```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:20:25
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.48

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

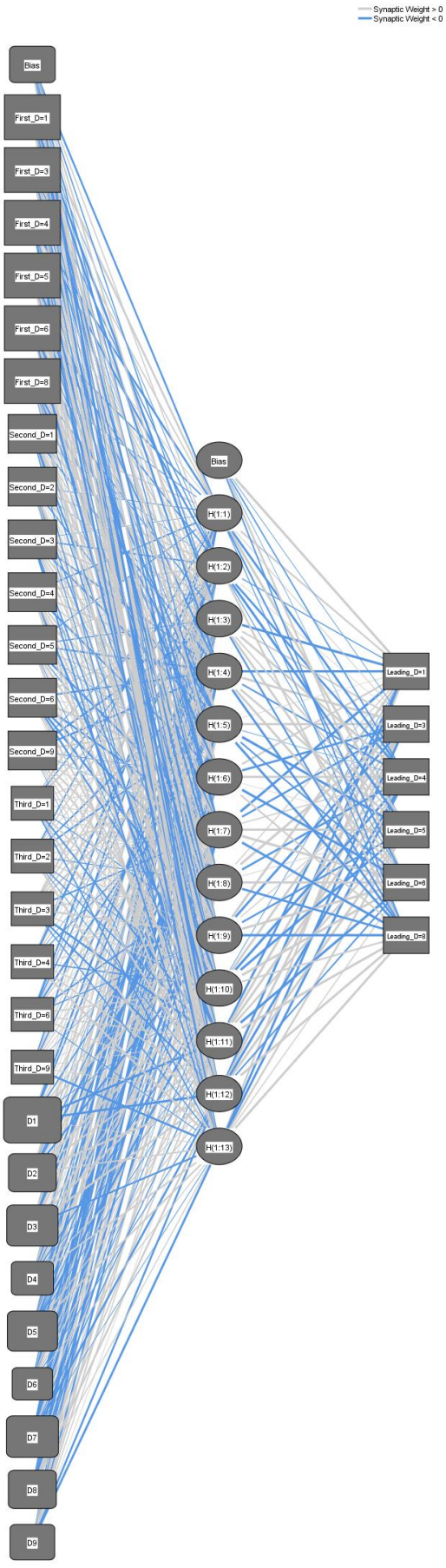
		N	Percent
Sample	Training	11	84.6%
	Testing	2	15.4%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		28
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		13
	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	.004
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	.144
	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)	H(1:12)	H(1:13)	[Leading_D=1]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.436	.200	-.200	.337	.099	-.205	-.051	-.077	.243	.262	-.116	-.922	.182						
	[First_D=1]	.494	-.072	-.673	-.482	.408	.691	-.810	-.336	.313	-.172	-.013	-.261	.604						
	[First_D=3]	.242	-.206	.295	-.010	.365	.039	-.233	.012	-.512	.237	-.209	.478	.107						
	[First_D=4]	-.479	-.490	.238	.012	.134	.197	-.011	-.356	.330	-.888	.956	-.185	-.563						
	[First_D=5]	.093	.165	.334	-.368	-.096	.099	.160	.379	-.189	.180	.387	.444	.085						
	[First_D=6]	-.289	-.284	.457	.291	-.380	-.861	.516	.131	.555	.986	-1.212	.002	.189						
	[First_D=8]	-.106	.022	-.208	.305	-.484	.298	-.438	.157	-.117	.088	.175	.541	-.007						
	[Second_D=1]	.252	-.078	.642	-.277	.171	.276	.533	.226	-.409	-.224	.015	.041	-.192						
	[Second_D=2]	-.116	.442	-.056	.429	-.292	.043	.035	.324	.502	-.264	.316	-.154	.188						
	[Second_D=3]	-.033	-.309	.427	-.310	-.457	.392	.295	.212	.258	.073	-.300	-.080	-.332						
	[Second_D=4]	-.388	.466	.165	.532	.198	-.444	.395	.316	.224	.430	-.660	.406	.441						
	[Second_D=5]	-.205	.252	-.232	-.429	.412	-.082	-.572	-.160	.517	.083	-.088	.100	.450						
