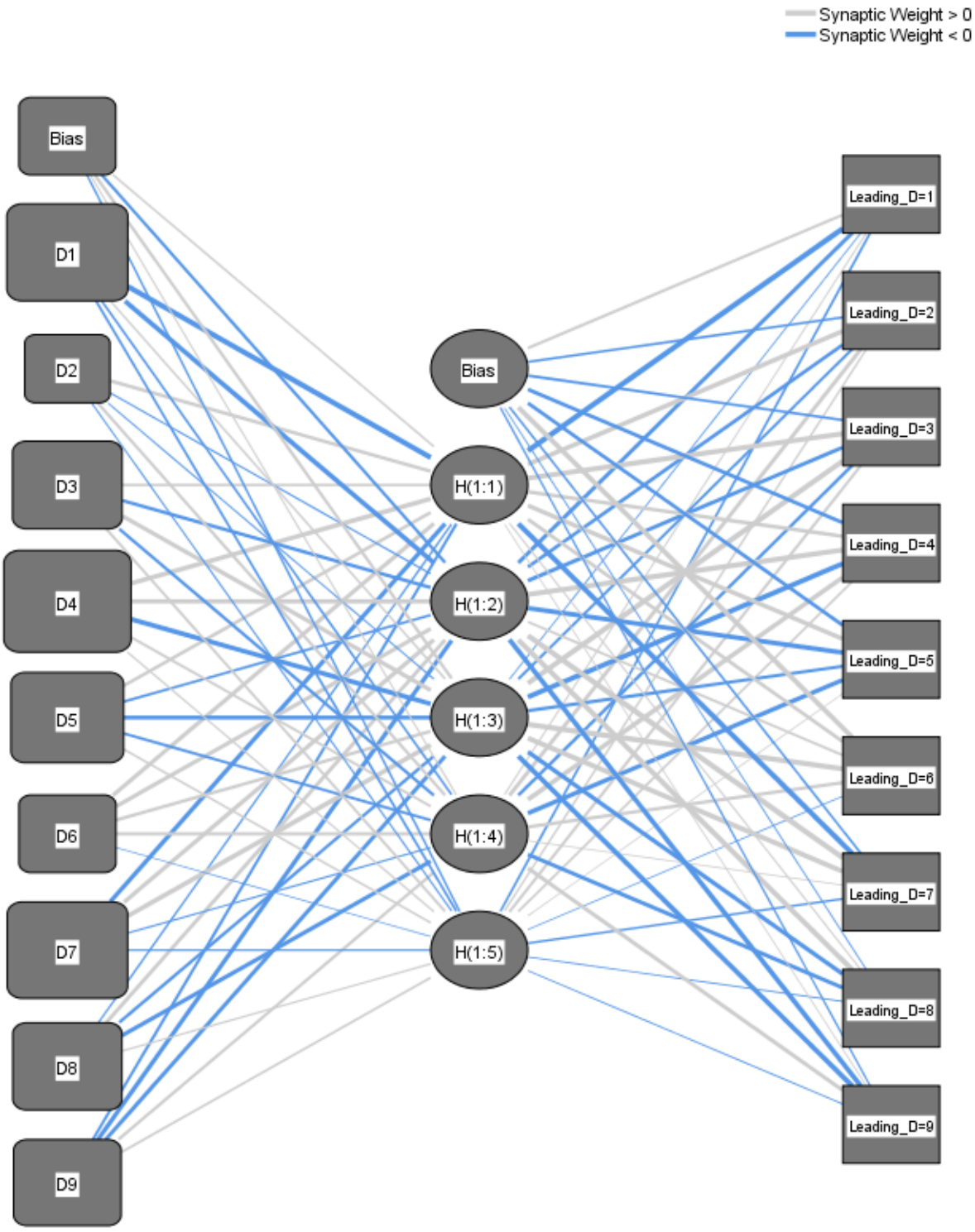
Case Processing Summary

		N	Percent
Sample	Training	75	72.1%
	Testing	29	27.9%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		5
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Model Summary

Training	Cross Entropy Error	31.210
	Percent Incorrect Predictions	17.3%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.05
Testing	Cross Entropy Error	28.415
	Percent Incorrect Predictions	27.6%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted													
		Hidden Layer 1					Output Layer								
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	.271	-.565	.630	.142	-.309									
	D1	-2.982	-1.679	.258	-.364	-.370									
	D2	.811	-.156	-.137	.558	-.149									
	D3	.464	-.812	1.156	-.643	.421									
	D4	1.392	1.389	-1.667	.419	.177									
	D5	.798	-.387	-1.009	-.489	.311									
	D6	1.095	1.095	.788	.741	-.008									
	D7	-1.336	1.136	1.577	-.158	-.200									
	D8	-.233	.918	-.682	-1.123	.204									
	D9	-.509	-1.281	-1.086	.562	.366									
Hidden Layer 1	(Bias)						.525	-.376	-.427	-.933	-.884	1.777	-.362	-.060	-.210
	H(1:1)						-3.020	1.529	2.197	.903	1.354	.834	-2.344	.138	.038
	H(1:2)						-1.009	-.846	-.945	2.311	-1.645	.380	2.999	2.330	-1.759
	H(1:3)						-.049	-.433	2.437	-2.004	-.789	2.442	1.887	-1.260	-1.805
	H(1:4)						.098	.936	-.766	1.465	-1.348	.807	.039	-1.034	.981
	H(1:5)						-.369	.254	.491	.367	.007	-.026	-.320	-.061	-.085

Classification

Sample	Observed	Predicted

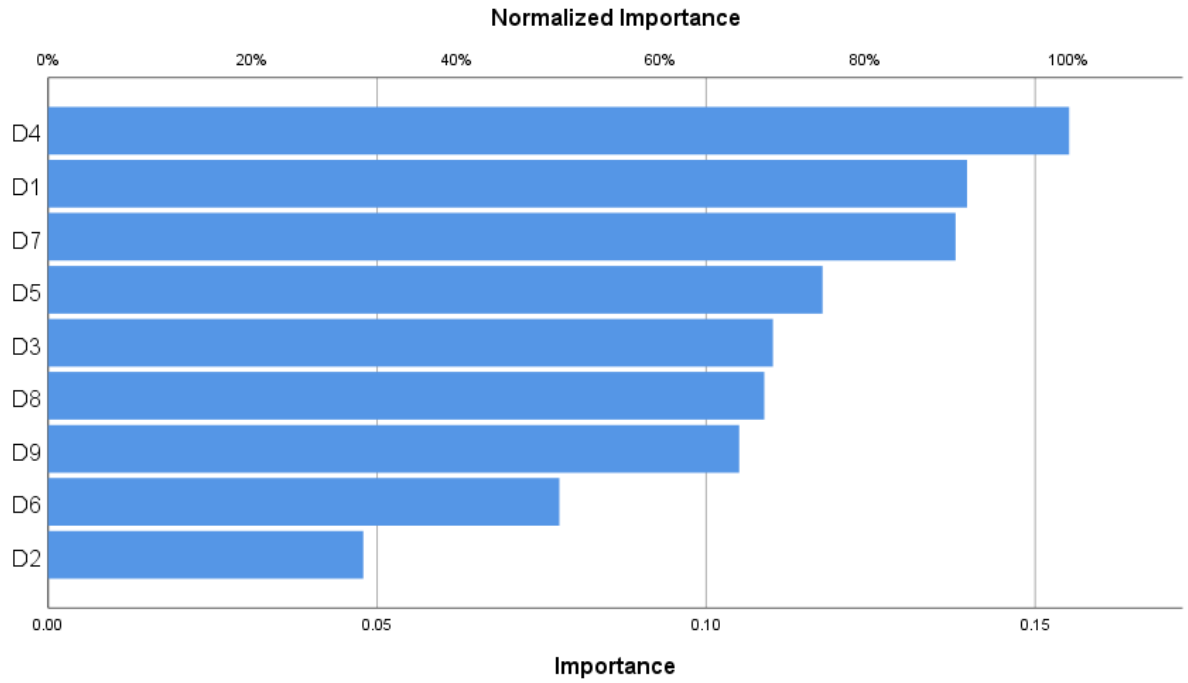
		1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	15	0	0	0	0	0	0	0	0	100.0%
	2	0	0	0	0	0	3	0	0	2	0.0%
	3	0	0	5	0	0	1	0	0	0	83.3%
	4	0	0	0	7	0	0	0	0	0	100.0%
	5	0	0	0	0	3	0	0	0	0	100.0%
	6	3	0	1	0	0	9	2	0	1	56.3%
	7	0	0	0	0	0	0	10	0	0	100.0%
	8	0	0	0	0	0	0	0	4	0	100.0%
	9	0	0	0	0	0	0	0	0	9	100.0%
	Overall Percent	24.0%	0.0%	8.0%	9.3%	4.0%	17.3%	16.0%	5.3%	16.0%	82.7%
Testing	1	5	0	0	0	0	0	0	1	0	83.3%
	2	0	0	1	0	0	0	0	0	1	0.0%
	3	0	0	3	0	0	1	0	0	0	75.0%
	4	0	0	0	0	0	0	0	0	0	0.0%
	5	0	0	0	0	1	0	0	0	0	100.0%
	6	0	0	1	2	0	6	0	0	0	66.7%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	0	0	0	0	1	0	0	0.0%
	9	0	0	0	0	0	0	0	0	3	100.0%
	Overall Percent	17.2%	0.0%	17.2%	6.9%	3.4%	24.1%	13.8%	3.4%	13.8%	72.4%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.140	90.0%
SANITATION AND HYGIENE	.048	30.9%
ISOLATION OF INFECTED	.110	71.0%
TOTAL ISOLATION	.155	100.0%
HEALTH CARE	.118	75.9%
VIRUS DISSEMINATION	.078	50.1%
LIFESTYLE CHANGES	.138	88.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.109	70.1%

BUREAUCRATIC RESPONSE	.105	67.7%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:09:41

Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.49

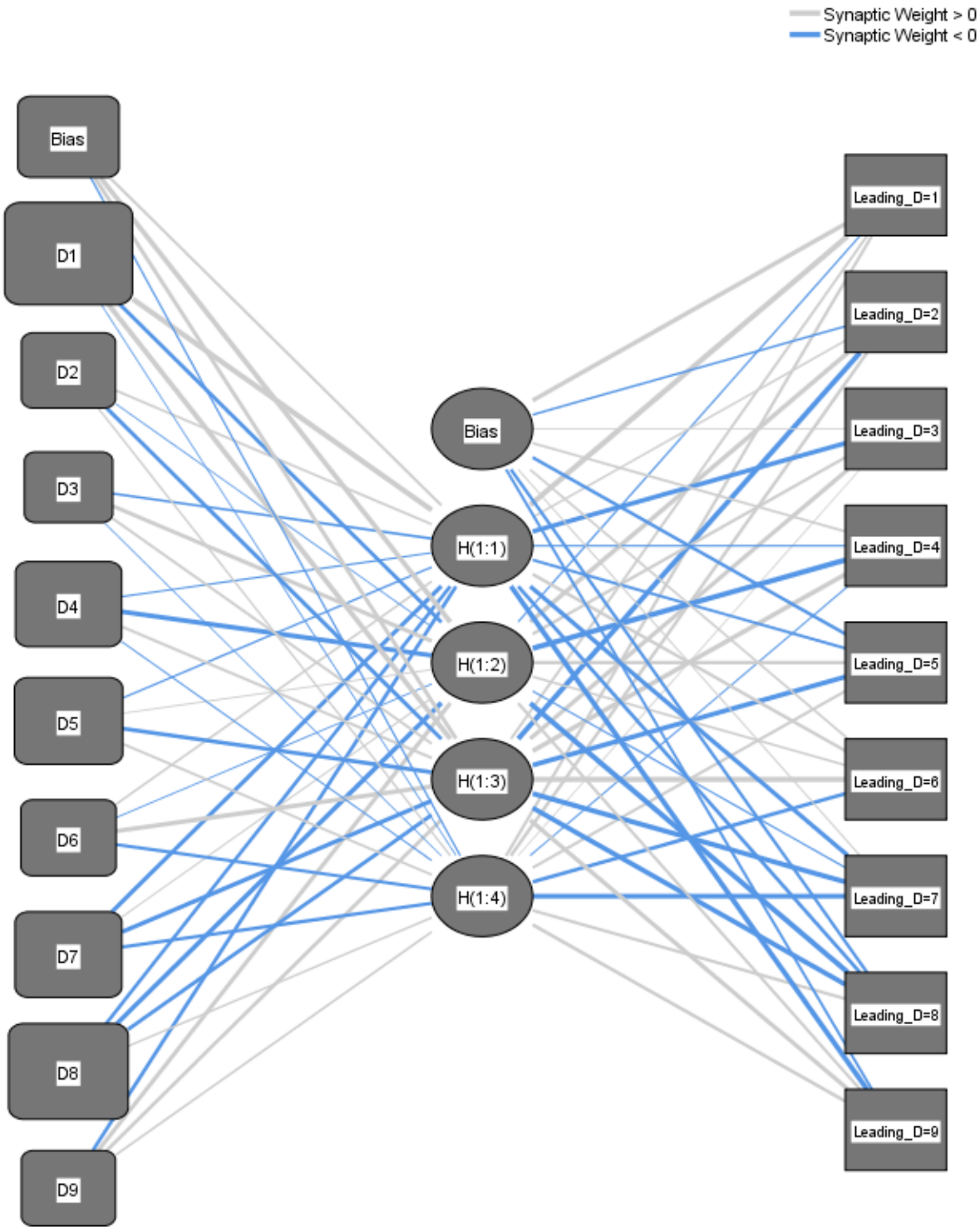
Case Processing Summary

		N	Percent
Sample	Training	72	69.2%
	Testing	32	30.8%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		4
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	39.389
	Percent Incorrect Predictions	25.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.06
Testing	Cross Entropy Error	29.448
	Percent Incorrect Predictions	31.3%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted												
		Hidden Layer 1				Output Layer								
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	[Leading_D =1]	[Leading_D =2]	[Leading_D =3]	[Leading_D =4]	[Leading_D =5]	[Leading_D =6]	[Leading_D =7]	[Leading_D =8]	[Leading_D =9]
Input Layer	(Bias)	.523	1.826	1.063	-.217									
	D1	3.792	-1.061	1.909	-.027									
	D2	.420	-.034	-1.119	.248									
	D3	-.437	1.189	.507	-.025									
	D4	-.145	-1.761	.532	-.066									
	D5	-.326	.055	-1.206	.433									
	D6	.392	-.034	1.547	-.779									
	D7	-1.222	.110	-1.455	-.813									
	D8	-.838	-1.603	-1.049	.352									
	D9	-.910	1.214	.876	.410									
Hidden Layer 1	(Bias)					1.538	-.364	.026	.433	-.812	.403	.058	-.715	-.522
	H(1:1)					3.896	.345	-1.632	-.237	-.544	.727	-1.533	-.875	-2.149
	H(1:2)					-.188	1.561	.704	-3.106	.783	.415	-.122	-2.287	.640
	H(1:3)					.483	-2.173	1.278	1.573	-1.772	2.954	-1.977	-1.795	1.375
	H(1:4)					.665	.756	.017	-.091	.596	-.942	-1.764	.708	.828

Classification

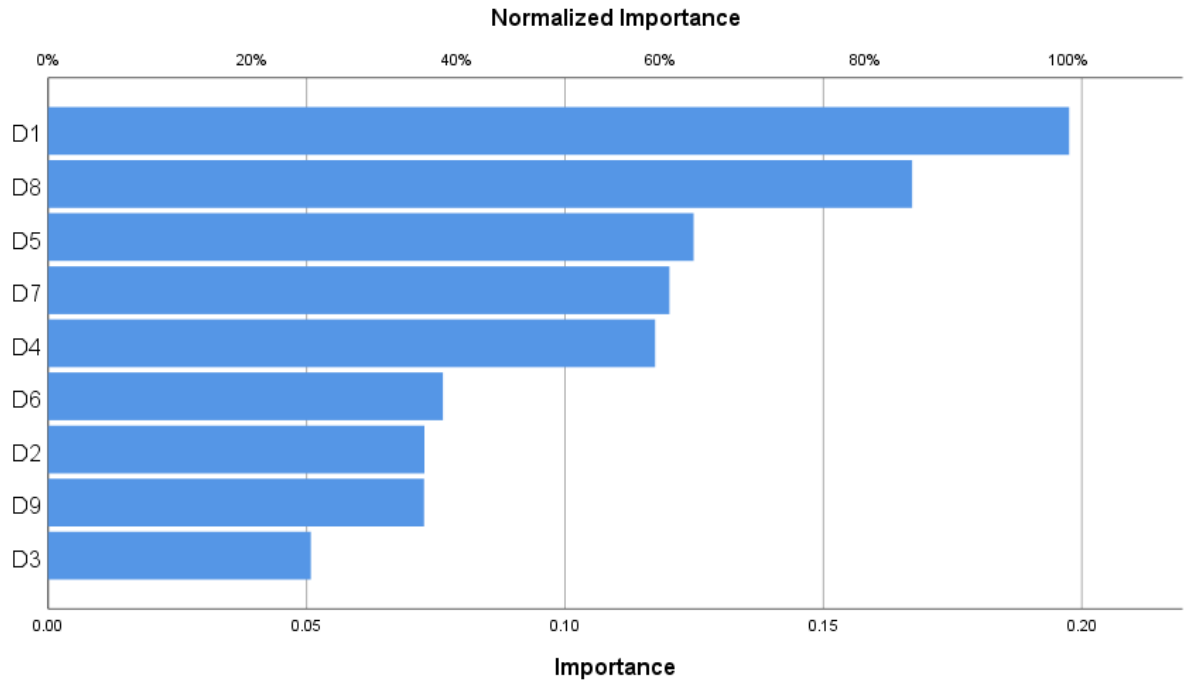
Sample	Observed	Predicted 1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	16	0	0	0	0	0	0	0	0	100.0%
	2	0	5	0	0	0	0	0	0	0	100.0%
	3	0	0	1	0	0	3	0	0	4	12.5%
	4	1	0	0	4	0	0	0	0	0	80.0%
	5	0	2	0	0	0	0	0	0	0	0.0%
	6	2	0	2	0	0	10	0	0	0	71.4%
	7	0	0	0	0	0	0	10	0	0	100.0%
	8	0	0	0	0	0	0	0	3	0	100.0%
	9	0	1	3	0	0	0	0	0	5	55.6%
	Overall Percent	26.4%	11.1%	8.3%	5.6%	0.0%	18.1%	13.9%	4.2%	12.5%	75.0%
Testing	1	5	0	0	0	0	0	0	0	0	100.0%
	2	0	2	0	0	0	0	0	0	0	100.0%
	3	0	0	0	0	0	0	0	0	2	0.0%
	4	0	0	0	2	0	0	0	0	0	100.0%
	5	0	1	0	0	0	0	0	1	0	0.0%
	6	1	0	0	1	0	7	2	0	0	63.6%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	0	0	0	0	1	1	0	50.0%
	9	0	0	1	0	0	0	0	0	2	66.7%
	Overall Percent	18.8%	9.4%	3.1%	9.4%	0.0%	21.9%	18.8%	6.3%	12.5%	68.8%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.198	100.0%
SANITATION AND HYGIENE	.073	36.9%
ISOLATION OF INFECTED	.051	25.7%
TOTAL ISOLATION	.117	59.4%
HEALTH CARE	.125	63.2%

VIRUS DISSEMINATION	.076	38.7%
LIFESTYLE CHANGES	.120	60.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.167	84.6%
BUREAUCRATIC RESPONSE	.073	36.8%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:09:47
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.50

