```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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		10-DEC-2020 16:12:40
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.48
	Elapsed Time	00:00:00.49

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

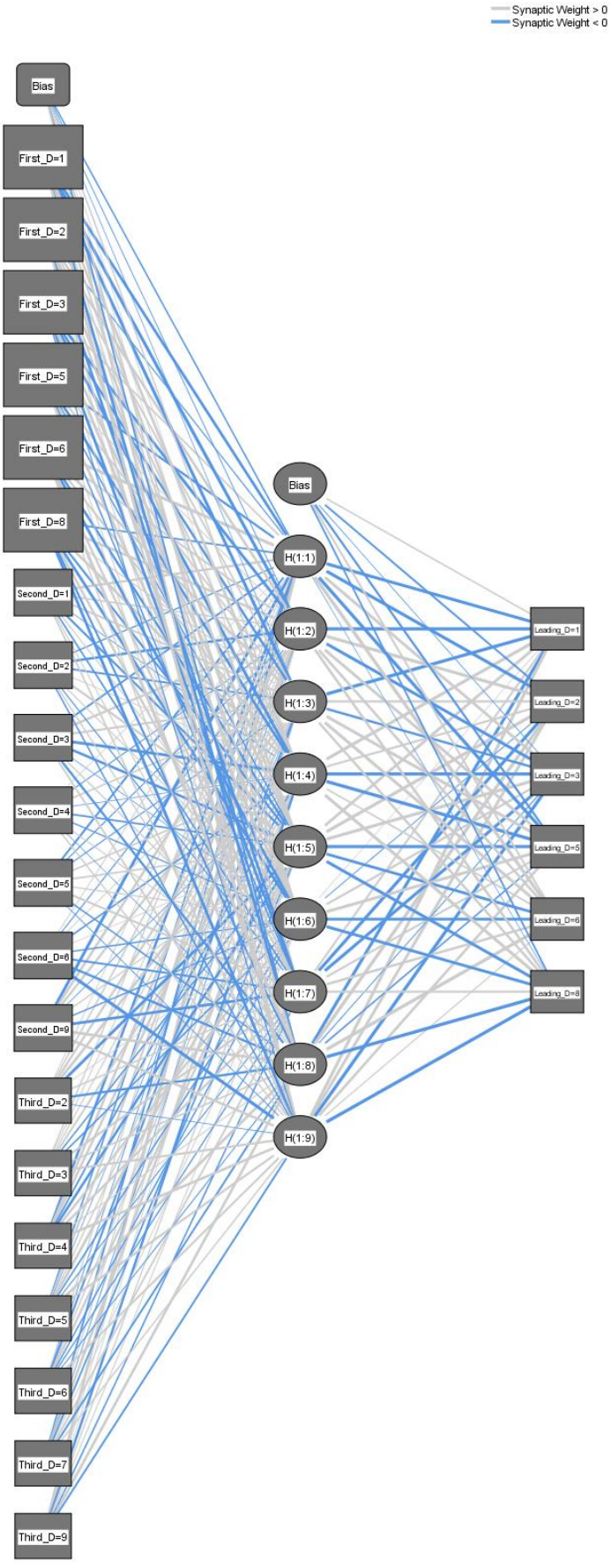
Case Processing Summary

		N	Percent
Sample	Training	9	75.0%
	Testing	3	25.0%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		20
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		9
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		6
	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	.005
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.036
	Percent Incorrect Predictions	0.0%

Dependent Variable: Leading discourse in meaning

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)	H(1:7)	H(1:8)	H(1:9)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.259	-.086	-.007	.248	.027	.003	.370	-.344	.403						
	[First_D=1]	-.829	-1.228	-1.075	.844	.612	.363	.161	-.818	1.039						
	[First_D=2]	-.147	.659	.360	.402	.746	.497	-.801	.491	.063						
	[First_D=3]	.321	-.949	-.630	-1.006	.780	.882	-.872	.103	-.172						
	[First_D=5]	-.532	.096	.345	-.803	-.239	.766	-.259	.097	.106						
	[First_D=6]	1.237	.415	.790	.423	-.630	-.920	.604	1.526	.184						
	[First_D=8]	-.339	.769	.148	.803	-.493	-.852	.594	-.437	-.914						
	[Second_D=1]	.626	.302	.404	-.054	-.497	.131	-.319	.134	.317						
	[Second_D=2]	-.201	-.661	-.385	.091	.548	.150	-.170	.212	-.266						
	[Second_D=3]	-.381	.619	.487	-.887	-.694	-.016	.230	-.600	.350						
	[Second_D=4]	.028	-.127	.309	-.022	-.343	-.193	.158	-.014	.230						
	[Second_D=5]	-.411	-.154	-.150	.325	.324	.173	.478	-.259	-.083						
	[Second_D=6]	.095	-.137	.089	-.310	.024	-.229	-.405	-.607	-1.416						
	[Second_D=9]	-.957	.657	.566	-.056	.199	-.228	-.858	.889	.678						
	[Third_D=2]	.069	.266	.577	.802	-.922	.050	.278	-.605	-.049						
	[Third_D=3]	.200	.116	.159	.406	-.275	-.309	.555	.329	.555						
	[Third_D=4]	-.663	.658	.627	-.326	-.714	.612	.623	.127	.753						
	[Third_D=5]	-.308	.411	-.023	.217	.791	-.302	-.129	.848	.546						
	[Third_D=6]	.138	-.074	-.422	.218	.588	-.239	-.194	-.122	.451						
	[Third_D=7]	-.394	.132	-.069	.696	-.322	.084	.371	-.398	.232						
	[Third_D=9]	1.118	.090	.030	-.627	.174	.113	-.264	.749	-.400						

Hidden Layer 1	(Bias)										.302	-.400	-.040	-.540	.404	-.340
	H(1:1)										-1.178	-1.349	.933	-1.438	2.526	-.006
	H(1:2)										-1.404	1.354	-1.032	.935	.709	.724
	H(1:3)										-1.542	.587	-.617	1.014	1.196	.637
	H(1:4)										1.291	.473	-1.793	-1.837	.323	1.414
	H(1:5)										.922	1.780	1.250	-1.182	-.872	-1.142
	H(1:6)										.007	-.104	.584	1.005	-1.031	-.951
	H(1:7)										.414	-1.373	-1.230	.429	.655	.538
	H(1:8)										-1.221	1.967	-.107	-.305	2.304	-1.890
	H(1:9)										1.167	.954	-1.591	.797	.171	-2.246

Classification

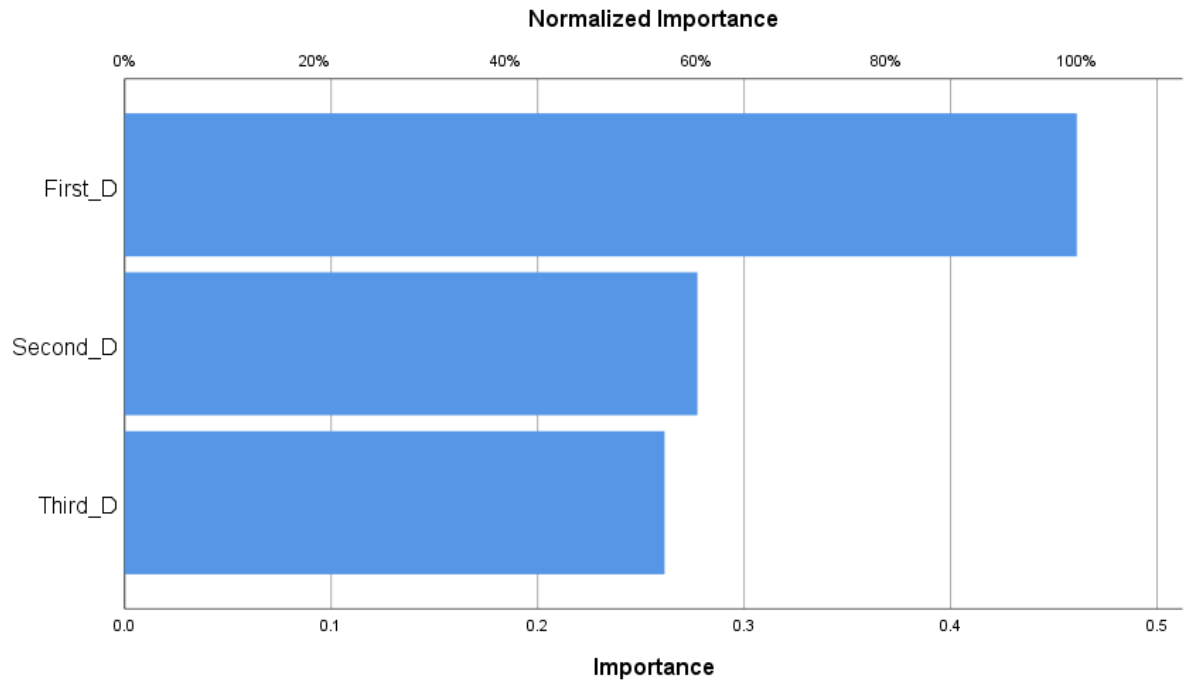
		Predicted						
Sample	Observed	1	2	3	5	6	8	Percent Correct
Training	1	3	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	100.0%
	3	0	0	1	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	33.3%	11.1%	11.1%	11.1%	22.2%	11.1%	100.0%
Testing	1	2	0	0	0	0	0	100.0%
	2	0	0	0	0	0	0	0.0%
	3	0	0	1	0	0	0	100.0%
	5	0	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0	0.0%
	Overall Percent	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.461	100.0%
Second discourse in text	.277	60.2%

Third discourse in text	.261	56.7%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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	10-DEC-2020 16:13:24
Comments	

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.44

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

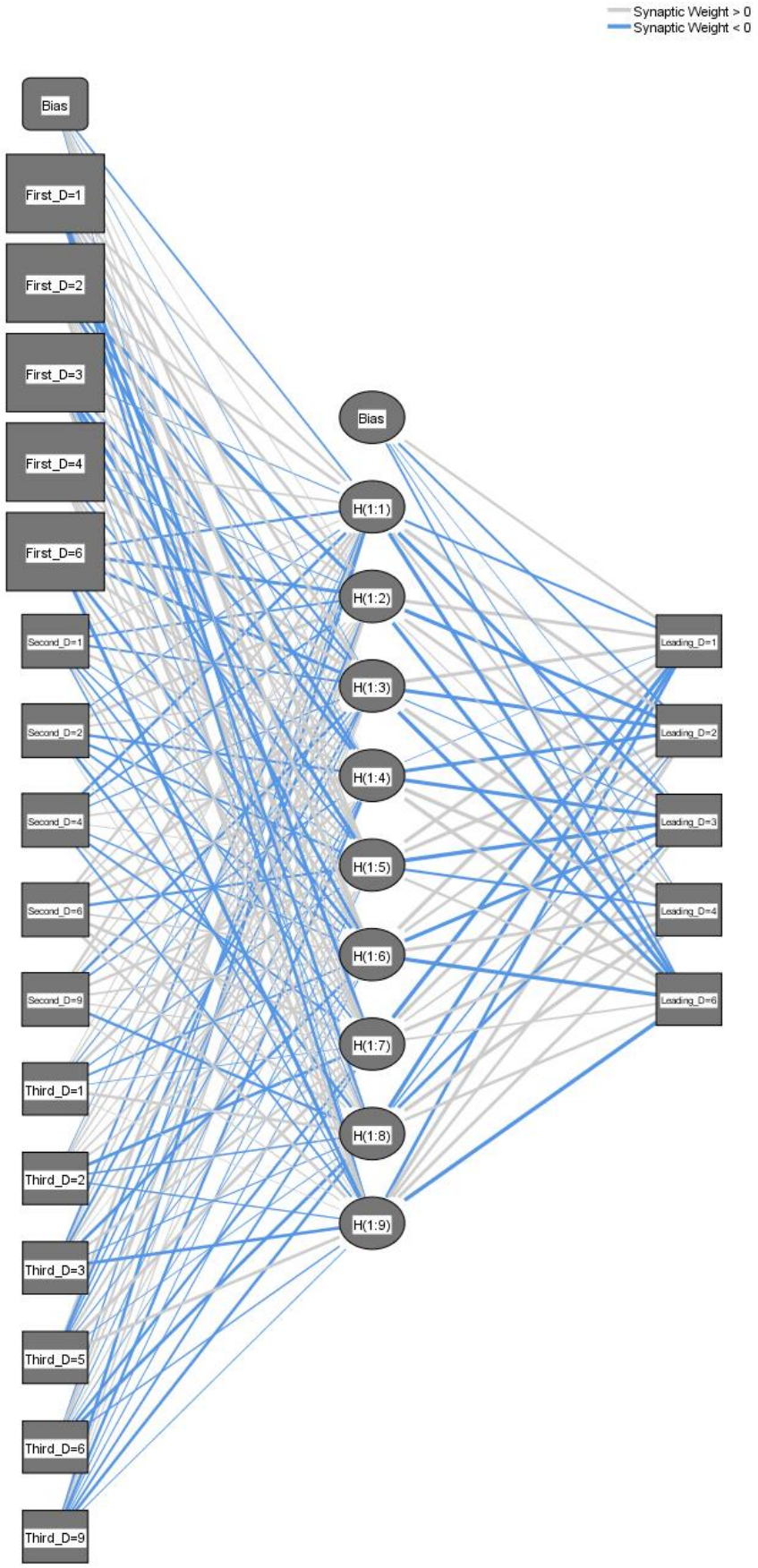
Case Processing Summary

		N	Percent
Sample	Training	8	72.7%
	Testing	3	27.3%
Valid		11	100.0%
Excluded		93	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		16
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		9
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		5
	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	.002
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.043
	Percent Incorrect Predictions	0.0%

Dependent Variable: Leading discourse in meaning