	[Second_D=6]	.077	.199	.369	-.496	.100	.831	-.509	-.618	-.551	-.435	.423	.164	.005						
	[Second_D=9]	.084	-.137	-.495	-.457	.461	-.106	-.017	.197	.405	.438	.231	.133	-.020						

	[Third_D=1]	.412	-.293	.544	.001	.165	.101	.154	.169	-.122	.376	-.381	.457	-.265					
	[Third_D=2]	-.299	.260	.112	-.351	-.370	.385	.131	-.124	.202	-.104	-.215	-.080	.490					
	[Third_D=3]	.028	.509	.298	.315	.511	.117	-.351	.300	.497	.182	-.542	-.409	-.204					
	[Third_D=4]	.350	-.532	.018	.161	-.035	-.181	.041	.180	.162	-.230	.191	.302	.610					
	[Third_D=6]	-.441	-.050	-.231	.097	-.431	.282	.045	-.321	-.186	.250	.288	.259	-.101					
	[Third_D=9]	-.346	.054	.161	-.251	.097	.206	.085	-.020	.159	.012	.084	.099	-.535					
	D1	.049	.116	-.466	-.350	.010	.199	-.279	.293	1.067	-.086	-.829	-.928	.049					
	D2	.039	.492	.073	-.068	.301	-.218	-.565	.269	-.477	.671	.424	.872	.306					
	D3	.094	-.066	.309	.740	-.310	-.744	.152	.478	.050	.325	.429	.733	-.416					
	D4	.083	-.260	.532	.014	-.217	-.035	.613	-.198	.392	-.294	-.077	.165	.365					
	D5	.400	-.209	-.336	.294	-.427	.460	-.246	-.204	-.183	-.737	-.116	.216	.398					
	D6	-.783	.149	.186	.149	-.630	-.259	.338	-.043	.238	.099	.215	-.118	.120					
	D7	-.101	-.449	-.495	-.275	-.351	-.030	-.609	.119	.222	-.158	-.200	-.538	-.071					
	D8	-.485	.142	.022	-.733	-.493	.078	-.561	-.275	-.001	.320	.293	.462	.158					
	D9	-.112	-.044	.184	-.367	.544	.051	-.429	.728	.347	.168	.021	-.472	-.600					
Hidden Layer 1	(Bias)														1.324	-.065	-.257	-.016	.474	-.291
	H(1:1)														.408	.091	-.643	1.128	-.352	-.125
	H(1:2)														-.167	.028	-.588	-1.376	-.101	.471
	H(1:3)														-1.924	.361	.725	.308	.607	-.421
	H(1:4)														-.877	.881	-.367	.579	.843	-.793
	H(1:5)														.005	.719	-.025	-1.575	-.345	-.953