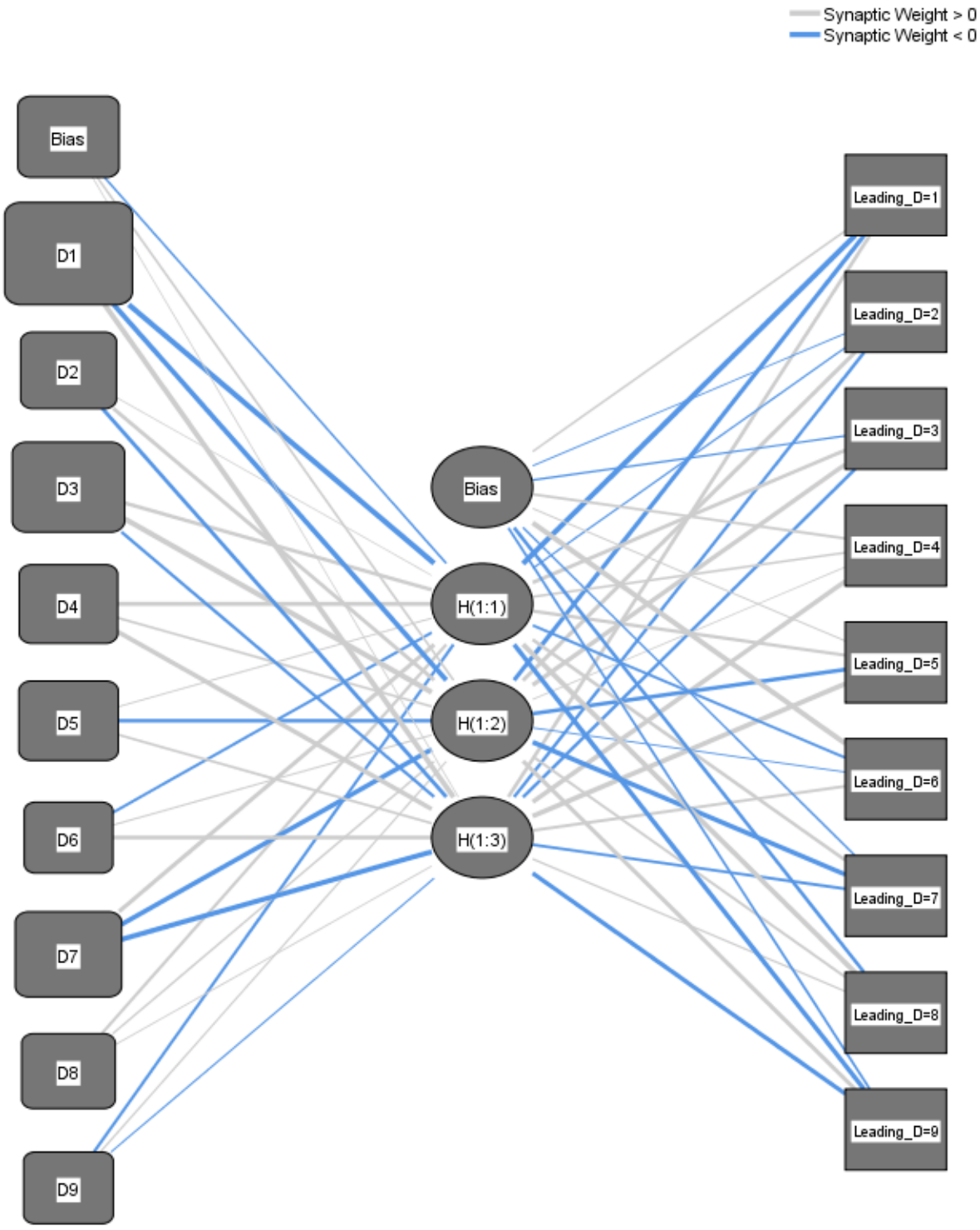
Case Processing Summary

		N	Percent
Sample	Training	75	72.1%
	Testing	29	27.9%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		3
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	60.207
	Percent Incorrect Predictions	24.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.06
Testing	Cross Entropy Error	37.252
	Percent Incorrect Predictions	44.8%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted											
		Hidden Layer 1			Output Layer								
Predictor		H(1:1)	H(1:2)	H(1:3)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	-.506	.582	.038									
	D1	-3.523	-2.072	2.538									
	D2	.028	1.291	-1.299									
	D3	1.277	2.866	-1.086									
	D4	1.435	.708	1.596									
	D5	.307	-1.174	.779									
	D6	-.848	.349	1.370									
	D7	1.403	-1.815	-2.303									
	D8	1.075	.435	.074									
	D9	-1.073	.362	-.360									
Hidden Layer 1	(Bias)				.503	-.240	-.413	.838	.305	2.441	-.449	-1.233	-.777
	H(1:1)				-2.755	-.387	1.262	.633	1.144	-.804	1.155	2.128	-1.788
	H(1:2)				-1.510	1.366	1.551	.069	-1.341	-.255	-1.952	.790	1.428
	H(1:3)				1.241	-1.097	-1.112	1.724	1.973	1.011	-.948	.411	-1.548

Classification

Sample	Observed	Predicted

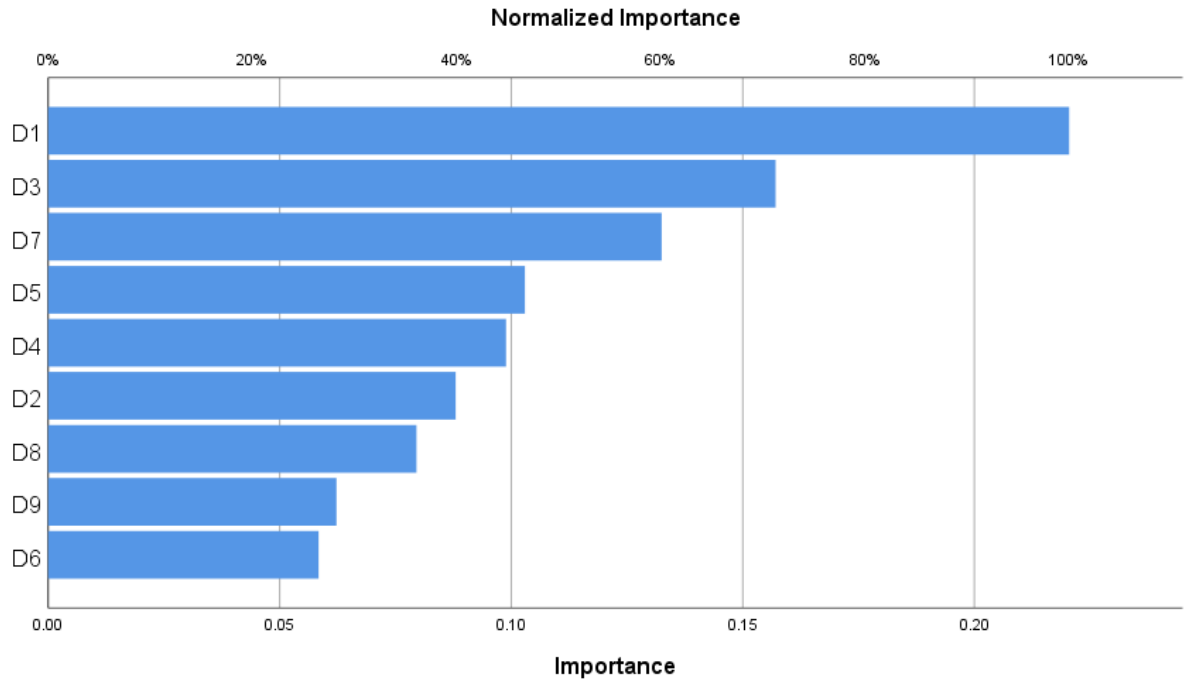
		1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	14	0	0	0	0	2	0	0	0	87.5%
	2	0	0	3	0	0	0	0	0	2	0.0%
	3	0	0	8	0	0	0	0	0	0	100.0%
	4	1	0	0	5	0	1	0	0	0	71.4%
	5	0	0	0	1	3	0	0	0	0	75.0%
	6	2	0	0	0	0	14	2	0	1	73.7%
	7	0	0	0	0	0	0	10	0	0	100.0%
	8	0	0	1	1	0	0	1	0	0	0.0%
	9	0	0	0	0	0	0	0	0	3	100.0%
	Overall Percent	22.7%	0.0%	16.0%	9.3%	4.0%	22.7%	17.3%	0.0%	8.0%	76.0%
Testing	1	3	0	0	0	1	1	0	0	0	60.0%
	2	0	0	1	0	0	0	0	0	1	0.0%
	3	0	0	1	0	0	0	0	0	1	50.0%
	4	0	0	0	0	0	0	0	0	0	0.0%
	5	0	0	0	0	0	0	0	0	0	0.0%
	6	0	0	2	0	0	4	0	0	0	66.7%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	2	0	0	0	0	0	0	0.0%
	9	0	0	0	0	0	4	0	0	5	55.6%
	Overall Percent	10.3%	0.0%	20.7%	0.0%	3.4%	31.0%	10.3%	0.0%	24.1%	55.2%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.220	100.0%
SANITATION AND HYGIENE	.088	39.9%
ISOLATION OF INFECTED	.157	71.2%
TOTAL ISOLATION	.099	44.8%
HEALTH CARE	.103	46.7%
VIRUS DISSEMINATION	.058	26.5%
LIFESTYLE CHANGES	.132	60.1%
RIGHTS AND FREEDOMS INFRINGEMENT	.080	36.1%

BUREAUCRATIC RESPONSE	.062	28.2%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:10:12

Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.50
	Elapsed Time	00:00:00.51

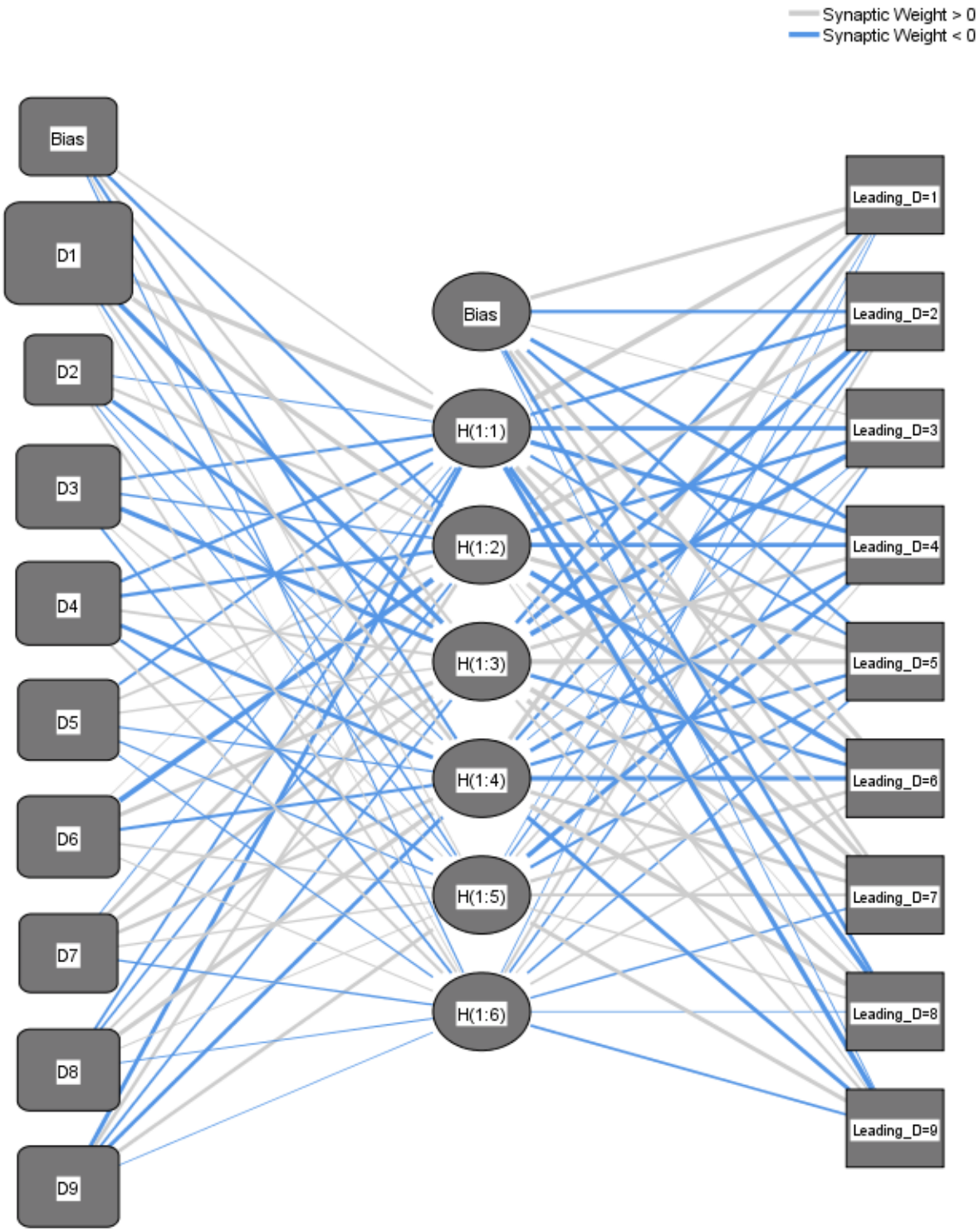
Case Processing Summary

		N	Percent
Sample	Training	69	66.3%
	Testing	35	33.7%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		6
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	15.722
	Percent Incorrect Predictions	10.1%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.09
Testing	Cross Entropy Error	29.650
	Percent Incorrect Predictions	20.0%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted													
		Hidden Layer 1						Output Layer							
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	.538	-1.005	.795	-.797	.231	-.315									
	D1	3.465	2.364	-2.772	1.286	-.432	.096									
	D2	-.225	.877	-1.523	-.285	-.192	.581									
	D3	-.821	-.474	-2.490	.580	.111	-.575									
	D4	-1.150	-1.289	.703	-1.554	-.851	.778									
	D5	-.713	.650	.426	-.324	-.336	-.333									
	D6	.038	-4.403	1.628	-.884	.436	.291									
	D7	-.145	1.459	1.586	1.318	.372	-.407									
	D8	-.658	-.500	.674	2.290	.130	-.150									
	D9	-1.679	1.162	-.618	-1.407	1.341	-.081									
Hidden Layer 1	(Bias)							1.750	-1.190	.272	-1.441	-1.099	2.373	1.262	-1.380	-.130
	H(1:1)							7.441	-1.193	-2.238	-2.380	-.733	2.195	2.801	-2.942	-3.233
	H(1:2)							.652	2.089	-1.372	-1.783	2.318	-4.274	2.697	.003	.297
	H(1:3)							-1.349	-3.640	-4.365	1.414	2.824	-1.521	4.027	2.262	.721
	H(1:4)							1.777	-1.011	-.130	-1.462	-1.212	-2.381	1.390	3.723	-1.586
	H(1:5)							-.011	-.364	.469	-2.338	-.919	1.247	.785	.408	1.683