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)	H(1:7)	H(1:8)	H(1:9)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=6]
Input Layer	(Bias)	-.338	.050	-.029	.067	.406	.128	.228	.062	-.037					
	[First_D=1]	.493	.699	.915	-.023	1.191	1.555	-1.083	-.687	-.655					
	[First_D=2]	.661	-1.054	-.493	-.970	.385	.259	.193	.279	.617					
	[First_D=3]	-.103	.361	-.443	-.881	-1.307	-.847	.869	-.093	.603					
	[First_D=4]	.326	-.096	.931	.339	-.399	.656	.498	.479	.195					
	[First_D=6]	-.515	-.970	-.898	.569	.513	-.777	.445	.038	-1.130					
	[Second_D=1]	.183	-.407	-.413	.488	-.076	-.259	-.344	.359	-.249					
	[Second_D=2]	-.184	.781	.269	-.577	-.517	-.383	.018	-.607	.055					
	[Second_D=4]	-.698	-.421	-.192	.322	.034	-.218	-.461	.312	-.360					
	[Second_D=6]	.615	.192	1.018	.697	-.565	.333	.727	.614	.658					
	[Second_D=9]	.618	.134	-.645	-.279	.536	.367	.151	-.595	.130					
	[Third_D=1]	.053	.251	-.165	.728	-.187	-.400	-.022	.645	.003					
	[Third_D=2]	-.031	.449	.261	.129	.342	.361	-.728	-.304	-.214					
	[Third_D=3]	-.459	.191	-.504	.534	.002	-.722	.544	-.125	-.703					
	[Third_D=5]	.626	-.562	-.244	-.222	.490	-.102	.901	-.046	.700					
	[Third_D=6]	-.233	.530	.283	-.098	.162	-.030	-.547	-.818	-.194					

	[Third D=9]	-.690	.265	.109	-.586	-.087	-.115	-.433	-.654	-.075					
Hidden Layer	(Bias)										.539	-.483	-.001	-.078	-.369
1	H(1:1)										-.508	1.149	-1.211	.482	-1.299
	H(1:2)										.897	-1.263	.827	.115	-1.258
	H(1:3)										1.028	-1.104	-.167	1.900	-1.469
	H(1:4)										-.015	-.994	-1.308	1.706	1.668
	H(1:5)										1.200	1.127	-1.849	-.546	.519
	H(1:6)										2.017	.639	-1.148	.804	-1.429
	H(1:7)										-2.157	.985	.379	.953	.340
	H(1:8)										-1.379	-.230	-.815	1.663	.672
	H(1:9)										-.808	1.282	.627	.858	-1.633

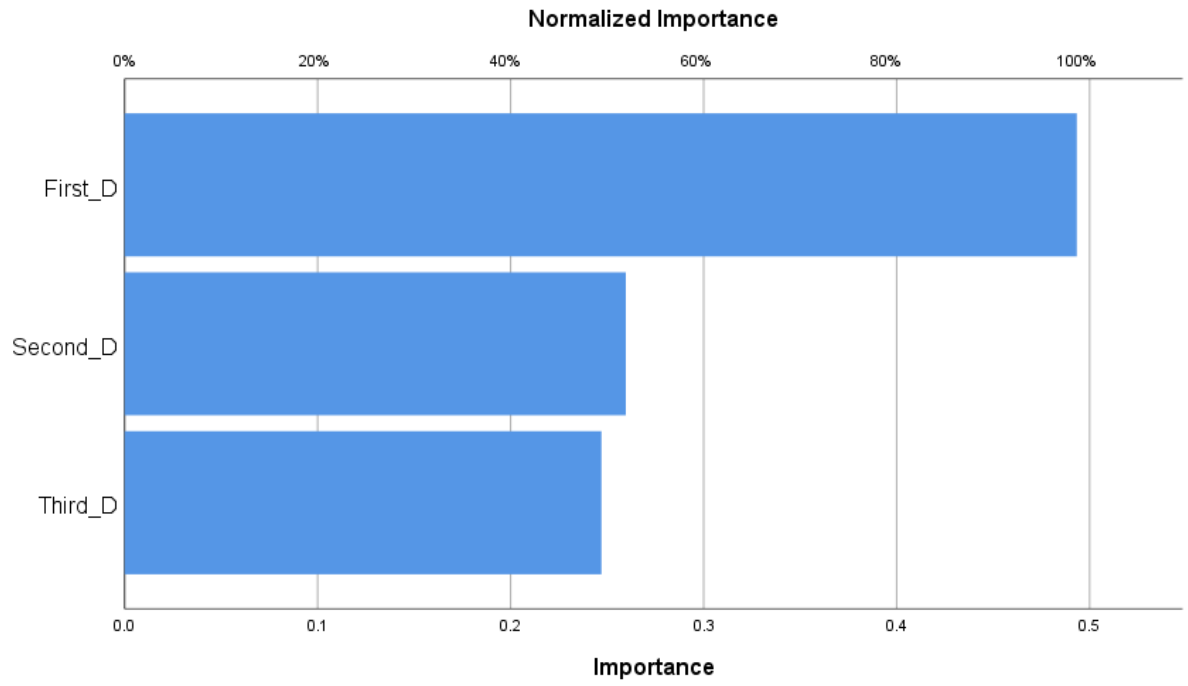
Classification

Sample	Observed	Predicted 1	2	3	4	6	Percent Correct
Training	1	3	0	0	0	0	100.0%
	2	0	1	0	0	0	100.0%
	3	0	0	1	0	0	100.0%
	4	0	0	0	1	0	100.0%
	6	0	0	0	0	2	100.0%
	Overall Percent	37.5%	12.5%	12.5%	12.5%	25.0%	100.0%
Testing	1	0	0	0	0	0	0.0%
	2	0	0	0	0	0	0.0%
	3	0	0	1	0	0	100.0%
	4	0	0	0	1	0	100.0%
	6	0	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	33.3%	33.3%	33.3%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.493	100.0%
Second discourse in text	.260	52.6%
Third discourse in text	.247	50.1%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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	10-DEC-2020 16:13:55
Comments	

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.40

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

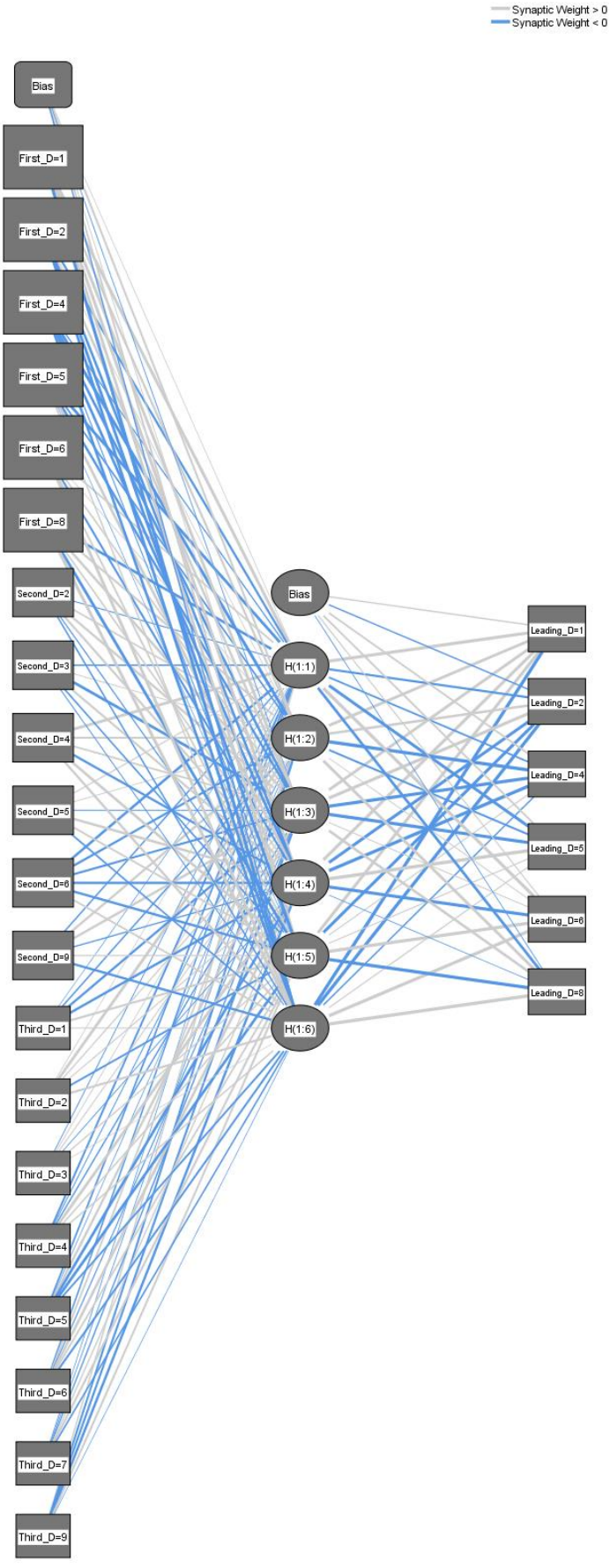
Case Processing Summary

		N	Percent
Sample	Training	11	91.7%
	Testing	1	8.3%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		20
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		6
	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	.010
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.000
	Percent Incorrect Predictions	0.0%

Dependent Variable: Leading discourse in meaning

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=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	.079	.536	-.089	.089	.522	-.273						
	[First_D=1]	1.317	.588	1.152	1.318	.886	-1.460						
	[First_D=2]	-.598	.045	.654	-.727	-1.102	-.898						
	[First_D=4]	-.233	-1.360	-.746	-.801	-.168	-.763						
	[First_D=5]	-1.084	-.391	-.663	.768	-.012	.293						
	[First_D=6]	.405	.081	.370	-.538	.463	1.311						
	[First_D=8]	-.783	.573	.733	.380	-1.134	1.406						
	[Second_D=2]	-.166	.385	.636	.595	-.233	-.348						
	[Second_D=3]	-.366	.121	-1.004	.572	-.369	-.130						
	[Second_D=4]	1.257	.471	.466	-.629	.864	.693						
	[Second_D=5]	.203	.102	-.153	.741	.487	-.399						
	[Second_D=6]	-.756	-.598	-.541	-.721	-.698	.475						
	[Second_D=9]	-.310	.638	.722	-.254	.240	-.653						
	[Third_D=1]	-.022	-.345	-.629	-.717	.546	.184						
	[Third_D=2]	.067	1.050	.240	.203	-.503	.602						

	[Third_D=3]	-.115	.095	.190	-.102	.255	.033						
	[Third_D=4]	-.519	-.124	-.275	1.029	.359	.348						
	[Third_D=5]	-.410	-.043	.631	-.829	-.877	-.479						
	[Third_D=6]	-.329	.431	-.196	.766	.440	-.523						
	[Third_D=7]	-.059	-.082	-.268	.268	.560	-.365						
	[Third_D=9]	.276	-.529	-.538	-.716	.529	-.030						
Hidden Layer	(Bias)							.307	-.278	.488	.506	.215	-.088
1	H(1:1)							1.937	-.600	-.439	-1.389	2.354	-.893