	H(1:6)														.436	-.622	.751	.001	-1.412	.390
	H(1:7)														-1.900	-.462	.208	1.110	1.438	-1.174
	H(1:8)														.171	1.474	-.524	.048	.730	-.648
	H(1:9)														1.303	-.890	.156	-.444	.926	-1.289
	H(1:10)														-.066	.834	-1.561	-1.125	1.141	.359
	H(1:11)														-.858	1.077	1.458	.509	-1.903	.962
	H(1:12)														-1.414	1.003	-1.175	1.387	-.322	.946
	H(1:13)														.445	-.844	-.894	.492	.180	1.081

Classification

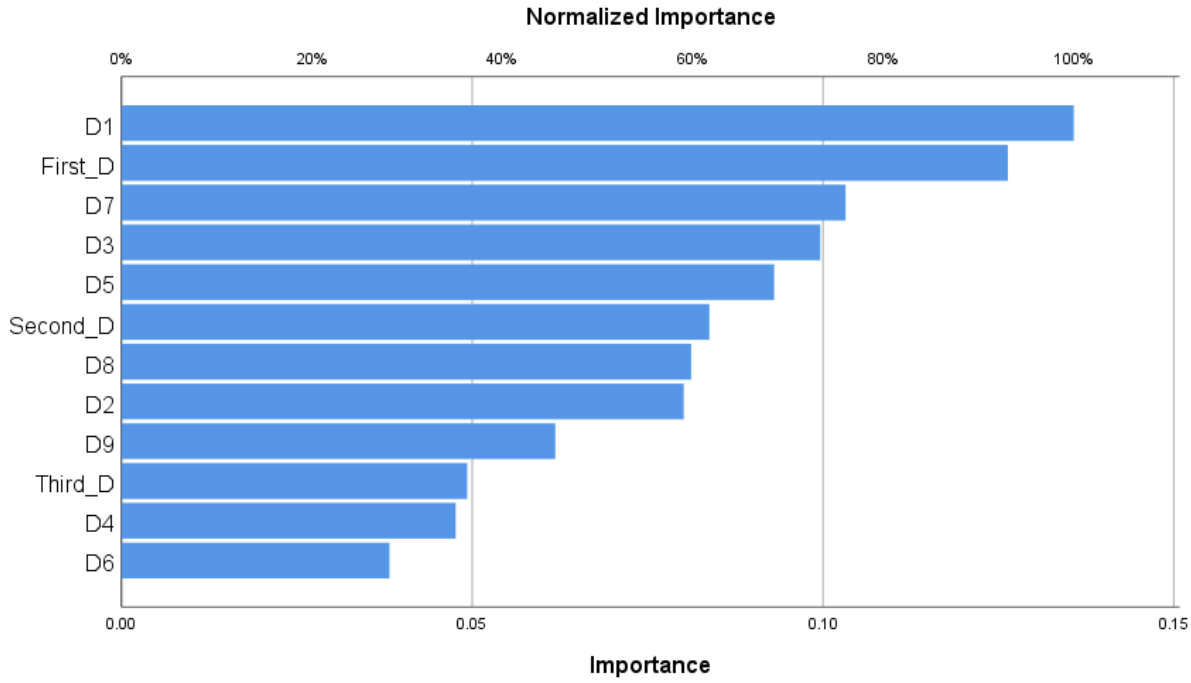
Sample	Observed	Predicted						Percent Correct
		1	3	4	5	6	8	

Training	1	4	0	0	0	0	0	100.0%
	3	0	1	0	0	0	0	100.0%
	4	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%
	3	0	1	0	0	0	0	100.0%
	4	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%	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.126	93.1%
Second discourse in text	.084	61.7%
Third discourse in text	.049	36.3%
CONTACT RESTRICTION	.136	100.0%
SANITATION AND HYGIENE	.080	59.0%
ISOLATION OF INFECTED	.100	73.4%
TOTAL ISOLATION	.048	35.1%
HEALTH CARE	.093	68.5%
VIRUS DISSEMINATION	.038	28.1%
LIFESTYLE CHANGES	.103	76.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.081	59.8%
BUREAUCRATIC RESPONSE	.062	45.5%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:20:53
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.42
	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

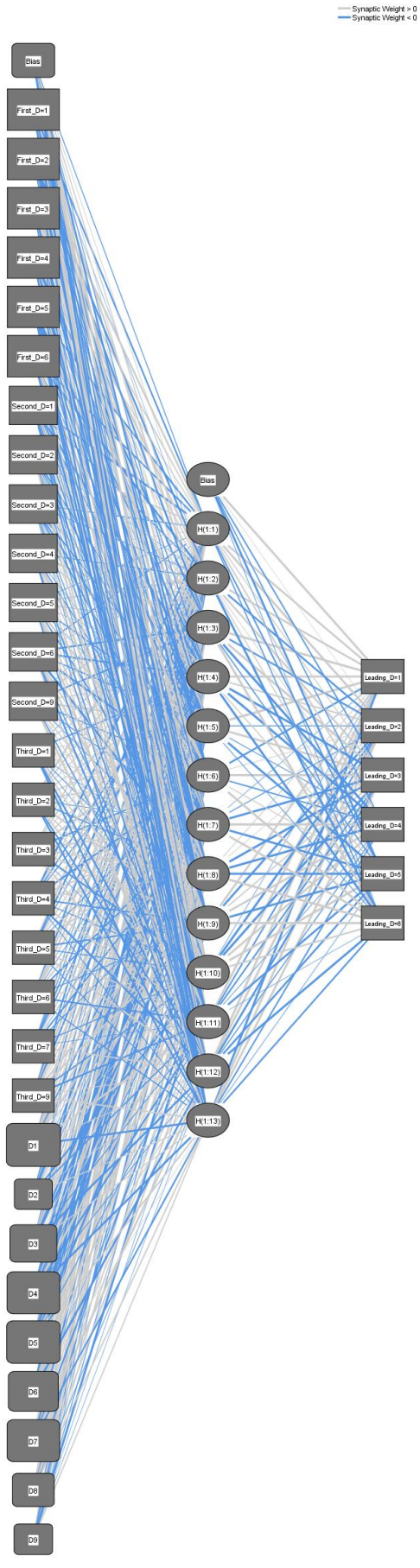
		N	Percent
Sample	Training	12	85.7%
	Testing	2	14.3%
Valid		14	100.0%
Excluded		90	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		30
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		13
	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	.064
	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	.022