	H(1:6)							-.097	.674	-.477	.275	-.488	.544	-.448	-.118	-.657

Classification

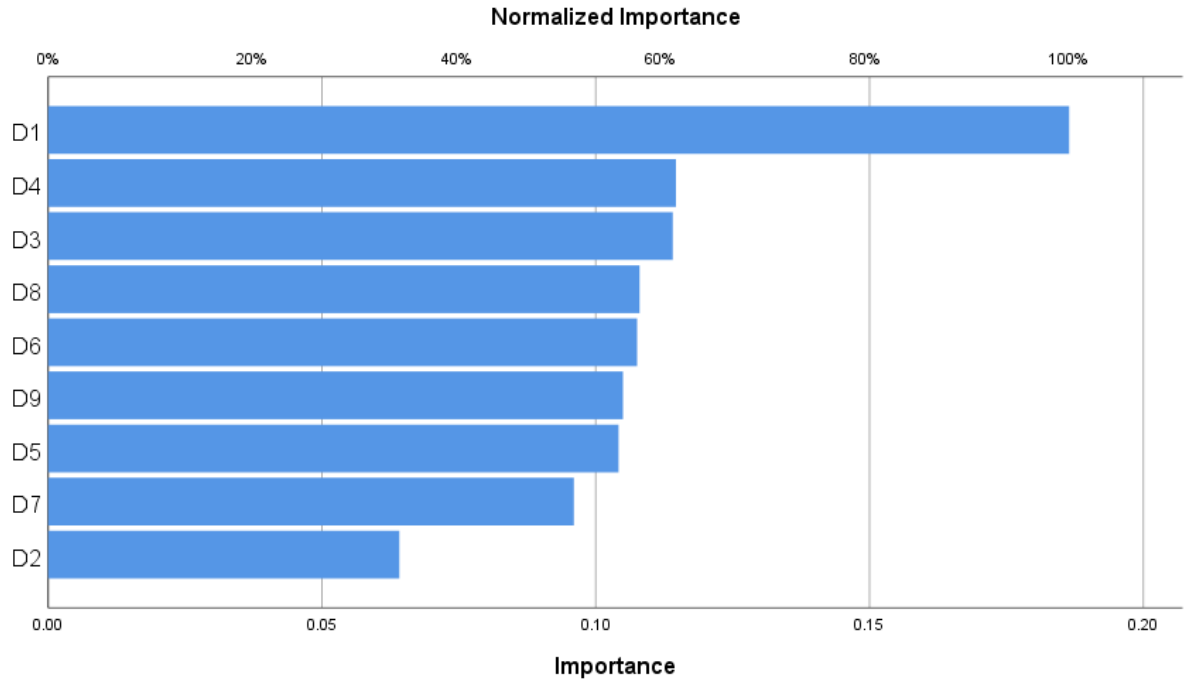
Sample	Observed	Predicted 1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	16	0	0	0	0	0	0	0	0	100.0%
	2	0	3	0	0	0	0	0	0	0	100.0%
	3	0	0	7	0	0	0	0	0	0	100.0%
	4	0	0	0	3	0	0	0	0	0	100.0%
	5	0	0	0	0	1	0	0	0	0	100.0%
	6	1	0	2	0	0	14	0	0	1	77.8%
	7	0	0	0	0	0	1	9	1	0	81.8%
	8	0	0	0	0	0	0	0	4	0	100.0%
	9	0	1	0	0	0	0	0	0	5	83.3%
	Overall Percent	24.6%	5.8%	13.0%	4.3%	1.4%	21.7%	13.0%	7.2%	8.7%	89.9%
Testing	1	5	0	0	0	0	0	0	0	0	100.0%
	2	0	3	1	0	0	0	0	0	0	75.0%
	3	0	0	3	0	0	0	0	0	0	100.0%
	4	0	0	0	2	0	2	0	0	0	50.0%
	5	0	0	1	0	2	0	0	0	0	66.7%
	6	2	0	1	0	0	4	0	0	0	57.1%
	7	0	0	0	0	0	0	2	0	0	100.0%
	8	0	0	0	0	0	0	0	1	0	100.0%
	9	0	0	0	0	0	0	0	0	6	100.0%
	Overall Percent	20.0%	8.6%	17.1%	5.7%	5.7%	17.1%	5.7%	2.9%	17.1%	80.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.186	100.0%
SANITATION AND HYGIENE	.064	34.4%
ISOLATION OF INFECTED	.114	61.2%

TOTAL ISOLATION	.115	61.5%
HEALTH CARE	.104	55.9%
VIRUS DISSEMINATION	.108	57.7%
LIFESTYLE CHANGES	.096	51.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.108	57.9%
BUREAUCRATIC RESPONSE	.105	56.3%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
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Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:10:20
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.45

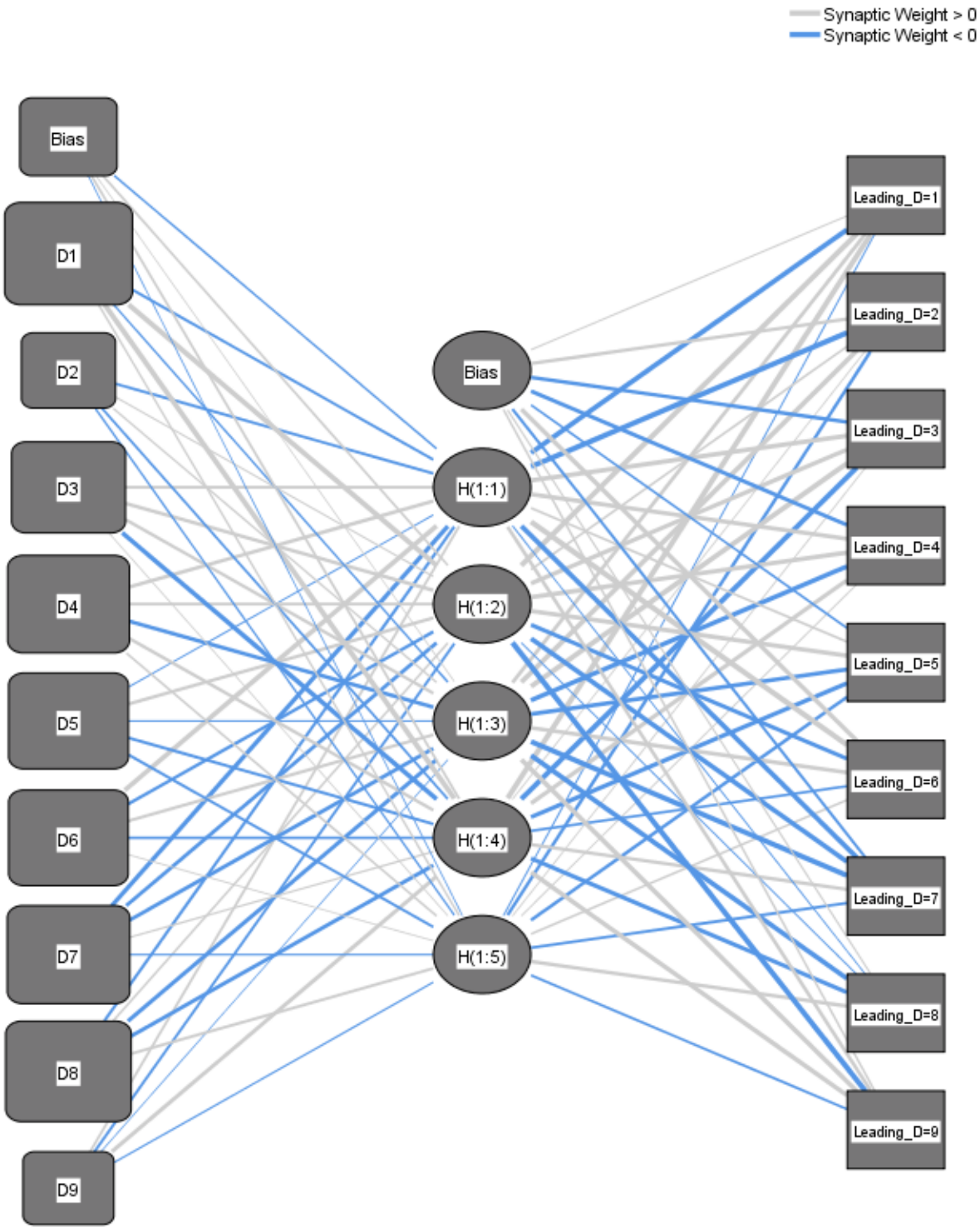
Case Processing Summary

		N	Percent
Sample	Training	70	67.3%
	Testing	34	32.7%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		5
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	13.596
	Percent Incorrect Predictions	8.6%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.02
Testing	Cross Entropy Error	38.268
	Percent Incorrect Predictions	23.5%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted													
		Hidden Layer 1					Output Layer								
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	-.426	.551	.016	.595	-.075									
	D1	-.707	2.682	-.397	2.794	.382									
	D2	-.744	.235	.352	-.572	-.381									
	D3	.860	1.084	.873	-2.209	.040									
	D4	1.101	.865	-1.298	.894	.496									
	D5	-.211	.929	-.288	-.784	-.726									
	D6	2.371	-.901	.880	-.675	.139									
	D7	-1.903	-1.178	-1.279	.310	-.300									
	D8	-.844	.466	-1.491	-1.341	.772									
	D9	.637	-.687	-.037	1.383	-.257									
Hidden Layer 1	(Bias)						.233	1.014	-1.249	-1.438	-.523	1.934	-.748	.235	.433
	H(1:1)						-2.636	-3.807	2.153	1.809	.566	3.990	-2.631	-.149	1.043
	H(1:2)						3.321	.511	1.839	2.104	1.922	-1.548	-2.411	-.174	-3.988
	H(1:3)						1.144	2.557	2.789	-2.268	-1.679	1.490	-2.940	-2.576	2.349
	H(1:4)						3.561	.107	-3.158	1.638	-1.861	-.659	1.028	-1.749	2.122
	H(1:5)						-.224	-.930	.124	.170	-.967	.491	-.758	1.166	-.641