	H(1:2)							1.300	.749	-3.093	-.528	.118	1.182
	H(1:3)							1.300	1.969	-1.994	-2.000	.155	.789
	H(1:4)							1.854	-1.457	-2.586	3.237	-1.794	-.075
	H(1:5)							1.656	-1.669	.197	.201	2.445	-2.540
	H(1:6)							-2.594	-2.588	-.323	.239	2.422	3.227

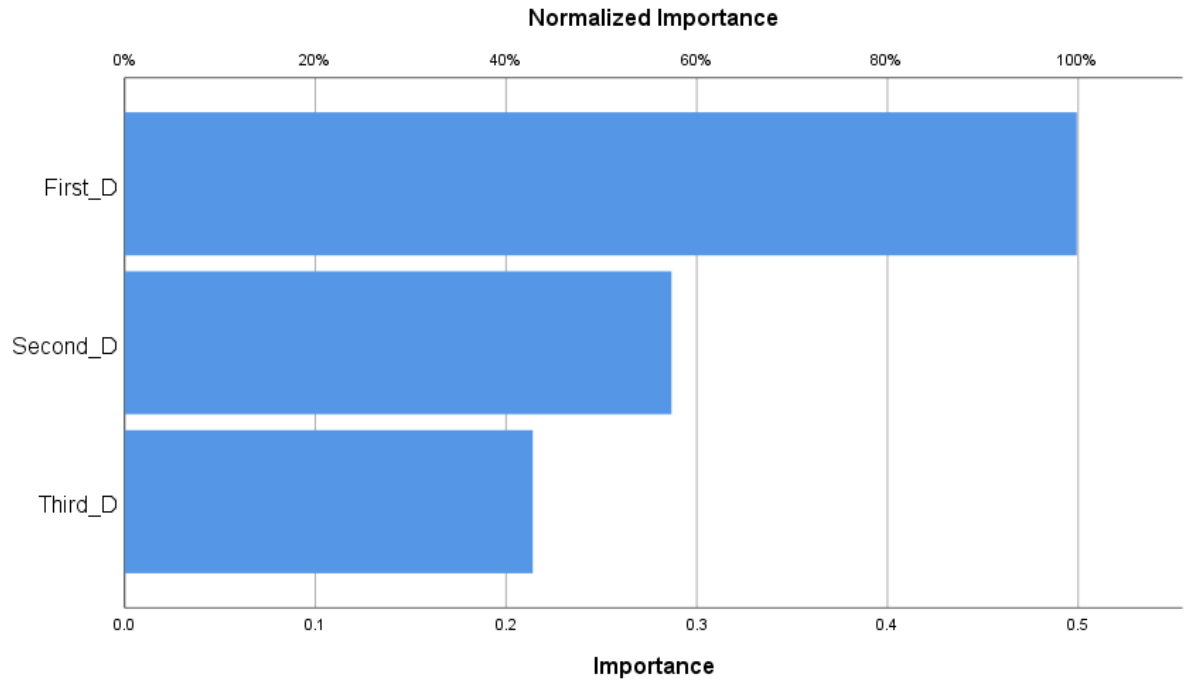
Classification

		Predicted						
Sample	Observed	1	2	4	5	6	8	Percent Correct
Training	1	4	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	100.0%
	4	0	0	2	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	36.4%	9.1%	18.2%	9.1%	18.2%	9.1%	100.0%
Testing	1	1	0	0	0	0	0	100.0%
	2	0	0	0	0	0	0	0.0%
	4	0	0	0	0	0	0	0.0%
	5	0	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.499	100.0%
Second discourse in text	.287	57.4%
Third discourse in text	.214	42.9%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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		10-DEC-2020 16:14:07
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.44

Case Processing Summary

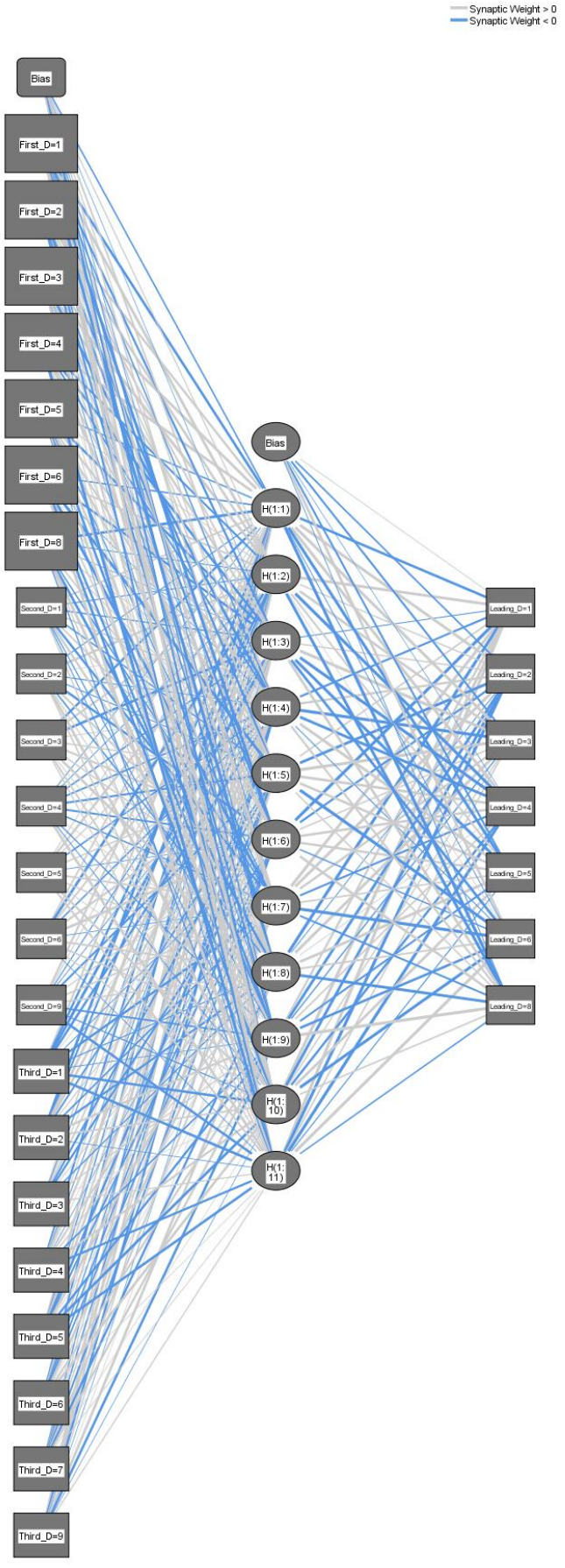
		N	Percent
Sample	Training	12	80.0%

Testing	3	20.0%
Valid	15	100.0%
Excluded	89	
Total	104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		22
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		11
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		7
	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	.020
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.409
	Percent Incorrect Predictions	0.0%

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)	H(1:7)	H(1:8)	H(1:9)	H(1:10)	H(1:11)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.283	.208	-.018	.411	.192	.285	-.054	-.175	-.225	-.476	.275							
	[First_D=1]	-.729	.856	-.515	-.261	.353	-1.081	.857	-1.311	.138	1.090	1.038							
	[First_D=2]	.544	.632	.381	.259	-.535	-.514	.204	-.270	-.451	.149	-.453							
	[First_D=3]	.855	1.054	.557	-.900	.620	-.032	.482	.296	-.081	.401	.116							
	[First_D=4]	.752	-.483	-.751	-.390	.377	.684	.006	.114	.096	.157	-1.083							
	[First_D=5]	-.263	.123	-.674	.552	.463	.587	-.227	.568	-.640	.631	-.060							
	[First_D=6]	-.295	.429	-.617	-.052	-1.257	.035	-1.218	.350	-.537	-.722	.931							
	[First_D=8]	-.850	-.143	-.046	.151	.181	.324	-.279	-.771	.863	.198	-.237							
	[Second_D=1]	.426	-.181	-.267	.342	-.278	.330	-.580	.513	-.192	-.115	.263							
	[Second_D=2]	-.199	.622	.010	-.151	-.166	-.673	.491	-.282	.152	.805	.294							
	[Second_D=3]	-.621	.509	-.732	.091	.263	.504	.273	.766	.086	.429	.220							
	[Second_D=4]	-.098	-.110	-.310	-.380	-.498	-.443	-.263	.055	-.225	-.101	.751							
	[Second_D=5]	.148	.624	.231	-.300	.263	-.067	.384	.242	.069	.512	.465							

	[Second_D=6]	.370	-.766	.420	-.288	.502	.846	-.082	.456	.382	.208	-.057						
	[Second_D=9]	.510	.142	-.197	-.082	-.496	.189	.371	.293	-.403	-.207	-.714						
	[Third_D=1]	.424	-.541	-1.037	-.611	.033	-.105	-.682	-.197	-.080	-.693	-.761						
	[Third_D=2]	-.796	-.450	.840	.588	-.371	.195	-.347	-.529	.595	.397	-.043						
	[Third_D=3]	.257	-.147	.091	.306	-.493	-.512	.096	-.248	.256	.005	.216						
	[Third_D=4]	-.523	.143	-.111	.524	.048	-.045	.479	.201	-.337	.517	-.547						
	[Third_D=5]	.636	-.244	.379	.661	-.620	-.387	.913	.049	-.555	-.781	-.728						
	[Third_D=6]	-.429	.082	.415	-.200	-.305	-.330	.687	.016	.493	.714	.032						
	[Third_D=7]	.033	-.217	.177	-.289	.262	-.443	.489	-.529	.534	.015	.060						
	[Third_D=9]	.370	.513	.431	-.655	.249	-.024	.002	.738	-.686	-.035	.208						
Hidden Layer 1	(Bias)												.073	-.341	-.479	-.014	-.453	.715	-.085
	H(1:1)												-.748	1.072	1.230	1.038	-1.210	-.095	-1.585
	H(1:2)												.957	.250	.712	-1.687	.420	.020	-1.253
	H(1:3)												-.129	.259	1.463	-1.460	-1.148	-.762	.761
	H(1:4)												-.496	.549	-1.473	-.954	.932	-.142	.498
	H(1:5)												.328	-1.035	1.378	.768	.703	-1.653	.271
	H(1:6)												-1.995	-.528	.273	.713	.581	-.254	.751
	H(1:7)												1.407	1.086	.559	-.490	.319	-2.115	-.428
	H(1:8)												-1.637	-.101	1.046	.068	.883	.386	-1.028
	H(1:9)												.534	-.917	-.235	.351	-.474	-.696	1.712
	H(1:10)												1.402	-.964	.240	-.588	.831	-1.362	.310
	H(1:11)												1.320	-1.583	.283	-1.887	-.181	1.546	-.264

Classification

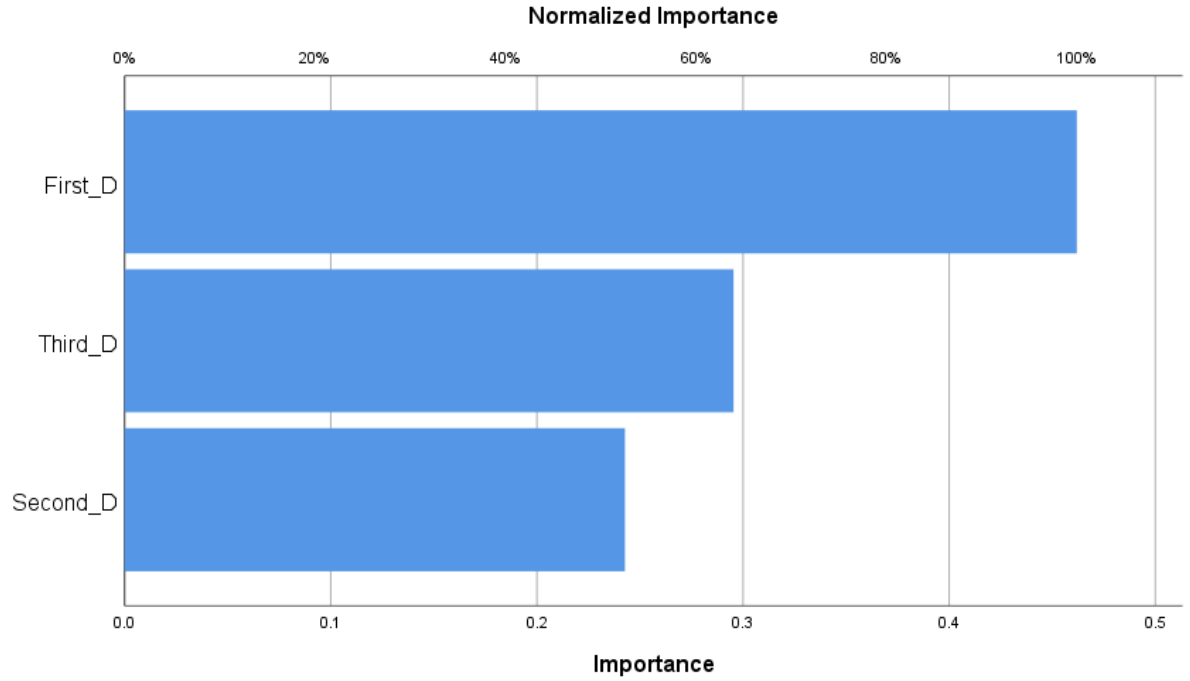
Sample	Observed	Predicted 1	2	3	4	5	6	8	Percent Correct
Training	1	4	0	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	0	100.0%