	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)	H(1:12)	H(1:13)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]
Input Layer	(Bias)	-.141	.041	.184	.102	-.129	-.482	.491	.395	.725	-.119	-.125	-.304	-.632						
	[First_D=1]	-.376	-.004	.403	.038	.322	-.589	-.260	-.101	-.190	.150	.691	.732	-.640						
	[First_D=2]	.503	-.479	-.455	-.148	-.286	-.264	.068	-.409	-.291	.150	.226	-.198	-.020						
	[First_D=3]	.234	.665	.107	.001	.494	-.002	.011	-.555	-.451	.011	-.132	.209	-.221						
	[First_D=4]	.150	.244	-.552	-.134	.013	-.154	.232	-.637	-.343	.317	-.046	.119	-.399						
	[First_D=5]	-.444	.143	.107	-.329	-.505	-.164	-.292	-.253	-.268	.064	-.277	-.655	-.465						
	[First_D=6]	-.386	-.859	.681	.051	-.140	.861	.279	.487	-.064	.345	-.570	-.063	-.020						
	[Second_D=1]	-.529	-.218	.212	-.479	-.370	.305	-.097	.577	-.287	.238	-.449	-.107	-.391						
	[Second_D=2]	.292	-.019	.044	.371	-.390	-.253	-.123	-.033	.484	-.068	-.197	.326	.260						
	[Second_D=3]	-.187	-.144	.174	.449	-.359	-.387	-.368	-.028	.133	-.131	-.144	.289	-.060						
	[Second_D=4]	.069	-.229	.726	.344	.020	-.038	-.252	.696	.243	.039	.387	-.282	-.143						
	[Second_D=5]	-.091	.505	.321	-.009	-.268	-.041	.506	-.288	.137	.408	.218	.461	-.315						
	[Second_D=6]	-.291	.173	-.439	-.569	-.274	-.563	.027	-.992	.382	.493	-.227	-.440	.287						

	[Second_D=9]	-.022	.464	-.443	.226	.551	-.220	-.164	-.098	.257	.160	-.247	.528	.048					
	[Third_D=1]	.090	-.038	-.005	-.290	.120	.102	.122	-.052	-.140	-.058	.294	-.489	-.421					
	[Third_D=2]	.508	.311	.169	.212	.266	.332	-.124	-.276	.489	.266	.309	-.344	-.450					
	[Third_D=3]	.244	-.019	.086	.247	.453	-.343	.503	.414	.455	-.383	-.061	.455	.070					
	[Third_D=4]	-.609	.187	-.303	-.207	.097	-.441	.311	.386	-.355	-.140	.381	-.500	-.120					