Classification

Sample	Observed	Predicted

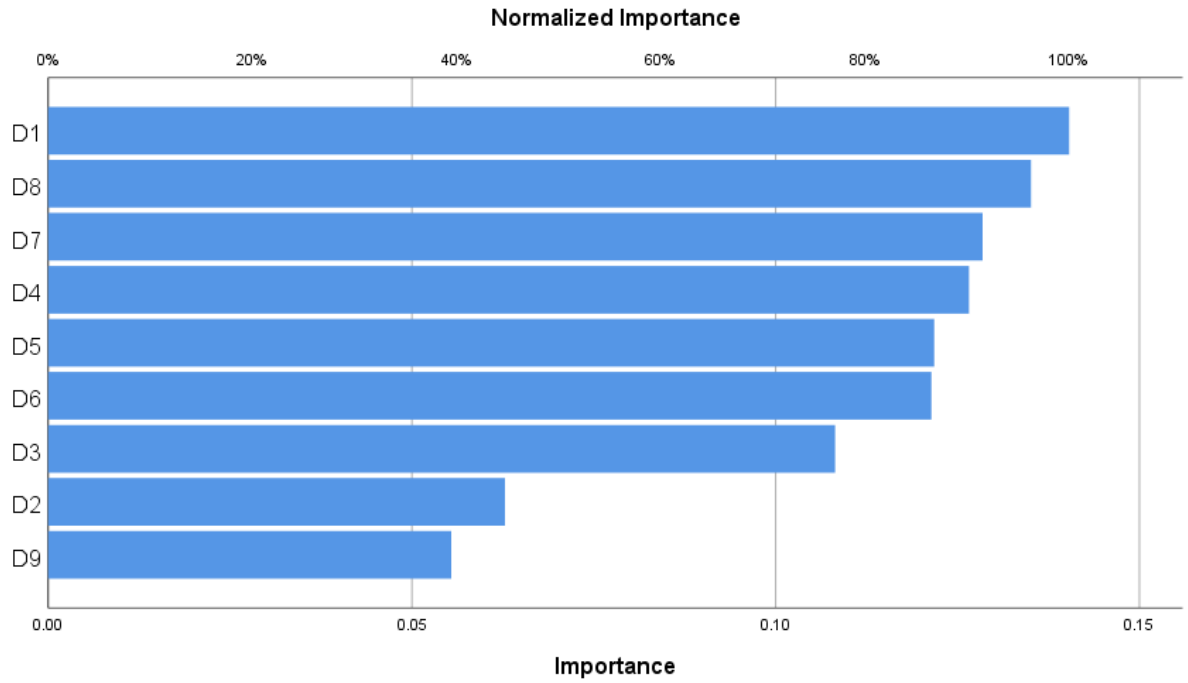
		1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	13	0	0	0	0	0	0	0	0	100.0%
	2	0	5	0	0	0	0	0	0	0	100.0%
	3	0	1	8	0	0	0	0	0	0	88.9%
	4	0	0	0	5	0	0	0	0	0	100.0%
	5	0	0	0	0	1	0	0	0	0	100.0%
	6	1	0	2	0	0	10	0	0	0	76.9%
	7	0	0	0	0	0	0	9	1	0	90.0%
	8	0	0	0	0	0	0	0	3	0	100.0%
	9	0	1	0	0	0	0	0	0	10	90.9%
	Overall Percent	20.0%	10.0%	14.3%	7.1%	1.4%	14.3%	12.9%	5.7%	14.3%	91.4%
Testing	1	7	1	0	0	0	0	0	0	0	87.5%
	2	0	2	0	0	0	0	0	0	0	100.0%
	3	0	0	0	0	0	1	0	0	0	0.0%
	4	0	0	0	1	0	1	0	0	0	50.0%
	5	0	0	0	0	3	0	0	0	0	100.0%
	6	1	0	0	1	0	7	2	0	1	58.3%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	0	0	0	0	0	2	0	100.0%
	9	0	0	0	0	0	0	0	0	1	100.0%
	Overall Percent	23.5%	8.8%	0.0%	5.9%	8.8%	26.5%	14.7%	5.9%	5.9%	76.5%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.140	100.0%
SANITATION AND HYGIENE	.063	44.7%
ISOLATION OF INFECTED	.108	77.1%
TOTAL ISOLATION	.127	90.2%
HEALTH CARE	.122	86.8%
VIRUS DISSEMINATION	.121	86.5%
LIFESTYLE CHANGES	.128	91.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.135	96.3%

BUREAUCRATIC RESPONSE	.055	39.5%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:10:31

Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.45

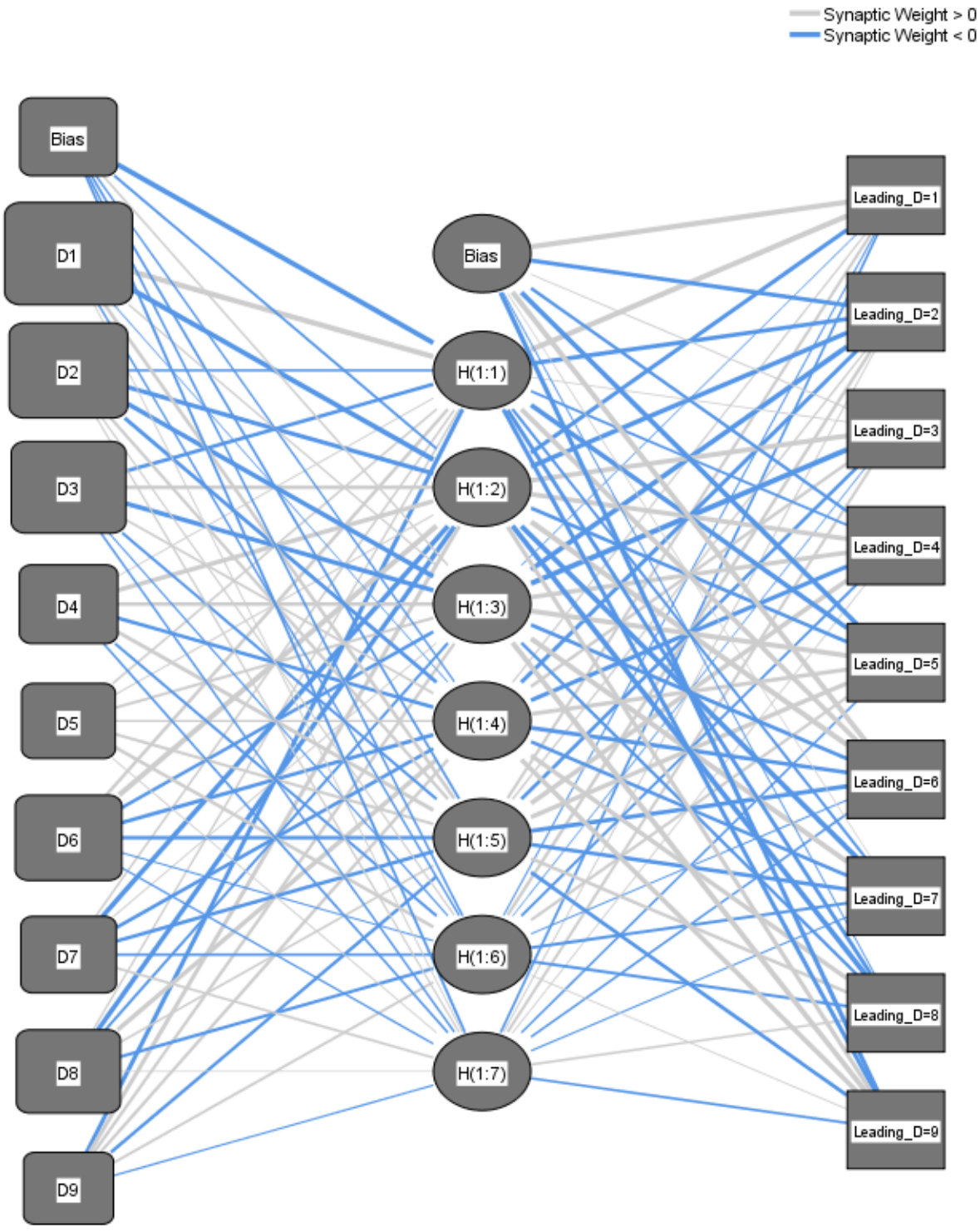
Case Processing Summary

		N	Percent
Sample	Training	68	65.4%
	Testing	36	34.6%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		7
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	12.766
	Percent Incorrect Predictions	8.8%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.04
Testing	Cross Entropy Error	30.708
	Percent Incorrect Predictions	25.0%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor		Predicted: Hidden Layer 1 H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	Predicted: Output Layer [Leading_D =1]	[Leading_D =2]	[Leading_D =3]	[Leading_D =4]	[Leading_D =5]	[Leading_D =6]	[Leading_D =7]	[Leading_D =8]	[Leading_D =9]
Input Layer	(Bias)	-2.679	-.402	.269	-.255	-.373	-.298	-.409									
	D1	5.327	-2.654	.211	-.008	.760	-.277	.080									
	D2	-.371	-1.574	-2.011	-.994	.611	.155	.208									
	D3	-.917	1.105	-1.900	.362	-.455	-.196	-.278									
	D4	.075	1.704	.961	-.874	1.024	-.429	-.354									
	D5	.294	.134	.458	.265	.505	.770	.073									
	D6	.745	3.971	-.735	-.947	-.822	-.164	-.222									
	D7	.289	-2.450	.083	-.830	-.925	-.426	.386									
	D8	.269	-2.045	-.420	1.669	.314	-.655	.033									
	D9	-1.486	1.148	.618	.619	-.690	.405	-.204									
Hidden Layer 1	(Bias)								3.246	-1.437	.091	-.666	-2.554	2.789	.003	-.085	-1.758
	H(1:1)								5.599	-1.552	.034	-.394	-2.167	2.490	-.432	-1.041	-1.413
	H(1:2)								-1.395	-2.066	2.600	2.113	-.868	4.232	-2.732	-2.808	1.358
	H(1:3)								-.008	-2.615	-5.410	1.868	2.611	-1.002	2.665	-.633	3.001
	H(1:4)								.190	-1.155	.651	-1.486	1.189	-1.225	-.811	1.596	2.327

	H(1:5)							.467	.221	-.827	2.044	1.611	-1.553	-1.104	.726	-.934
	H(1:6)							-.142	.702	-.009	-.412	.525	-.123	-.591	-.560	.038
	H(1:7)							-.388	.098	.464	.054	-.295	-.329	-.175	.334	-.392