	3	0	0	1	0	0	0	0	100.0%
	4	0	0	0	1	0	0	0	100.0%
	5	0	0	0	0	1	0	0	100.0%
	6	0	0	0	0	0	3	0	100.0%
	8	0	0	0	0	0	0	1	100.0%
	Overall Percent	33.3%	8.3%	8.3%	8.3%	8.3%	25.0%	8.3%	100.0%
Testing	1	1	0	0	0	0	0	0	100.0%

	2	0	0	0	0	0	0	0.0%
	3	0	0	1	0	0	0	100.0%
	4	0	0	0	1	0	0	100.0%
	5	0	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0	0.0%
	Overall Percent	33.3%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.462	100.0%
Second discourse in text	.243	52.5%
Third discourse in text	.295	64.0%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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		10-DEC-2020 16:14:19
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.48
	Elapsed Time	00:00:00.43

Case Processing Summary

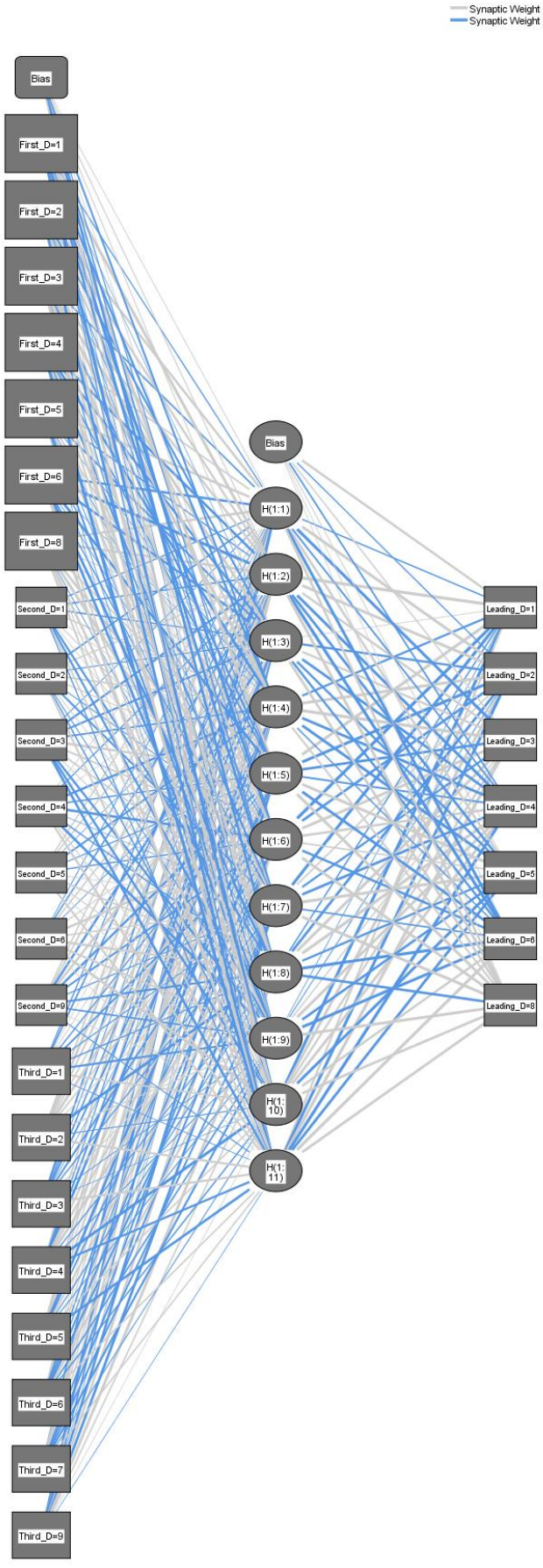
		N	Percent
Sample	Training	14	93.3%

Testing	1	6.7%
Valid	15	100.0%
Excluded	89	
Total	104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		22
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		11
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		7
	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	.010
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.017
	Percent Incorrect Predictions	0.0%

Dependent Variable: Leading discourse in meaning

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)	H(1:7)	H(1:8)	H(1:9)	H(1:10)	H(1:11)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	.061	.162	.129	-.432	.036	-.185	-.315	-.761	-.022	.282	.059							
	[First_D=1]	-.201	1.200	-.005	-.562	1.347	-1.363	-.787	.037	-.039	-1.455	-.207							
	[First_D=2]	.630	.536	-.478	.494	-.163	-.081	.147	.170	.089	.618	-.820							
	[First_D=3]	-.327	.579	.901	1.415	-.462	.649	.024	.703	-.196	.363	1.249							
	[First_D=4]	.344	-.773	-.586	-.835	-.335	.235	-.534	.732	.384	.198	-1.497							
	[First_D=5]	.737	-.236	-.498	-.076	.352	-.088	.584	-.124	-.460	-.078	-.010							
	[First_D=6]	-.670	-1.453	-.667	-.009	-.839	-.078	-.233	-.885	-.791	.365	.950							
	[First_D=8]	.745	.721	.154	.092	.350	.708	1.091	-.074	.709	.180	.419							
	[Second_D=1]	-.247	-.333	-.302	.317	.030	.168	.041	-.508	-.513	.323	-.200							
	[Second_D=2]	-.378	.256	-.197	.383	.172	-.157	-.457	.067	-.144	-.255	.451							
	[Second_D=3]	-.139	-.559	-.476	-.369	.623	.374	.357	.108	-.582	-.586	-.758							
	[Second_D=4]	.075	-.210	.057	-.625	-.256	-.791	-.007	-.250	-.776	.144	.603							
	[Second_D=5]	.251	.279	-.039	-.416	-.198	-.261	.060	.339	.171	.053	.472							
	[Second_D=6]	-.123	-.304	.267	-.078	.165	.717	.288	.627	.466	.912	.075							

	[Second_D=9]	.283	.361	-.665	.626	-.621	-.434	-.186	-.513	-.359	.035	-.183						
	[Third_D=1]	-.202	-.351	.033	.084	-.246	-.407	-.180	-.245	-.517	.427	-.068						
	[Third_D=2]	.365	.854	.412	.312	.919	.320	.127	-.902	.230	-.158	.572						
	[Third_D=3]	-.433	-.126	-.312	-.402	-.040	-.422	-.248	.192	-.095	-.024	.577						
	[Third_D=4]	.452	-.226	-.420	-.778	.497	.548	.955	-.211	-.169	-1.033	-.573						
	[Third_D=5]	.502	.386	.175	.436	-.831	-.315	.468	-.185	-.167	.288	-.751						
	[Third_D=6]	.061	.200	.231	-.314	-.203	-.434	-.481	.494	-.318	-.253	.306						
	[Third_D=7]	-.410	.535	.463	.216	.299	-.394	-.436	-.403	-.500	-.151	.259						
	[Third_D=9]	-.836	.133	-.377	-.014	-.737	.590	-.813	.965	.300	.027	-.044						
Hidden	(Bias)												.644	-.212	.237	-.351	.096	.050	.046
Layer 1	H(1:1)												-.262	1.121	-1.297	-.367	.614	-1.077	.666
	H(1:2)												1.857	.963	.585	-1.041	-.789	-2.101	1.025
	H(1:3)												.051	-.567	.553	-.805	-.585	-.585	.768
	H(1:4)												-.527	1.244	1.894	-.899	-1.056	-.255	.443
	H(1:5)												1.498	-1.332	-.788	-.410	1.184	-.947	1.300
	H(1:6)												-2.184	-.785	.992	.702	.308	-.702	1.181
	H(1:7)												-1.515	.326	-.527	-.800	1.443	-.334	1.414
	H(1:8)												-.264	-.817	1.228	1.549	-.572	-1.359	-.776
	H(1:9)												-.049	-.135	.209	1.023	-.776	-1.183	1.150
	H(1:10)												-1.810	.934	.498	.859	-1.068	.684	.805
	H(1:11)												.464	-1.404	1.778	-1.796	-.892	1.601	.889

Classification

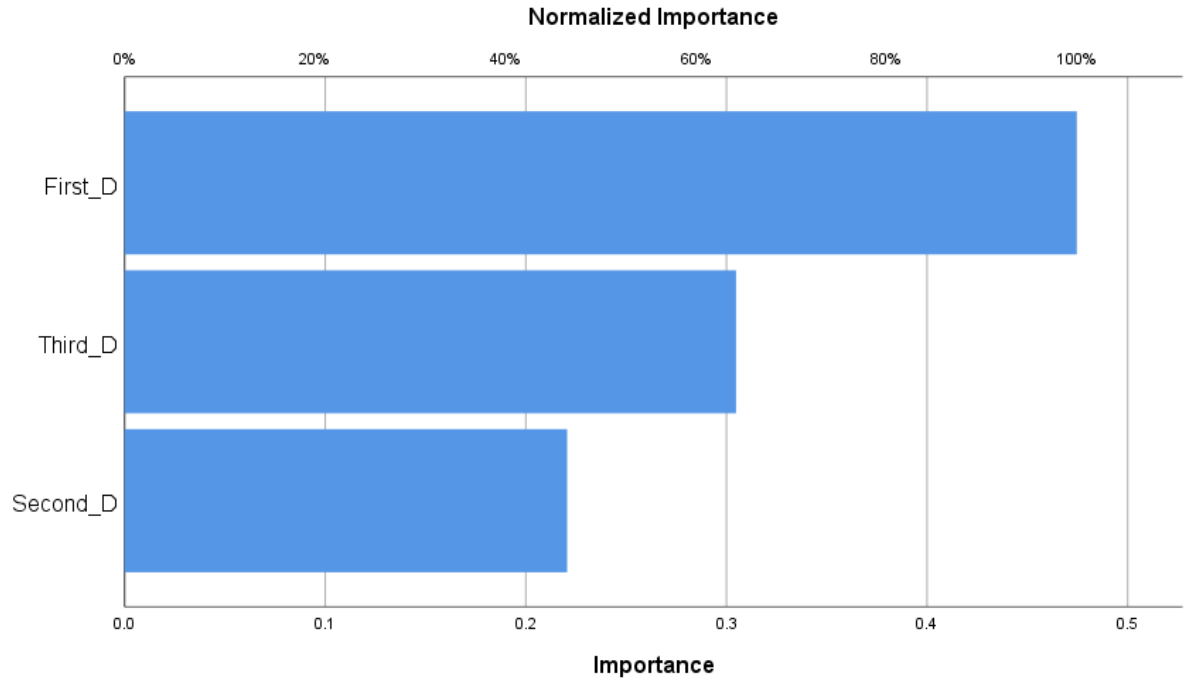
Sample	Observed	Predicted 1	2	3	4	5	6	8	Percent Correct
Training	1	5	0	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	0	100.0%
	3	0	0	2	0	0	0	0	100.0%
	4	0	0	0	1	0	0	0	100.0%
	5	0	0	0	0	1	0	0	100.0%
	6	0	0	0	0	0	3	0	100.0%