	[Third_D=5]	.504	-.410	-.157	.212	.333	-.156	.420	.119	-.368	-.181	.358	.433	-.174					
	[Third_D=6]	-.416	.398	.525	.304	-.117	.355	-.361	.144	-.169	.159	-.390	.017	-.217					
	[Third_D=7]	-.096	-.135	-.294	-.230	.164	-.029	-.361	-.177	.056	-.212	-.048	.298	.032					
	[Third_D=9]	-.362	-.104	.541	-.455	.284	.267	.108	.501	.512	-.299	-.421	.139	.337					
	D1	.450	-.243	.492	.233	.467	-.326	.697	.577	.185	.068	.731	.124	-.575					
	D2	-.204	-.077	.025	-.015	-.395	-.243	-.029	.277	.033	-.410	-.305	.071	.214					
	D3	-.386	.183	.436	-.081	.375	.574	-.499	-.509	.043	.066	-.163	-.678	.233					
	D4	.070	-.130	-.548	.133	-.777	-.338	.751	-.369	-.171	1.034	-.460	-.120	-.625					
	D5	.640	-.358	-.458	.654	-.623	-.638	-.396	.317	-.622	.451	-.164	.194	.342					
	D6	-.066	-.322	-.156	-.821	-.256	.004	.468	.133	.617	.403	-.005	-.619	.002					
	D7	.421	.278	.270	.599	.128	-.401	-.016	.077	.150	-.409	.192	.658	-.378					
	D8	.201	.271	.023	.104	.144	.259	.574	-.277	.227	.299	.344	-.070	.287					
	D9	.218	-.167	.217	.189	-.231	-.123	-.070	.106	-.133	-.827	-.010	-.015	.228					
Hidden Layer 1	(Bias)														.863	.010	-.290	-.220	-.607	-.060
	H(1:1)														.580	.889	.162	.303	-.315	-.213
	H(1:2)														.565	-.469	.500	.047	.181	-.973
	H(1:3)														1.482	-.412	.918	-1.220	-.220	.967
	H(1:4)														.809	.351	-.865	-1.291	.204	-.778
	H(1:5)														1.154	-.153	.683	-.127	-.699	-.105
	H(1:6)														-.422	.064	1.107	-.283	.156	.959
	H(1:7)														-.035	-.160	-.855	1.149	-.676	.778
	H(1:8)														.113	.037	-1.058	-1.111	-.736	1.594
	H(1:9)														.610	-.648	.259	.669	-.771	1.018
	H(1:10)														-.034	-.979	-.986	.738	.962	.392
	H(1:11)														1.335	-.334	-.373	-.085	-.603	-.025