Classification

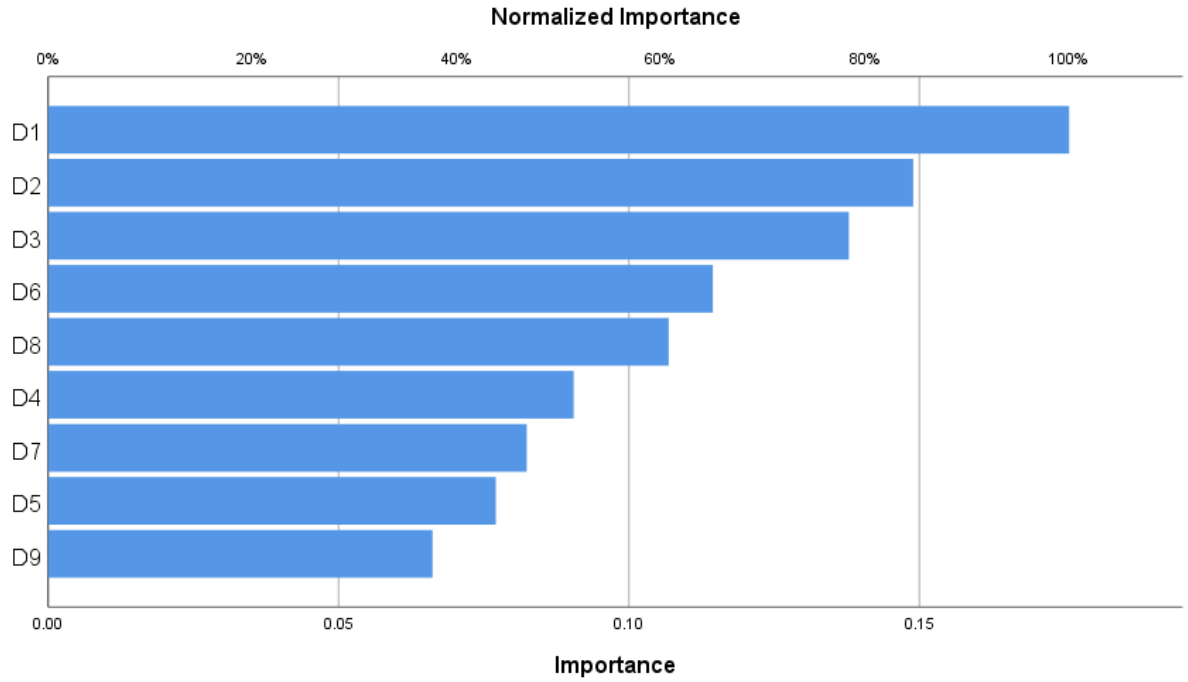
		Predicted									
Sample	Observed	1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	17	0	0	0	0	0	0	0	0	100.0%
	2	0	3	0	0	0	0	0	0	0	100.0%
	3	0	0	8	0	0	0	0	0	0	100.0%
	4	0	0	0	4	0	1	0	0	0	80.0%
	5	0	0	0	0	1	0	0	0	0	100.0%
	6	1	0	1	0	0	12	0	0	1	80.0%
	7	0	0	0	0	0	1	7	1	0	77.8%
	8	0	0	0	0	0	0	0	4	0	100.0%
	9	0	0	0	0	0	0	0	0	6	100.0%
	Overall Percent	26.5%	4.4%	13.2%	5.9%	1.5%	20.6%	10.3%	7.4%	10.3%	91.2%
Testing	1	4	0	0	0	0	0	0	0	0	100.0%
	2	0	3	0	0	0	0	0	1	0	75.0%
	3	0	1	1	0	0	0	0	0	0	50.0%
	4	0	0	0	1	0	1	0	0	0	50.0%
	5	0	0	0	0	2	0	0	0	1	66.7%
	6	2	0	2	0	0	6	0	0	0	60.0%
	7	0	0	0	0	0	0	4	0	0	100.0%
	8	0	0	0	0	0	0	0	1	0	100.0%
	9	0	1	0	0	0	0	0	0	5	83.3%
	Overall Percent	16.7%	13.9%	8.3%	2.8%	5.6%	19.4%	11.1%	5.6%	16.7%	75.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance

CONTACT RESTRICTION	.176	100.0%
SANITATION AND HYGIENE	.149	84.7%
ISOLATION OF INFECTED	.138	78.4%
TOTAL ISOLATION	.090	51.5%
HEALTH CARE	.077	43.8%
VIRUS DISSEMINATION	.114	65.1%
LIFESTYLE CHANGES	.082	46.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.107	60.8%
BUREAUCRATIC RESPONSE	.066	37.6%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:10:50
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.50
	Elapsed Time	00:00:00.52

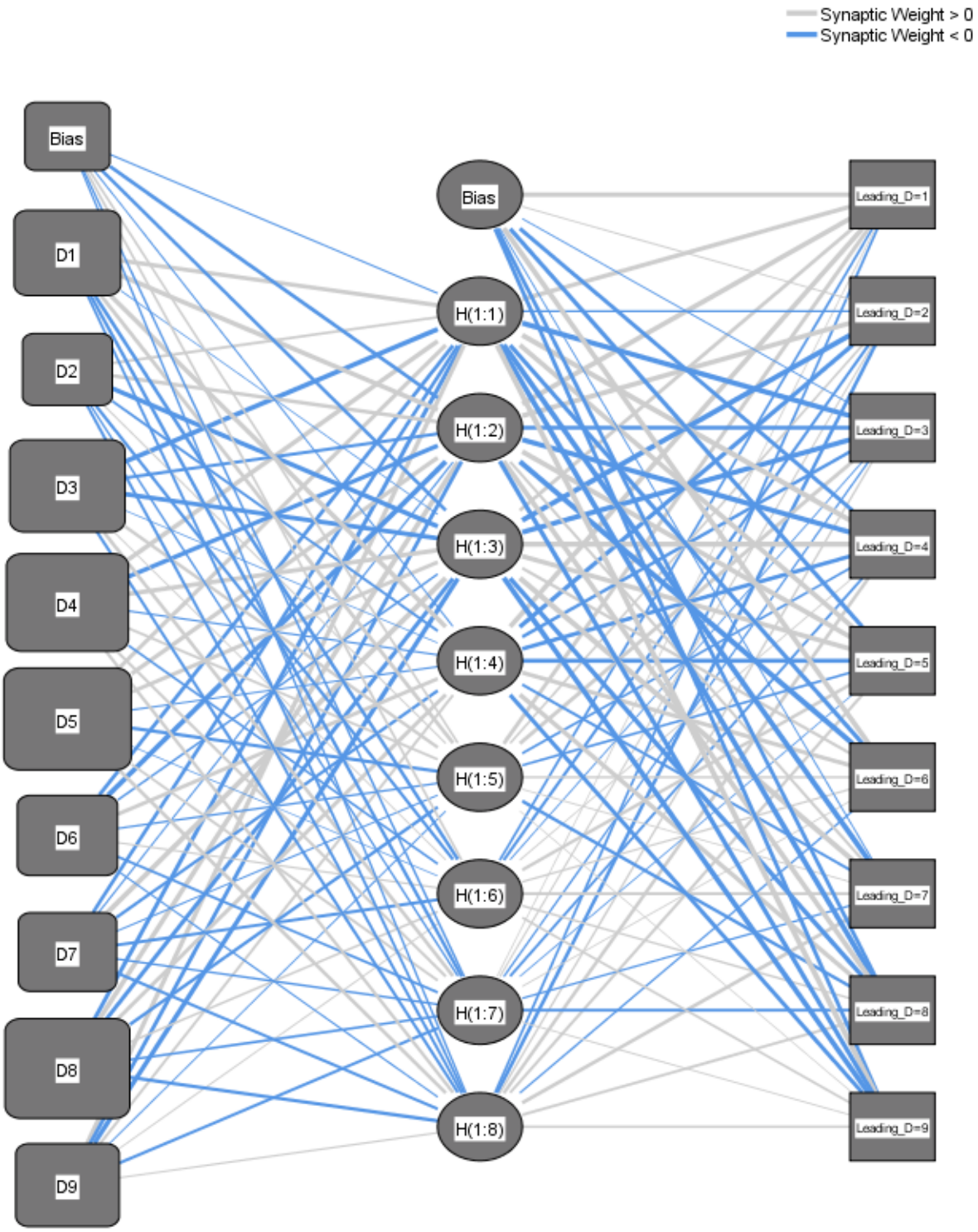
Case Processing Summary

		N	Percent
Sample	Training	73	70.2%
	Testing	31	29.8%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		8
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	14.159
	Percent Incorrect Predictions	8.2%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.05
Testing	Cross Entropy Error	15.010
	Percent Incorrect Predictions	19.4%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

Predictor		Predicted: Hidden Layer 1								Predicted: Output Layer								
		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	H(1:8)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	-.077	-.538	-.431	-.058	.196	.207	-.174	-.144									
	D1	.975	1.739	-.019	1.668	.547	-.454	-.416	-.249									
	D2	.251	.604	-1.706	-.247	.058	-.370	-.141	-.317									
	D3	-2.076	-.377	-1.633	-.014	.386	.024	.486	-.363									
	D4	1.654	-1.240	1.469	-.113	.242	-.206	.275	.379									
	D5	.869	.905	.763	-.078	-.427	-.012	.248	.490									
	D6	-.620	-2.500	-.166	.653	-.136	.110	-.244	-.092									
	D7	-.488	-.084	2.546	-.371	-.069	-.376	-.178	-.359									
	D8	-.899	1.965	-.870	.708	-.401	.184	-.232	-.469									
	D9	1.518	-.691	-1.681	.250	-.048	.043	-.318	.090									
Hidden Layer 1	(Bias)									1.799	.053	-.042	-.782	-1.185	2.513	-.046	-.690	-.746
	H(1:1)									1.319	-.133	-2.881	2.736	2.034	-1.181	-3.265	-2.938	3.257
	H(1:2)									2.482	2.361	-.890	-2.826	2.415	-4.356	.274	2.449	-1.639
	H(1:3)									.541	-2.918	-2.602	3.427	1.882	.366	4.203	-1.698	-2.837
	H(1:4)									2.147	-1.310	-.424	-.784	-.964	.929	-.253	1.505	-.852

H(15)									.739	.179	.638	-.210	-.227	.192	.023	-.416	.004
H(16)									-.232	-.359	-.036	.033	.405	.114	.366	.152	.226
H(17)									.020	.072	-.116	-.238	-.022	.020	-.117	-.366	.037
H(18)									-.232	-.487	.128	.430	.315	-.117	.496	.263	.198