	8	0	0	0	0	0	0	1	100.0%
	Overall Percent	35.7%	7.1%	14.3%	7.1%	7.1%	21.4%	7.1%	100.0%
Testing	1	0	0	0	0	0	0	0	0.0%
	2	0	0	0	0	0	0	0	0.0%
	3	0	0	0	0	0	0	0	0.0%

	4	0	0	0	1	0	0	0	100.0%
	5	0	0	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0	0	0.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.475	100.0%
Second discourse in text	.221	46.5%
Third discourse in text	.305	64.2%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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		10-DEC-2020 16:14:26
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.45
	Elapsed Time	00:00:00.46

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

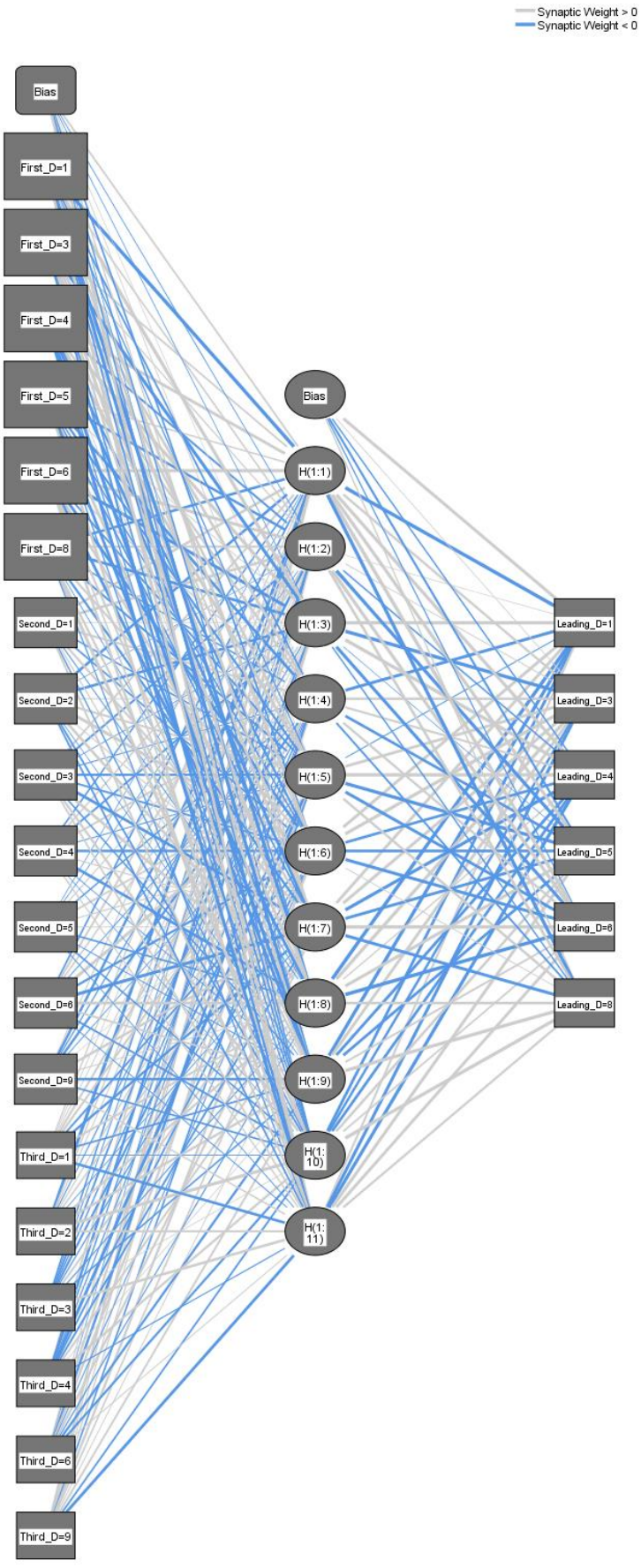
Case Processing Summary

		N	Percent
Sample	Training	11	84.6%
	Testing	2	15.4%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		19
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		11
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		6
	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	.016
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.042
	Percent Incorrect Predictions	0.0%

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)	H(1:7)	H(1:8)	H(1:9)	H(1:10)	H(1:11)	[Leading_D=1]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	.350	-.061	-.038	.001	.035	-.314	.202	-.249	-.032	-.228	.595						
	[First_D=1]	-1.624	.271	1.212	-.340	-.175	.774	.617	-1.216	-.982	-.338	.590						
	[First_D=3]	.357	.176	-1.014	.590	.545	.326	.568	1.019	.496	-.293	-.435						
	[First_D=4]	.740	-.396	1.003	.512	.873	-.450	-.635	.049	-1.253	-.187	-1.000						
	[First_D=5]	.230	-.544	.064	-.688	-.447	-.229	-.304	.663	-.688	-.204	.551						
	[First_D=6]	1.147	.859	-.965	.219	-.377	-.711	.510	-.763	.446	.288	.558						
	[First_D=8]	-.586	.462	-.741	-.239	-.396	.410	-.472	-.054	.461	.980	-.178						
	[Second_D=1]	.560	.628	.028	.436	-.266	-.296	.436	-.092	.159	-.215	.409						
	[Second_D=2]	-.582	-.006	-.580	.123	.414	.868	.115	.579	-.033	-.355	-.361						
	[Second_D=3]	.392	-.411	-.041	-.099	-.495	-.368	-.668	.672	-.255	.503	.343						
	[Second_D=4]	-.270	.254	-.384	.393	-.104	-.566	.133	-.664	-.064	-.009	.201						
	[Second_D=5]	-.028	-.040	.155	-.228	.375	.175	.066	-.329	-.086	-.291	-.073						
	[Second_D=6]	-.324	.389	.255	-.081	.780	-.454	-.897	.747	.377	-.373	-.083						

	[Second_D=9]	.148	-.526	-.164	-.493	-.055	.007	.538	.099	-.517	-.326	.243						
	[Third_D=1]	.206	.054	.076	.421	.436	-.371	-.520	.413	-.343	-.065	-.580						
	[Third_D=2]	-.994	.226	.119	-.159	.165	.261	-.057	.484	.549	.929	.411						
	[Third_D=3]	-.280	-.095	-.364	-.222	-.413	-.176	.385	-.148	-.275	.031	.579						
	[Third_D=4]	.351	-.548	-.226	-.171	-.780	-.370	-.380	.404	.030	.483	-.158						
	[Third_D=6]	.129	-.038	.440	-.532	.486	-.108	.448	-.151	-.477	-.438	.103						
	[Third_D=9]	.478	.204	.098	.203	-.294	.508	.305	.080	.391	-.359	-.719						
Hidden Layer 1	(Bias)												.900	.040	-.228	-.417	-.172	.219
	H(1:1)												-1.751	.498	1.090	1.040	1.599	-1.425
	H(1:2)												.020	.081	-.261	-1.340	1.078	.617
	H(1:3)												1.268	-1.453	1.597	-.011	-.971	-.226
	H(1:4)												-.806	.614	.413	-.600	.489	-.384
	H(1:5)												-.115	.710	1.662	-1.331	-.805	.532
	H(1:6)												.806	1.202	-.591	-.690	-.888	.074
	H(1:7)												.764	.791	-1.064	-.733	1.107	-.826
	H(1:8)												-1.741	1.241	.223	.894	-1.800	.548
	H(1:9)												-1.354	.692	-.739	-.661	.391	1.363
	H(1:10)												-.684	-.516	-.649	.550	.344	1.389
	H(1:11)												.405	-.838	-1.147	.859	.777	.463

Classification

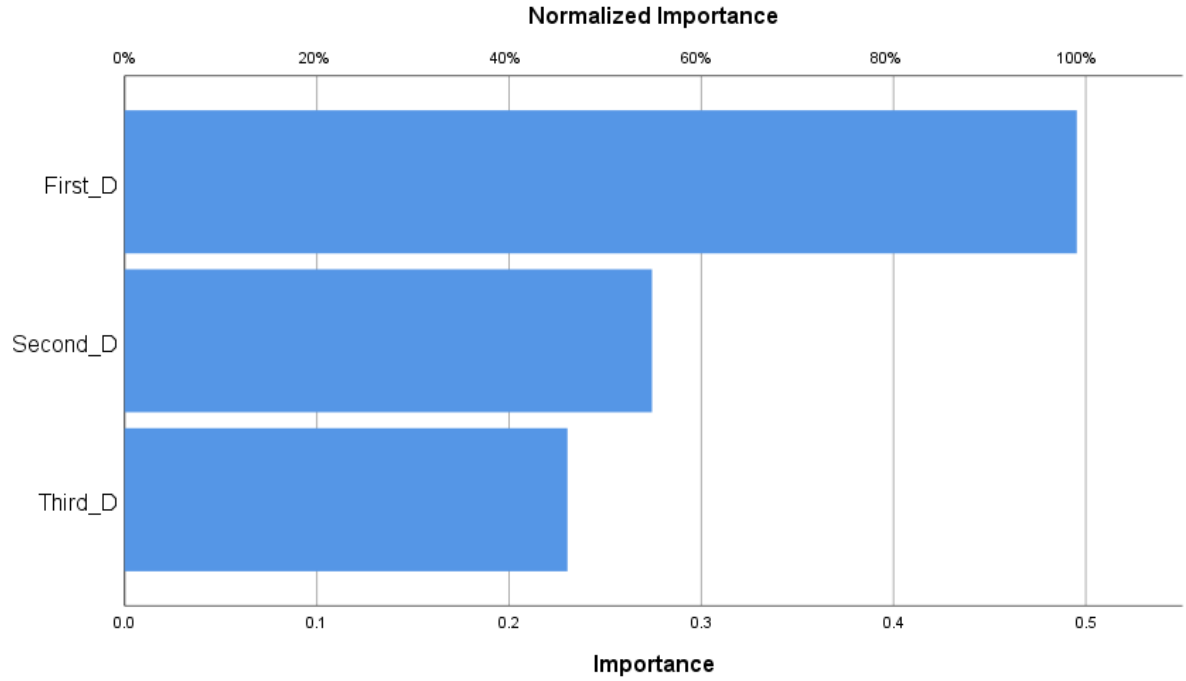
		Predicted						
Sample	Observed	1	3	4	5	6	8	Percent Correct
Training	1	4	0	0	0	0	0	100.0%
	3	0	1	0	0	0	0	100.0%
	4	0	0	2	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	36.4%	9.1%	18.2%	9.1%	18.2%	9.1%	100.0%
Testing	1	0	0	0	0	0	0	0.0%
	3	0	1	0	0	0	0	100.0%
	4	0	0	0	0	0	0	0.0%
	5	0	0	0	0	0	0	0.0%
	6	0	0	0	0	1	0	100.0%
	8	0	0	0	0	0	0	0.0%

Overall Percent	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.495	100.0%
Second discourse in text	.274	55.4%
Third discourse in text	.230	46.5%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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		10-DEC-2020 16:14:34
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.05
	Elapsed Time	00:00:00.03