	H(1:12)														1.308	.947	-.568	-.188	-.490	-.792
	H(1:13)														-.850	.855	.767	-.313	-.047	-.395

Classification

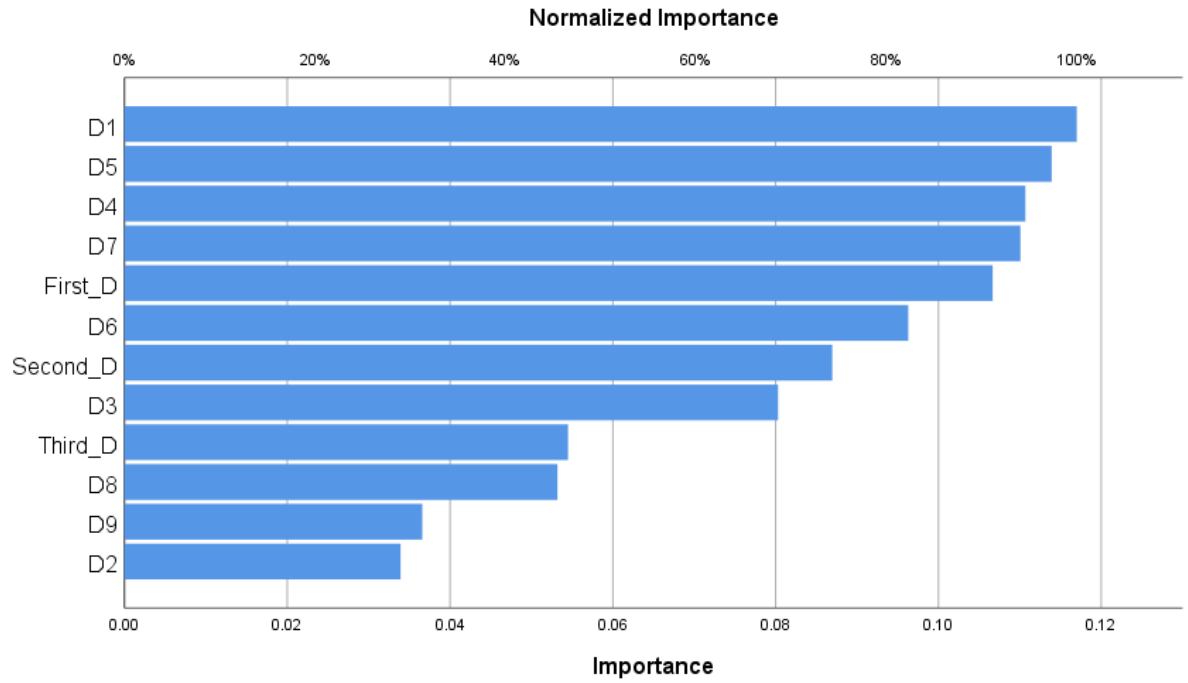
Sample	Observed	Predicted 1	2	3	4	5	6	Percent Correct
Training	1	4	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	100.0%
	3	0	0	1	0	0	0	100.0%
	4	0	0	0	2	0	0	100.0%
	5	0	0	0	0	1	0	100.0%
	6	0	0	0	0	0	3	100.0%
	Overall Percent	33.3%	8.3%	8.3%	16.7%	8.3%	25.0%	100.0%
Testing	1	1	0	0	0	0	0	100.0%
	2	0	0	0	0	0	0	0.0%
	3	0	0	1	0	0	0	100.0%
	4	0	0	0	0	0	0	0.0%
	5	0	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0	0.0%
	Overall Percent	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.107	91.2%
Second discourse in text	.087	74.3%
Third discourse in text	.054	46.6%
CONTACT RESTRICTION	.117	100.0%
SANITATION AND HYGIENE	.034	29.0%
ISOLATION OF INFECTED	.080	68.6%
TOTAL ISOLATION	.111	94.6%
HEALTH CARE	.114	97.4%
VIRUS DISSEMINATION	.096	82.3%
LIFESTYLE CHANGES	.110	94.1%

RIGHTS AND FREEDOMS INFRINGEMENT	.053	45.5%
BUREAUCRATIC RESPONSE	.037	31.3%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:21:08
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.43

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.

The following independent variables are constant in the training sample and are excluded from the analysis: D5.

Case Processing Summary

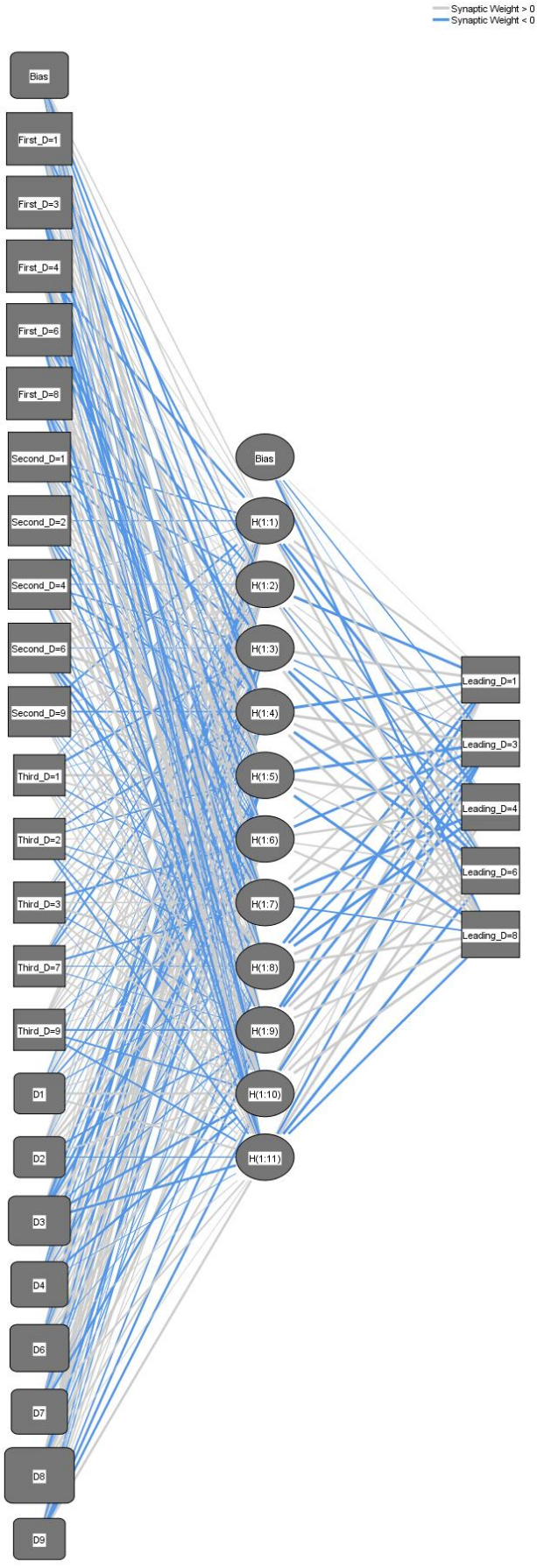
		N	Percent
Sample	Training	9	81.8%
	Testing	2	18.2%
Valid		11	100.0%
Excluded		93	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	VIRUS DISSEMINATION
		6	LIFESTYLE CHANGES
		7	RIGHTS AND FREEDOMS INFRINGEMENT

		8	BUREAUCRATIC RESPONSE
	Number of Units[a]		23
	Rescaling Method for Covariates		Standardized