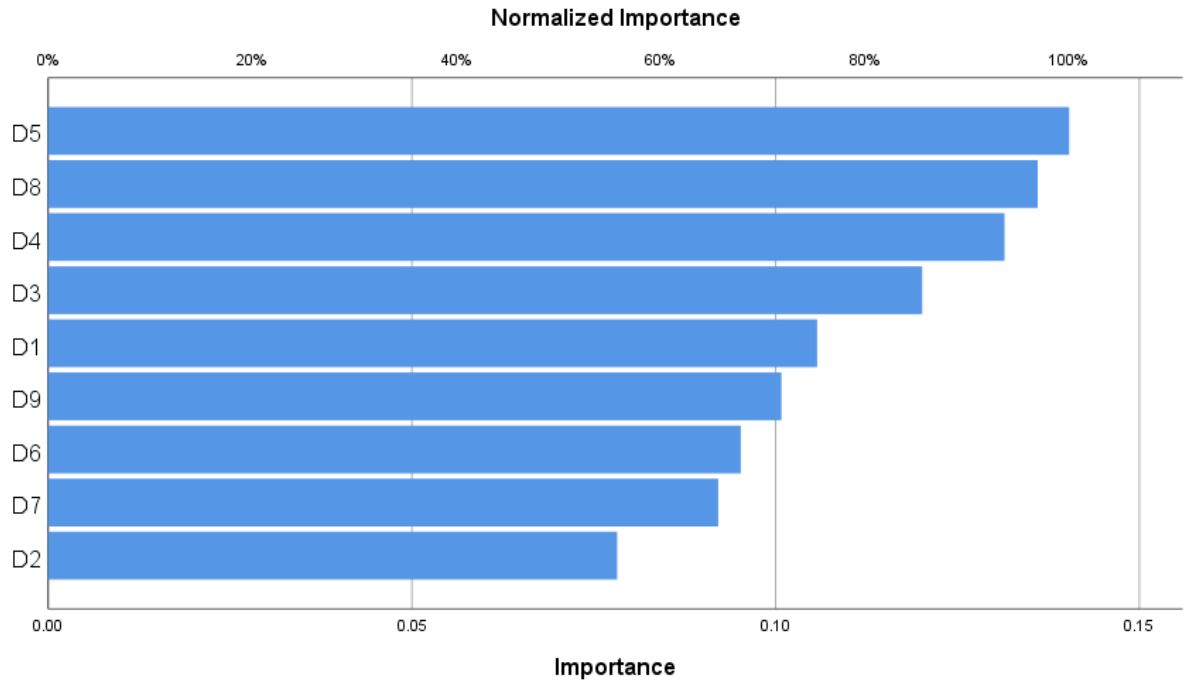
Classification

		Predicted									
Sample	Observed	1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	16	0	0	0	0	0	0	0	0	100.0%
	2	0	5	0	0	0	0	0	0	0	100.0%
	3	0	0	3	0	0	1	0	0	0	75.0%
	4	0	0	0	5	0	0	0	0	0	100.0%
	5	0	0	0	0	1	0	0	0	0	100.0%
	6	1	0	0	1	0	16	0	0	1	84.2%
	7	0	0	0	0	0	1	9	0	0	90.0%
	8	0	0	0	0	0	0	0	4	0	100.0%
	9	0	1	0	0	0	0	0	0	8	88.9%
	Overall Percent	23.3%	8.2%	4.1%	8.2%	1.4%	24.7%	12.3%	5.5%	12.3%	91.8%
Testing	1	4	0	0	0	0	0	0	1	0	80.0%
	2	0	2	0	0	0	0	0	0	0	100.0%
	3	0	0	3	0	0	3	0	0	0	50.0%
	4	0	0	0	2	0	0	0	0	0	100.0%
	5	0	0	0	0	3	0	0	0	0	100.0%
	6	1	0	0	0	0	5	0	0	0	83.3%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	0	0	0	0	1	0	0	0.0%
	9	0	0	0	0	0	0	0	0	3	100.0%
	Overall Percent	16.1%	6.5%	9.7%	6.5%	9.7%	25.8%	12.9%	3.2%	9.7%	80.6%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.106	75.3%
SANITATION AND HYGIENE	.078	55.7%
ISOLATION OF INFECTED	.120	85.6%
TOTAL ISOLATION	.131	93.7%
HEALTH CARE	.140	100.0%
VIRUS DISSEMINATION	.095	67.8%
LIFESTYLE CHANGES	.092	65.6%
RIGHTS AND FREEDOMS INFRINGEMENT	.136	96.9%
BUREAUCRATIC RESPONSE	.101	71.8%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
```

```
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:10:58
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.47
	Elapsed Time	00:00:00.48

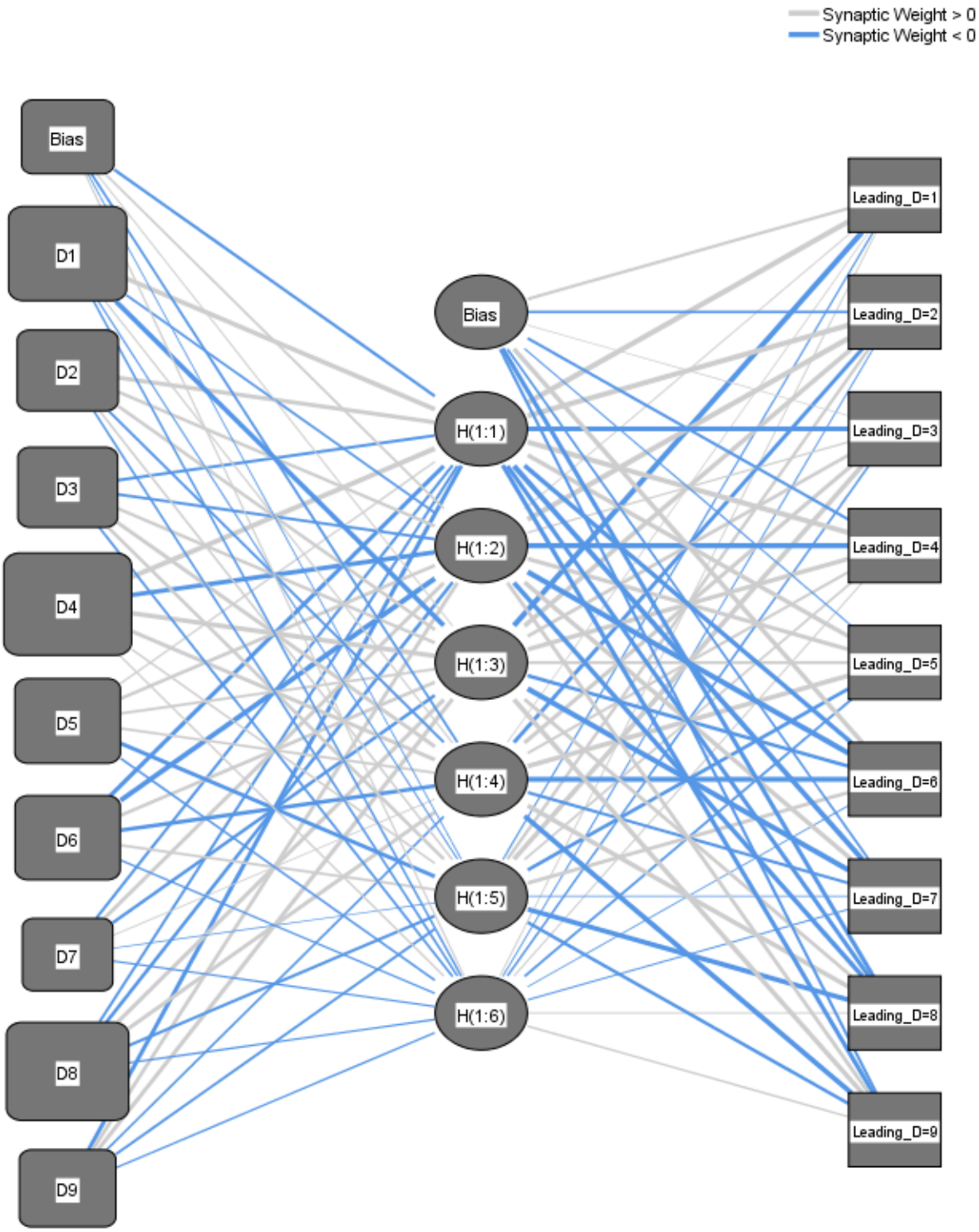
Case Processing Summary

		N	Percent
Sample	Training	71	68.3%
	Testing	33	31.7%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		6
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	13.663
	Percent Incorrect Predictions	9.9%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.06
Testing	Cross Entropy Error	22.790
	Percent Incorrect Predictions	18.2%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

		Predicted													
		Hidden Layer 1						Output Layer							
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=7]	[Leading_D=8]	[Leading_D=9]
Input Layer	(Bias)	-.758	.439	.180	-.456	-.080	.254									
	D1	2.063	-.439	-2.349	.253	-.247	-.375									
	D2	1.505	.889	.943	-.557	.365	-.399									
	D3	-.715	-.625	.943	1.246	.994	-.445									
	D4	2.530	-1.799	2.078	1.294	.344	.316									
	D5	.279	1.133	.565	.497	-1.326	-.392									
	D6	-1.441	-2.696	1.027	-1.331	.516	-.318									
	D7	-.655	1.224	-.956	.071	-.045	-.302									
	D8	-.615	-1.025	1.398	1.260	-.698	-.324									
	D9	-1.426	1.211	1.404	-.412	-.531	-.332									
Hidden Layer 1	(Bias)							.830	-.586	.008	-.647	-.251	1.928	-.437	-1.510	-.694
	H(1:1)							3.921	2.987	-2.619	2.740	1.538	-1.720	-2.754	-1.463	-1.599
	H(1:2)							.142	3.021	.281	-2.949	1.409	-3.599	1.681	-1.944	1.213
	H(1:3)							-4.523	1.816	1.097	1.601	.780	-1.198	-3.588	1.174	2.115
	H(1:4)							.019	-1.302	1.355	.592	2.287	-2.364	-.772	2.053	-2.693
	H(1:5)							-.255	.848	2.336	.434	-1.165	1.204	-.062	-2.495	-.969

	H(1:6)							.135	-.228	-.368	.239	-.459	-.101	-.249	.156	.352

Classification

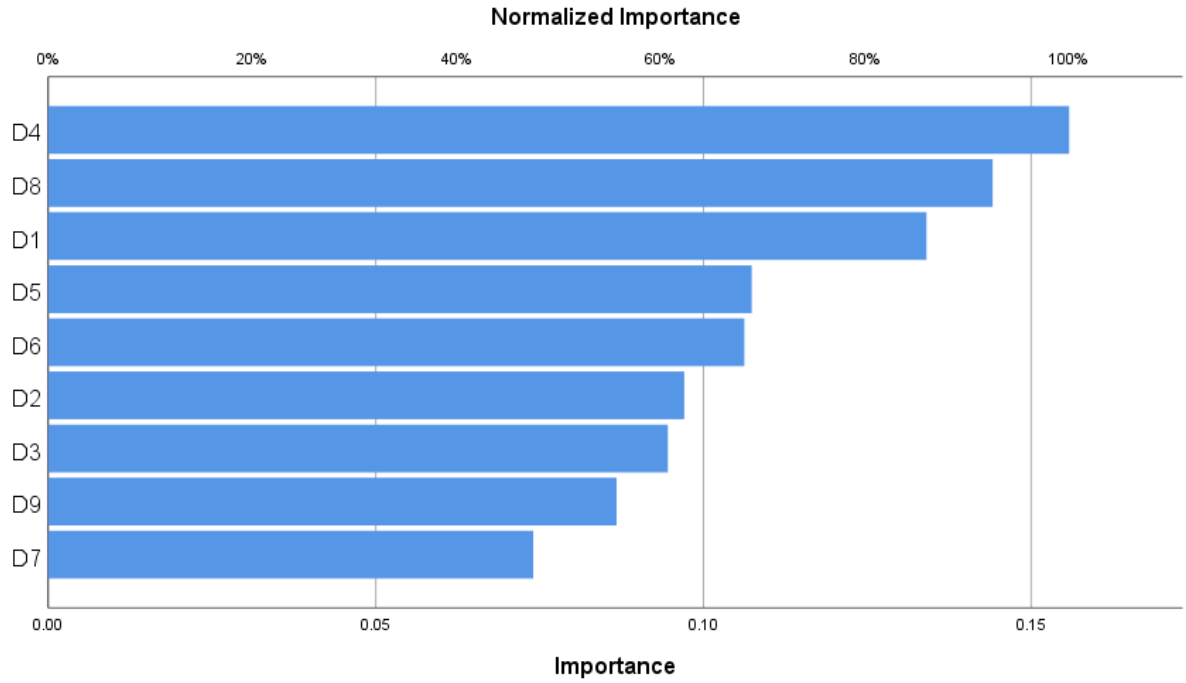
Sample	Observed	Predicted 1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	13	0	0	0	0	0	0	0	0	100.0%
	2	0	5	0	0	0	0	0	0	0	100.0%
	3	0	0	3	0	0	1	0	0	0	75.0%
	4	0	0	0	7	0	0	0	0	0	100.0%
	5	0	0	0	0	2	0	0	0	0	100.0%
	6	2	0	0	1	0	14	0	0	1	77.8%
	7	0	0	0	0	0	1	9	0	0	90.0%
	8	0	0	0	0	0	0	0	3	0	100.0%
	9	0	1	0	0	0	0	0	0	8	88.9%
	Overall Percent	21.1%	8.5%	4.2%	11.3%	2.8%	22.5%	12.7%	4.2%	12.7%	90.1%
Testing	1	7	0	0	1	0	0	0	0	0	87.5%
	2	0	2	0	0	0	0	0	0	0	100.0%
	3	0	0	3	0	0	3	0	0	0	50.0%
	4	0	0	0	0	0	0	0	0	0	0.0%
	5	0	0	0	0	2	0	0	0	0	100.0%
	6	0	0	0	1	0	6	0	0	0	85.7%
	7	0	0	0	0	0	0	2	1	0	66.7%
	8	0	0	0	0	0	0	0	2	0	100.0%
	9	0	0	0	0	0	0	0	0	3	100.0%
	Overall Percent	21.2%	6.1%	9.1%	6.1%	6.1%	27.3%	6.1%	9.1%	9.1%	81.8%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.134	86.0%
SANITATION AND HYGIENE	.097	62.3%
ISOLATION OF INFECTED	.095	60.7%