```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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		10-DEC-2020 16:14:50
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.45

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

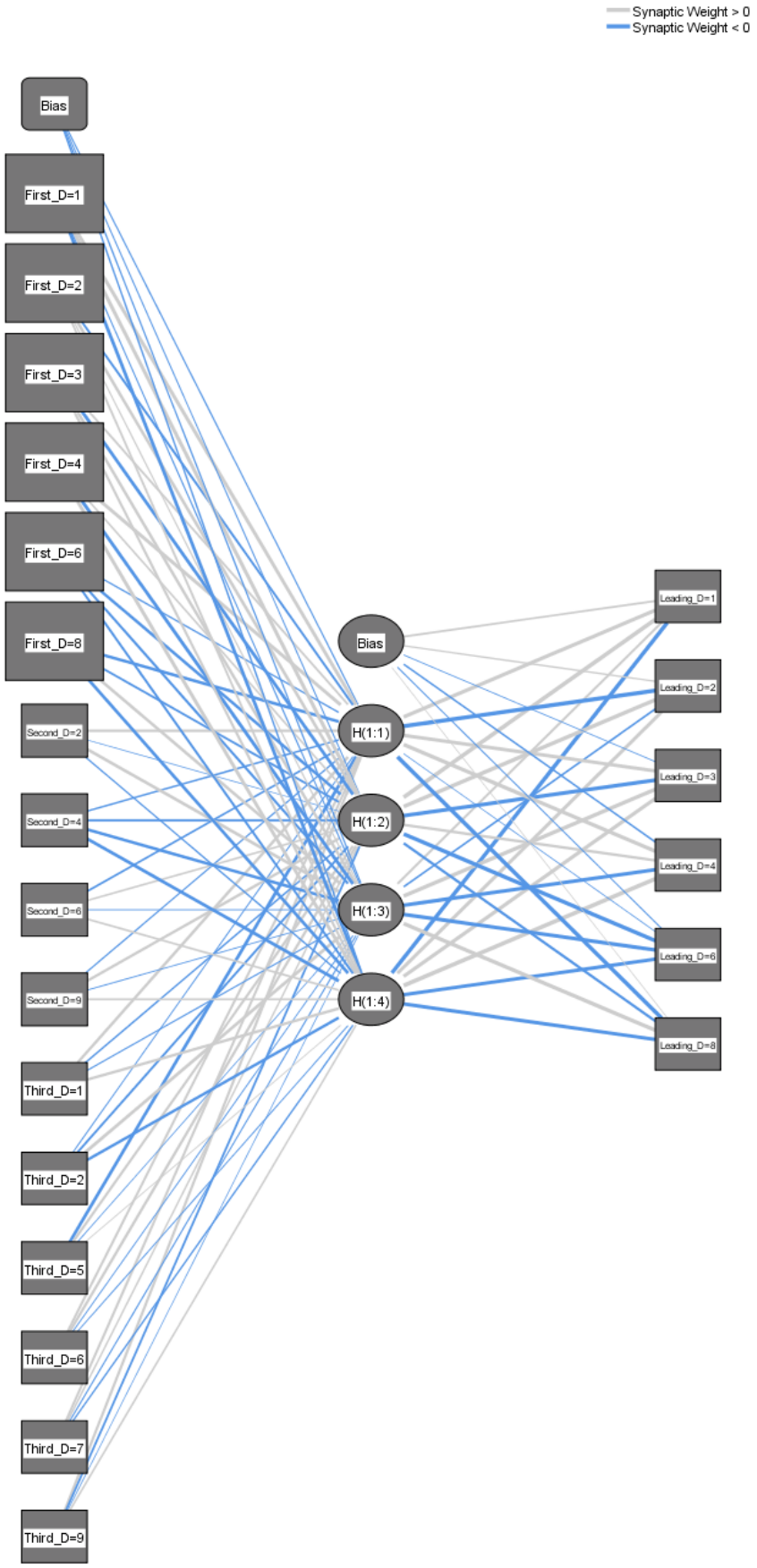
Case Processing Summary

		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		16
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		6
	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	.018
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.014
	Percent Incorrect Predictions	0.0%

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)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.142	-.101	-.183	-.288						
	[First_D=1]	1.575	1.868	-.117	-1.376						
	[First_D=2]	-.617	1.009	.169	.550						
	[First_D=3]	.541	-1.335	.988	.815						
	[First_D=4]	1.526	.367	-1.508	1.535						
	[First_D=6]	-.258	-.995	-.814	-.632						
	[First_D=8]	-1.192	-.554	1.008	-1.207						
	[Second_D=2]	.827	-.012	1.206	-.260						
	[Second_D=4]	-.346	-.599	-1.024	-1.334						
	[Second_D=6]	-.457	.390	-.064	.484						
	[Second_D=9]	-.203	.858	-.039	.486						
	[Third_D=1]	.972	-.312	-.120	.878						
	[Third_D=2]	-.084	-.597	1.228	-.884						
	[Third_D=5]	-1.327	.816	-.023	.031						
	[Third_D=6]	.701	.841	-.081	-.084						

	[Third_D=7]	.738	.300	-.114	-.271						
	[Third_D=9]	.828	-.520	-.017	.364						
Hidden Layer	(Bias)					.511	.284	-.025	-.337	-.096	.011
1	H(1:1)					2.181	-3.351	1.715	2.457	-.018	-2.999
	H(1:2)					3.125	2.743	-2.532	.876	-2.917	-.832
	H(1:3)					.654	-.441	2.570	-2.093	-2.321	2.665
	H(1:4)					-2.874	1.586	2.001	3.452	-1.737	-1.977

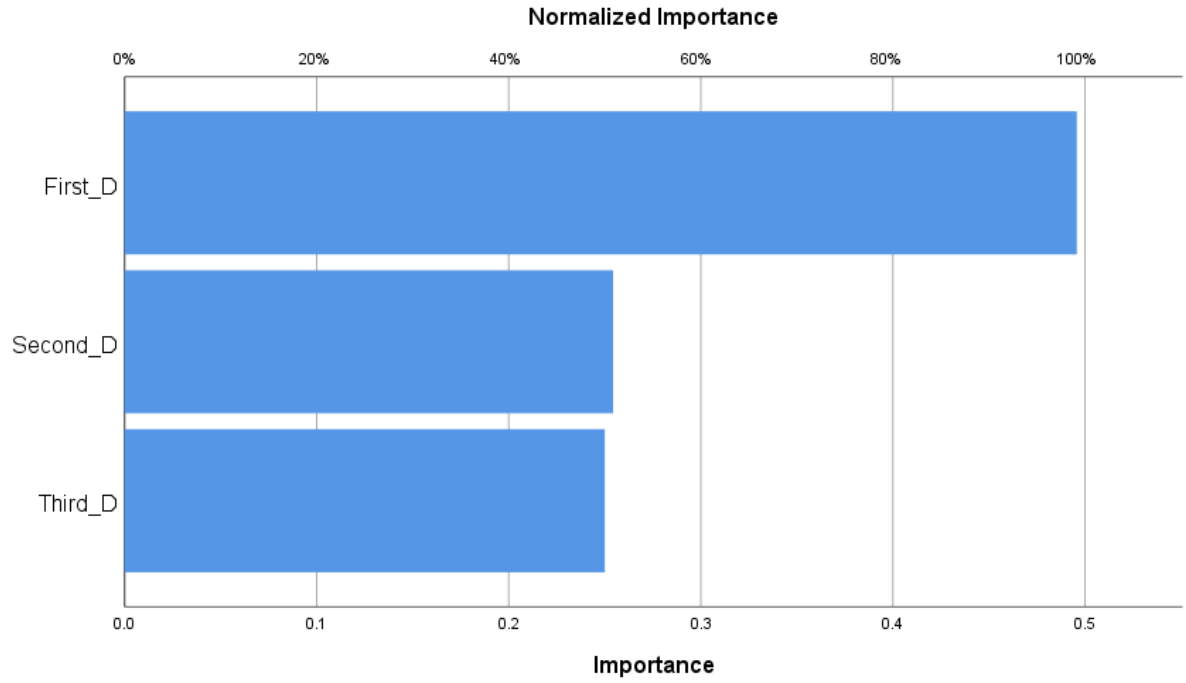
Classification

		Predicted						
Sample	Observed	1	2	3	4	6	8	Percent Correct
Training	1	4	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	100.0%
	3	0	0	1	0	0	0	100.0%
	4	0	0	0	2	0	0	100.0%
	6	0	0	0	0	1	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	40.0%	10.0%	10.0%	20.0%	10.0%	10.0%	100.0%
Testing	1	0	0	0	0	0	0	0.0%
	2	0	0	0	0	0	0	0.0%
	3	0	0	1	0	0	0	100.0%
	4	0	0	0	0	0	0	0.0%
	6	0	0	0	0	1	0	100.0%
	8	0	0	0	0	0	0	0.0%
	Overall Percent	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.496	100.0%
Second discourse in text	.254	51.3%
Third discourse in text	.250	50.4%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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	10-DEC-2020 16:14:57
Comments	

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.46

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

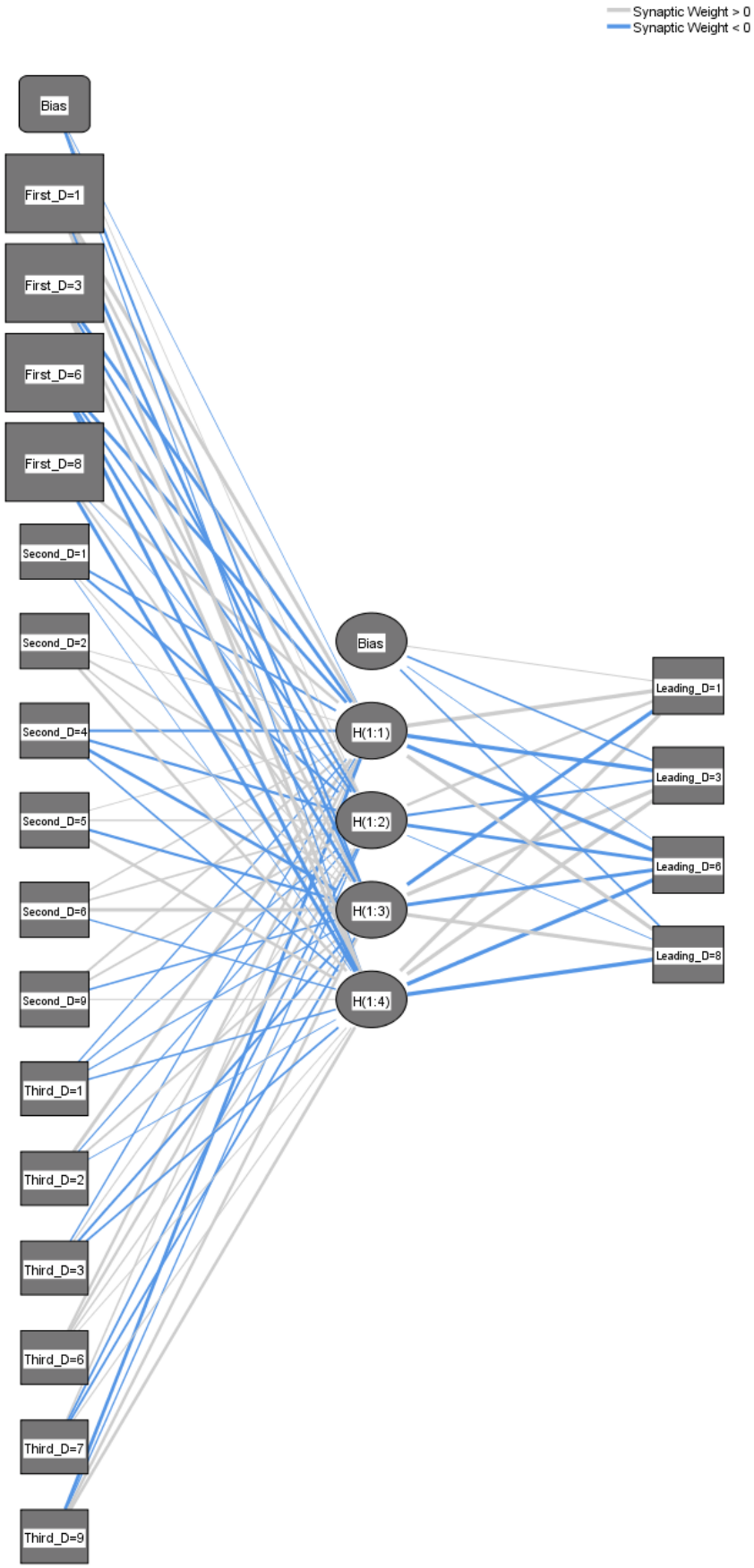
Case Processing Summary

		N	Percent
Sample	Training	10	90.9%
	Testing	1	9.1%
Valid		11	100.0%
Excluded		93	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		16
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		4
	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	.015
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.007
	Percent Incorrect Predictions	0.0%