TOTAL ISOLATION	.156	100.0%
HEALTH CARE	.107	68.9%
VIRUS DISSEMINATION	.106	68.2%
LIFESTYLE CHANGES	.074	47.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.144	92.5%
BUREAUCRATIC RESPONSE	.087	55.7%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9
 /RESCALE COVARIATE=STANDARDIZED
  /PARTITION  TRAINING=7  TESTING=3  HOLDOUT=0
  /ARCHITECTURE   AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50)
  /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDCONJUGATE
LAMBDAINITIAL=0.0000005
    SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000
  /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE
  /PLOT NETWORK
  /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15)
MAXEPOCHS=AUTO
    ERRORCHANGE=1.0E-4 ERRORRATIO=0.001
 /MISSING USERMISSING=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:11:06
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Leading_D (MLEVEL=N) WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.47

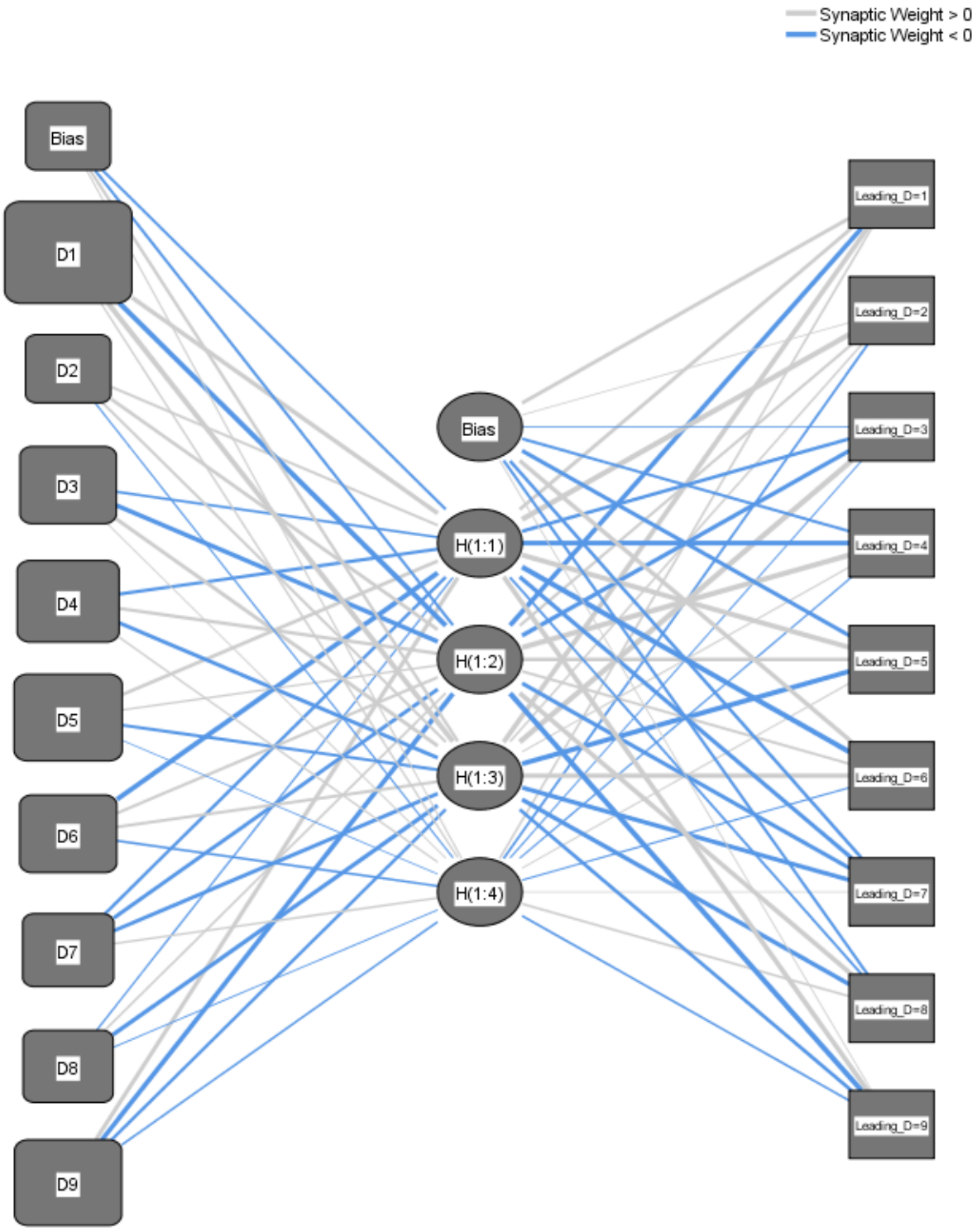
Case Processing Summary

		N	Percent
Sample	Training	80	76.9%
	Testing	24	23.1%
Valid		104	100.0%
Excluded		0	
Total		104	

Network Information

Input Layer	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		9
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		4
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		9
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	51.209
	Percent Incorrect Predictions	21.3%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.06
Testing	Cross Entropy Error	11.430
	Percent Incorrect Predictions	12.5%

Dependent Variable: Leading discourse in meaning

a. Error computations are based on the testing sample.

Parameter Estimates

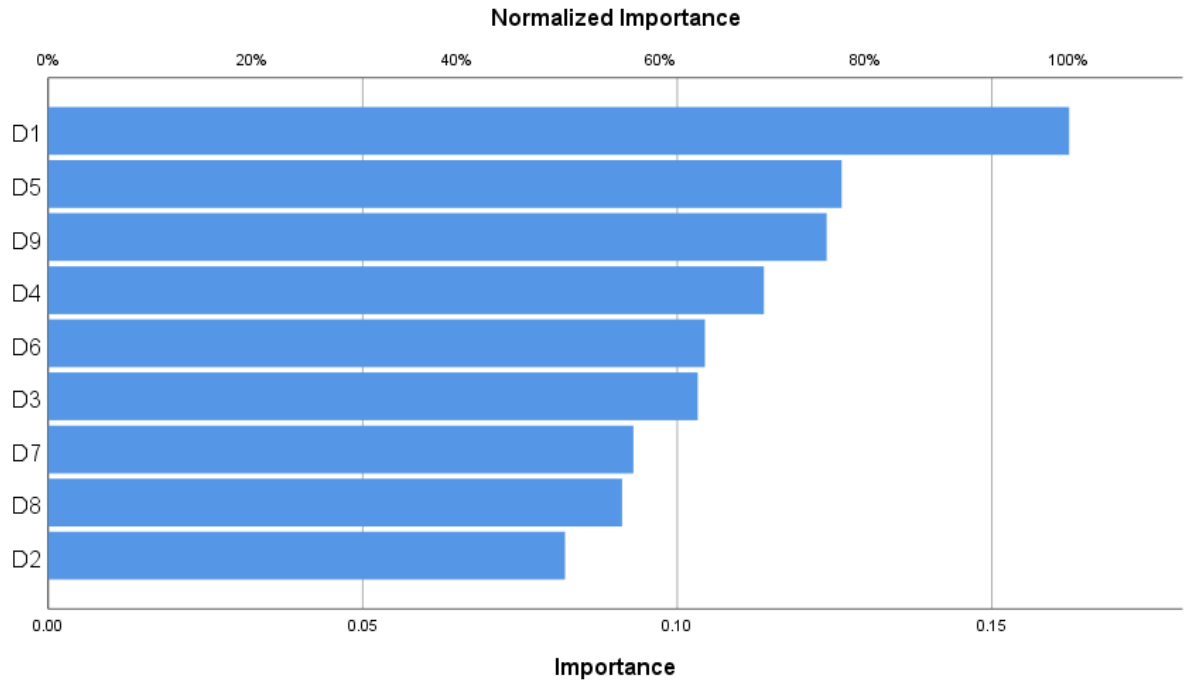
		Predicted												
		Hidden Layer 1				Output Layer								
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	[Leading_D =1]	[Leading_D =2]	[Leading_D =3]	[Leading_D =4]	[Leading_D =5]	[Leading_D =6]	[Leading_D =7]	[Leading_D =8]	[Leading_D =9]
Input Layer	(Bias)	-.590	-.666	.868	.213									
	D1	1.915	-2.605	2.798	.255									
	D2	.544	1.114	.568	-.217									
	D3	-.533	-2.109	1.421	.133									
	D4	-1.029	1.091	-1.465	.224									
	D5	1.200	.299	-.889	-.052									
	D6	-2.542	.786	.859	-.444									
	D7	-1.021	-1.464	-1.528	.329									
	D8	-.223	.407	-1.726	-.159									
	D9	1.670	-2.358	-.924	-.358									
Hidden Layer 1	(Bias)					1.446	.130	-.090	-.687	-1.662	1.897	-1.067	-.699	.092
	H(1:1)					1.349	3.088	-1.126	-2.368	2.585	-2.800	-1.678	-.461	2.463
	H(1:2)					-2.305	.612	-1.804	3.160	1.643	.544	-1.665	2.242	-3.062
	H(1:3)					2.410	.306	3.499	.208	-2.572	2.215	-2.024	-1.952	-1.243
	H(1:4)					.373	-.457	-.166	-.221	.197	-.219	.037	.409	-.395

Classification

Sample	Observed	Predicted 1	2	3	4	5	6	7	8	9	Percent Correct
Training	1	15	0	0	0	0	0	1	0	0	93.8%
	2	0	3	0	0	0	0	0	0	0	100.0%
	3	1	0	4	0	0	3	0	0	0	50.0%
	4	0	0	0	4	0	1	0	0	0	80.0%
	5	0	0	0	0	2	0	0	0	0	100.0%
	6	2	0	2	1	0	15	2	0	1	65.2%
	7	0	0	0	0	0	0	10	0	0	100.0%
	8	0	0	0	1	0	0	1	2	0	50.0%
	9	0	1	0	0	0	0	0	0	8	88.9%
	Overall Percent	22.5%	5.0%	7.5%	7.5%	2.5%	23.8%	17.5%	2.5%	11.3%	78.8%
Testing	1	5	0	0	0	0	0	0	0	0	100.0%
	2	1	2	0	0	1	0	0	0	0	50.0%
	3	0	0	2	0	0	0	0	0	0	100.0%
	4	0	0	0	2	0	0	0	0	0	100.0%
	5	0	0	0	0	2	0	0	0	0	100.0%
	6	0	0	0	0	0	2	0	0	0	100.0%
	7	0	0	0	0	0	0	3	0	0	100.0%
	8	0	0	0	1	0	0	0	0	0	0.0%
	9	0	0	0	0	0	0	0	0	3	100.0%
	Overall Percent	25.0%	8.3%	8.3%	12.5%	12.5%	8.3%	12.5%	0.0%	12.5%	87.5%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
CONTACT RESTRICTION	.162	100.0%
SANITATION AND HYGIENE	.082	50.6%
ISOLATION OF INFECTED	.103	63.6%
TOTAL ISOLATION	.114	70.1%
HEALTH CARE	.126	77.7%

VIRUS DISSEMINATION	.104	64.3%
LIFESTYLE CHANGES	.093	57.3%
RIGHTS AND FREEDOMS INFRINGEMENT	.091	56.2%
BUREAUCRATIC RESPONSE	.124	76.3%