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)	[Leading_D=1]	[Leading_D=3]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.036	.053	-.438	-.166				
	[First_D=1]	1.544	.691	-.859	1.472				
	[First_D=3]	-1.087	-.509	.728	.881				
	[First_D=6]	-.942	-.466	-.756	-1.549				
	[First_D=8]	.634	-.027	.441	-1.346				
	[Second_D=1]	-.422	-.499	.150	-.050				
	[Second_D=2]	.089	.419	.247	.647				
	[Second_D=4]	-.496	-.531	-.778	-.290				
	[Second_D=5]	.092	.271	-.515	.705				
	[Second_D=6]	.250	.336	1.228	-.247				
	[Second_D=9]	.413	.352	-.284	.114				
	[Third_D=1]	-.211	-.184	-.174	-.278				
	[Third_D=2]	1.011	-.179	.392	-.084				
	[Third_D=3]	-.224	.150	-.451	-.382				
	[Third_D=6]	.614	.611	.238	.103				
	[Third_D=7]	.272	-.361	-.411	.151				
	[Third_D=9]	-.959	-.215	.643	.725				
Hidden Layer 1	(Bias)					.106	-.306	-.038	-.334
	H(1:1)					2.348	-2.216	-2.186	1.999

	H(1:2)					.646	-.482	-1.183	-.088
	H(1:3)					-1.722	1.805	-1.437	1.700
	H(1:4)					1.775	1.783	-2.200	-2.428

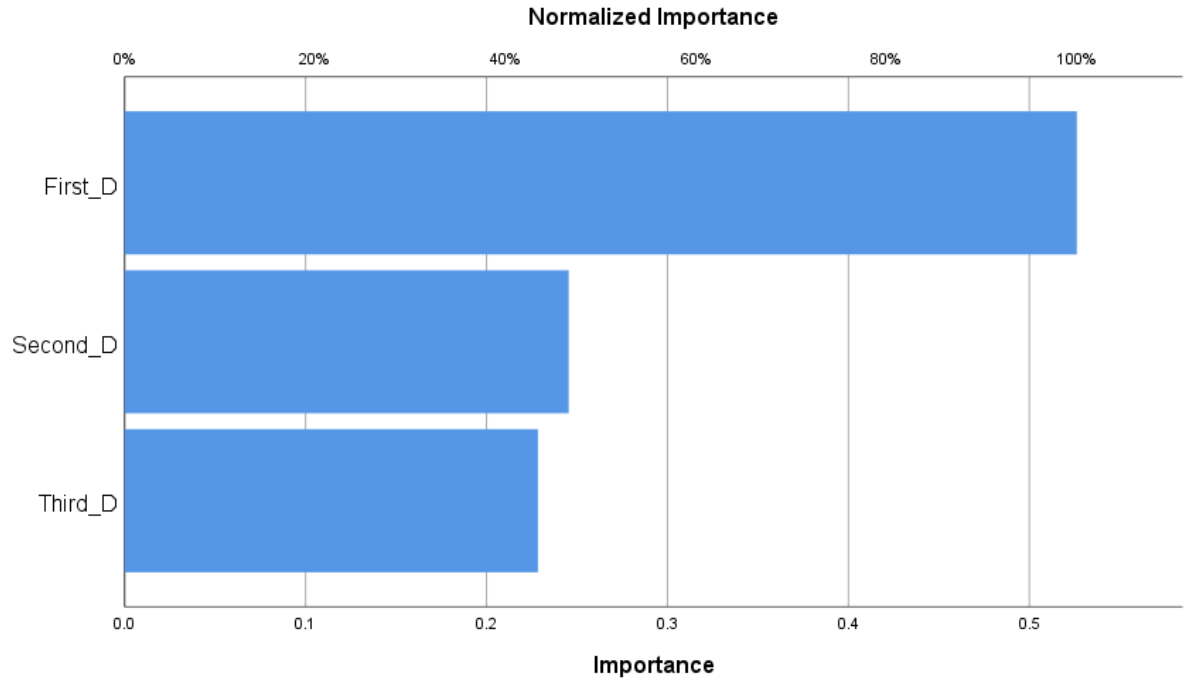
Classification

		Predicted				
Sample	Observed	1	3	6	8	Percent Correct
Training	1	4	0	0	0	100.0%
	3	0	2	0	0	100.0%
	6	0	0	3	0	100.0%
	8	0	0	0	1	100.0%
	Overall Percent	40.0%	20.0%	30.0%	10.0%	100.0%
Testing	1	1	0	0	0	100.0%
	3	0	0	0	0	0.0%
	6	0	0	0	0	0.0%
	8	0	0	0	0	0.0%
	Overall Percent	100.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.526	100.0%
Second discourse in text	.245	46.6%
Third discourse in text	.228	43.4%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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	10-DEC-2020 16:15:06
Comments	

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.49
	Elapsed Time	00:00:00.46

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

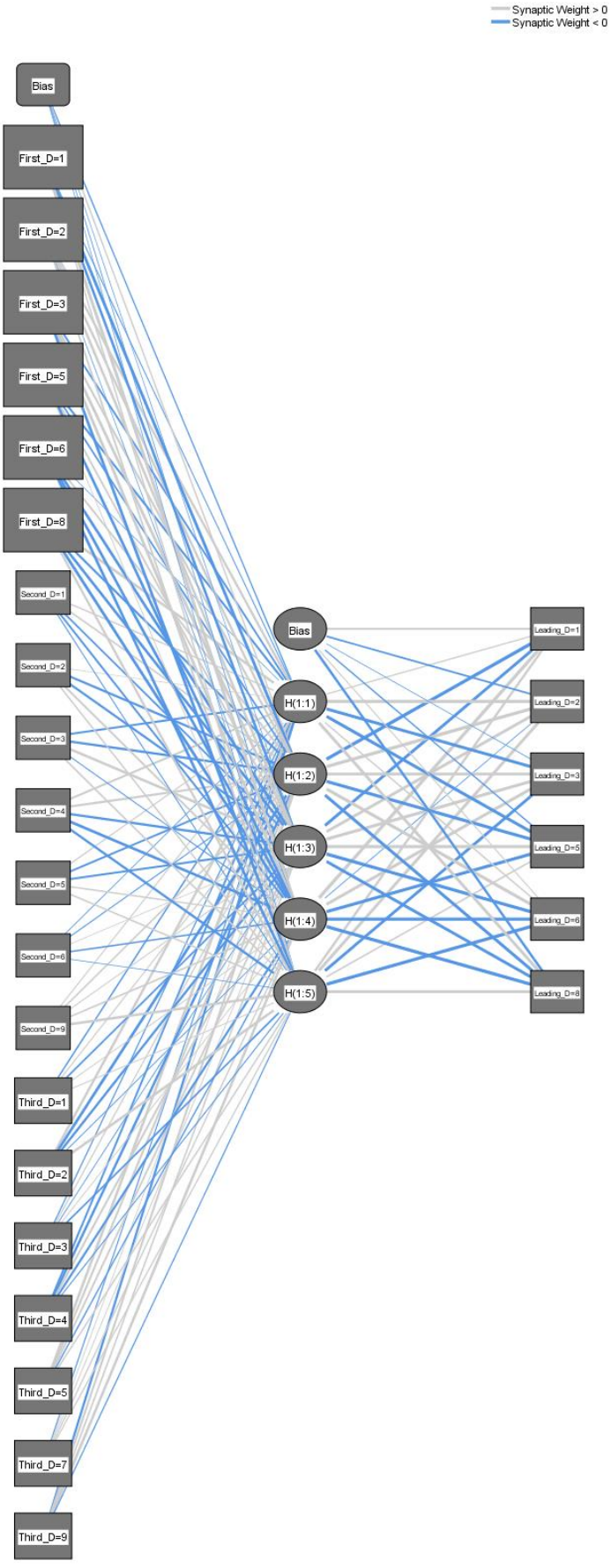
Case Processing Summary

		N	Percent
Sample	Training	11	91.7%
	Testing	1	8.3%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		20
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		6
	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	.012
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.01
Testing	Cross Entropy Error	.004
	Percent Incorrect Predictions	0.0%

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)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)		-.253	.346	-.006	-.084	-.024						
	[First_D=1]		-.165	-1.515	-.889	1.895	.356						
	[First_D=2]		.769	.753	.867	-.038	.561						
	[First_D=3]		-.564	.686	1.187	1.114	-1.089						
	[First_D=5]		-.676	-.508	.556	-.976	.136						
	[First_D=6]		-.031	.570	-1.076	-.984	-1.073						
	[First_D=8]		.885	-.731	-.974	-1.292	.734						
	[Second_D=1]		.339	.491	-.547	-.613	-.168						
	[Second_D=2]		.030	-.745	-.733	.600	.396						
	[Second_D=3]		-.625	-.836	.895	-.171	.495						
	[Second_D=4]		.646	.697	-.834	-1.012	-.851						
	[Second_D=5]		.251	-.599	-.645	.340	.416						
	[Second_D=6]		-.134	-.206	.078	-.403	-.074						
	[Second_D=9]		.236	.431	.200	.505	.874						
	[Third_D=1]		-.392	.237	-.521	.147	.158						
	[Third_D=2]		.862	-1.112	-.801	-.138	.951						
	[Third_D=3]		-.248	.253	-.135	.147	-.517						
	[Third_D=4]		-.609	-.865	.631	-.728	-.191						
	[Third_D=5]		.974	.673	.568	-.268	.374						

	[Third_D=7]	-.234	.093	.137	.332	.257						
	[Third_D=9]	-.749	.682	.406	.896	-.240						
Hidden Layer 1	(Bias)						.616	-.536	-.074	-.312	.218	-.873
	H(1:1)						.257	2.140	-1.799	-1.918	.365	1.639
	H(1:2)						-2.318	2.386	1.420	-1.986	2.030	-1.892
	H(1:3)						-1.704	1.647	1.917	2.139	-2.125	-1.740
	H(1:4)						4.114	-.112	1.809	-1.977	-2.051	-2.473
	H(1:5)						.840	1.664	-1.516	.426	-2.203	1.343

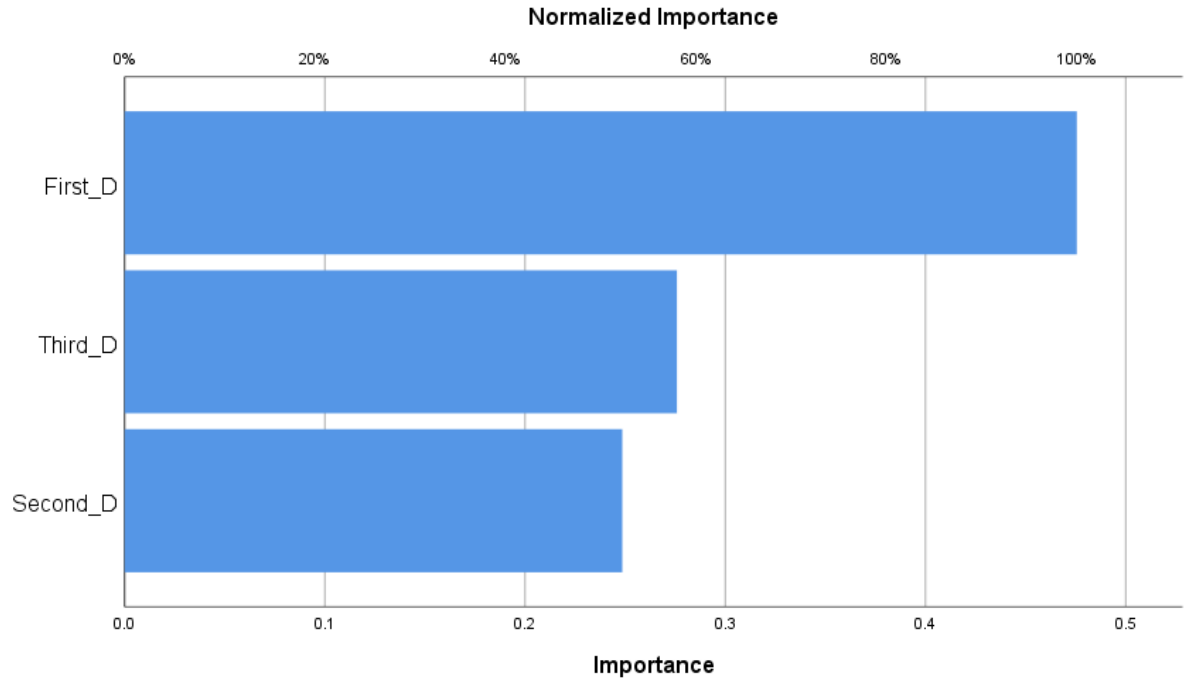
Classification

		Predicted						
Sample	Observed	1	2	3	5	6	8	Percent Correct
Training	1	4	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	100.0%
	3	0	0	1	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	3	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	36.4%	9.1%	9.1%	9.1%	27.3%	9.1%	100.0%
Testing	1	0	0	0	0	0	0	0.0%
	2	0	0	0	0	0	0	0.0%
	3	0	0	1	0	0	0	100.0%
	5	0	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0	0.0%
	Overall Percent	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.476	100.0%
Second discourse in text	.249	52.3%
Third discourse in text	.276	58.0%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D
  /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	10-DEC-2020 16:15:14
Comments	

Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet4
	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) BY First_D Second_D Third_D /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	00:00:00.48
	Elapsed Time	00:00:00.44

Warnings

One or more cases in the testing or holdout sample have factor or dependent variable values that do not occur in the training sample. These cases are excluded from the analysis.

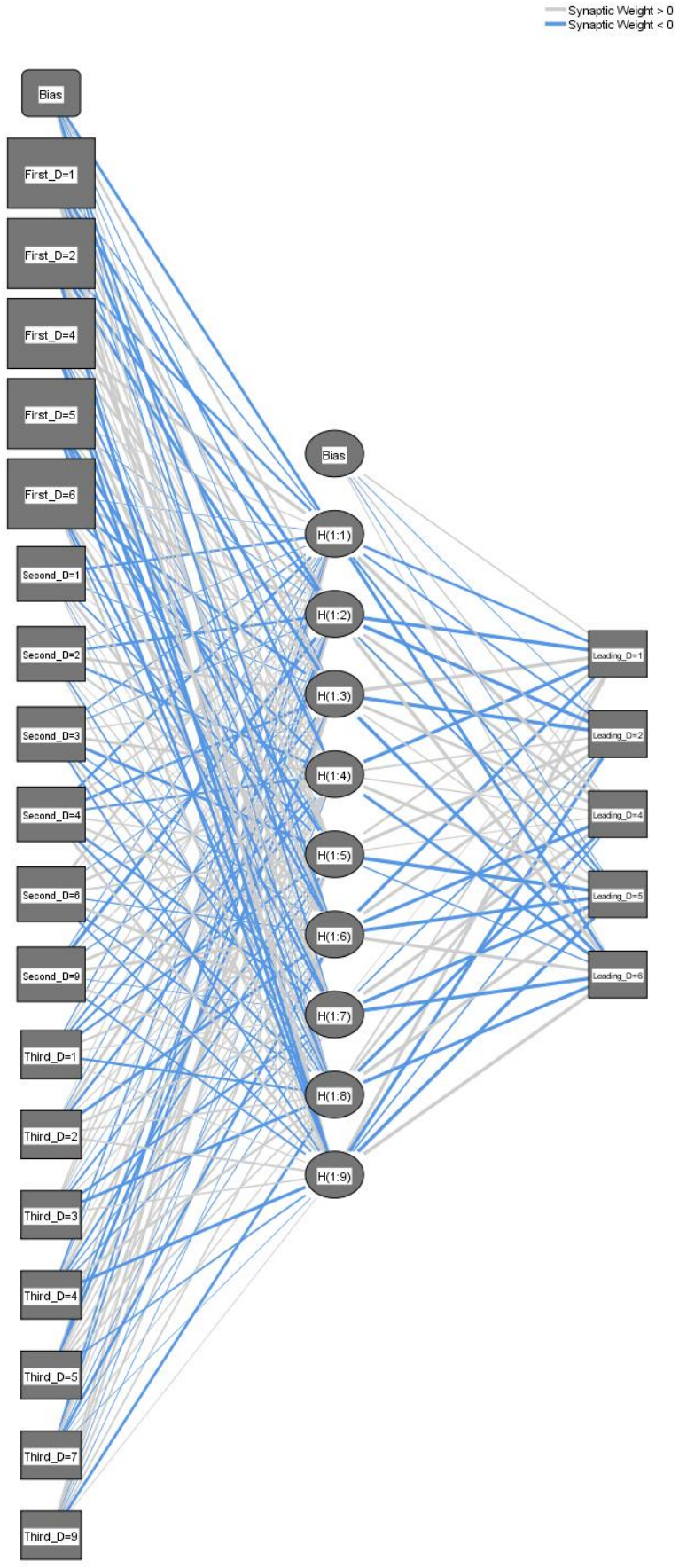
Case Processing Summary

		N	Percent
Sample	Training	8	80.0%
	Testing	2	20.0%
Valid		10	100.0%
Excluded		94	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Number of Units[a]		18
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		9
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Leading discourse in meaning
	Number of Units		5
	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	.002
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.006
	Percent Incorrect Predictions	0.0%

Dependent Variable: Leading discourse in meaning

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)	H(1:7)	H(1:8)	H(1:9)	[Leading_D=1]	[Leading_D=2]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]
Input Layer	(Bias)	-.697	.486	-.102	-.051	.244	-.425	-.351	-.043	.261					
	[First_D=1]	-.220	-1.071	.845	-.687	.337	-.192	.239	.238	.873					
	[First_D=2]	-.574	-.676	-1.182	.045	.662	.850	.073	-.102	-.953					
	[First_D=4]	1.195	.633	.624	.390	-.105	-.426	.986	-.533	-.738					
	[First_D=5]	.181	-.057	.427	.290	-.942	-.657	-.525	.632	-.729					
	[First_D=6]	-.021	1.071	-.694	-.506	.023	.787	-.580	-.298	.589					
	[Second_D=1]	-.545	.223	-.119	.040	-.316	.729	.059	-.022	.211					
	[Second_D=2]	-.063	-.642	.775	-.554	.413	.038	.169	-.262	.272					
	[Second_D=3]	-.262	-.149	.232	.662	-.818	-.177	-.452	.420	-.371					
	[Second_D=4]	-.598	.312	-.694	-.446	.196	.494	-.564	-.501	.680					
	[Second_D=6]	.638	.017	-.086	.525	.397	-.172	.884	-.352	-.335					
	[Second_D=9]	-.075	-.979	.195	-.155	.714	.691	-.004	.397	-.352					
	[Third_D=1]	-.181	.155	-.389	-.492	-.481	.460	.084	-.490	.136					
	[Third_D=2]	.049	-.071	.779	-.575	.101	-.778	.439	.289	.404					
	[Third_D=3]	.197	.263	.167	-.008	-.370	.120	-.509	-.732	.248					

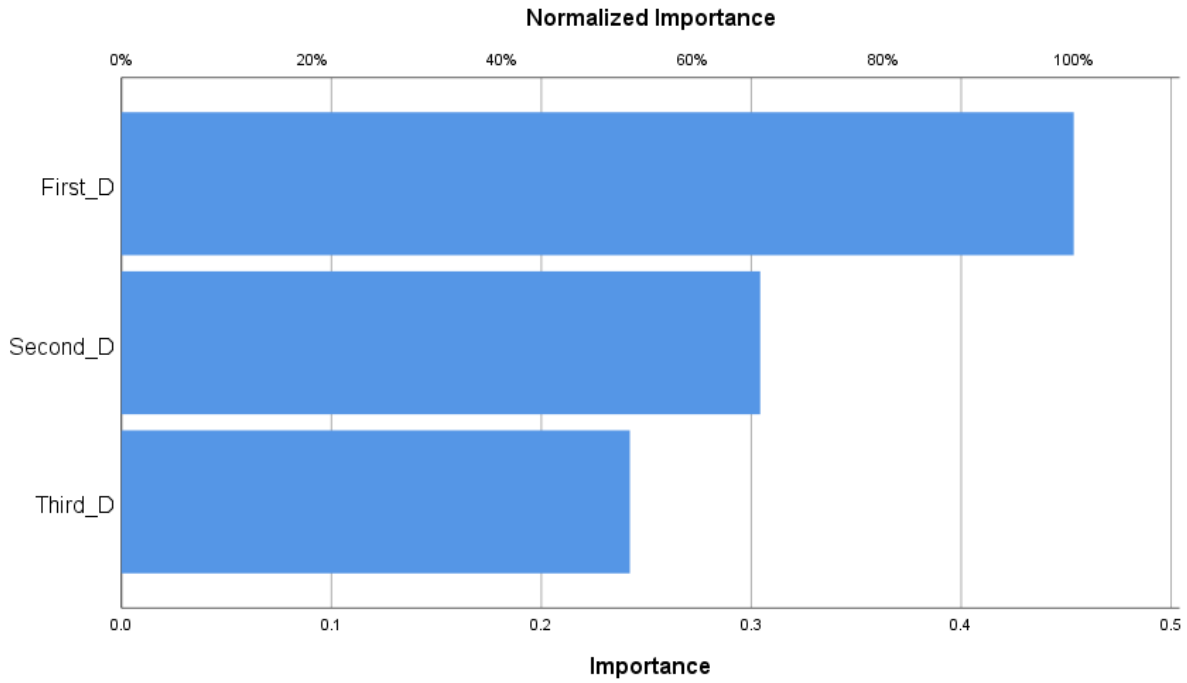
	[Third_D=4]	-.251	-.057	.000	.641	-.403	-.114	-.242	.574	-.912					
	[Third_D=5]	.306	-.378	-.811	.533	.154	.354	.441	.245	-.294					
	[Third_D=7]	-.371	-.373	.528	.069	-.065	-.660	-.073	.128	-.005					
	[Third_D=9]	.365	.523	.475	-.055	.365	-.041	.278	-.638	.047					
Hidden Layer 1	(Bias)										.238	-.054	.235	-.058	.073
	H(1:1)										-.583	-.399	1.672	-.486	-.923
	H(1:2)										-1.932	-1.600	.935	-.393	2.274
	H(1:3)										2.121	-2.171	.821	.205	-1.229
	H(1:4)										-1.508	.320	.232	.982	-.829
	H(1:5)										.465	1.118	.109	-2.175	-.202
	H(1:6)										-1.065	.871	-1.125	-1.427	.841
	H(1:7)										.019	-.254	1.623	-1.223	-1.576
	H(1:8)										.300	.642	-1.111	1.343	-1.005
	H(1:9)										1.510	-1.245	-.245	-1.264	1.572

Classification

Sample	Observed	Predicted 1	2	4	5	6	Percent Correct
Training	1	2	0	0	0	0	100.0%
	2	0	1	0	0	0	100.0%
	4	0	0	1	0	0	100.0%
	5	0	0	0	1	0	100.0%
	6	0	0	0	0	3	100.0%
	Overall Percent	25.0%	12.5%	12.5%	12.5%	37.5%	100.0%
Testing	1	1	0	0	0	0	100.0%
	2	0	0	0	0	0	0.0%
	4	0	0	1	0	0	100.0%
	5	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0.0%
	Overall Percent	50.0%	0.0%	50.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance

First discourse in text	.454	100.0%
Second discourse in text	.304	67.1%
Third discourse in text	.242	53.4%