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		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	.012
	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	.032
	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=6]	[Leading_D=8]
Input Layer	(Bias)	.189	.256	-.357	-.353	.214	-.179	.568	-.277	.366	-.001	-.113					
	[First_D=1]	.137	-.399	.017	-.612	.498	.192	.249	.032	.035	.134	-.083					
	[First_D=3]	.096	.156	.099	.406	-.186	-.571	.122	-.100	-.333	-.507	-.089					
	[First_D=4]	-.518	.039	.384	.347	.635	.370	-.619	-.800	.152	-.219	.811					
	[First_D=6]	.028	-.399	-.612	-.890	.002	-.061	.074	1.080	.396	.417	-.579					
	[First_D=8]	.024	.053	.373	.331	-.302	-.101	-.370	-.148	.312	.240	-.444					
	[Second_D=1]	-.245	-.365	-.395	-.193	.433	-.043	.475	.278	.234	.373	-.197					
	[Second_D=2]	-.156	.110	.168	-.217	-.162	-.427	-.382	.021	-.281	.439	.224					
	[Second_D=4]	-.049	-.061	-.234	-.393	-.107	.571	.362	.793	.014	-.098	-.210					
	[Second_D=6]	.151	.340	-.109	1.106	-.181	.301	-.613	-.720	-.164	.432	.394					
	[Second_D=9]	-.393	.265	.192	-.281	.432	-.010	-.130	-.060	-.006	-.013	.222					
	[Third_D=1]	-.132	.124	-.445	-.007	.515	.260	-.222	.270	-.079	.172	.192					
	[Third_D=2]	-.059	.318	.406	-.325	-.227	.041	-.175	-.274	.056	-.244	-.334					
	[Third_D=3]	.156	-.144	.226	.176	.272	-.397	.223	.563	-.183	.284	-.017					

	[Third_D=7]	.420	-.212	-.410	.359	.163	.382	-.368	-.070	-.106	.225	.136					
	[Third_D=9]	.209	.403	.190	.266	.255	-.122	.607	.053	-.325	-.310	-.337					
	D1	-.189	.146	.105	-.212	.245	-.275	.290	-.148	.152	.433	.418					
	D2	.302	-.043	.231	-.059	.088	.408	.518	.155	-.313	.264	-.161					
	D3	.128	.371	-.486	-.053	-.454	-.612	.654	.281	-.226	-.518	-.559					
	D4	-.879	.301	-.227	-.099	.335	.195	-.226	.424	.669	-.495	-.045					
	D6	-.479	.613	-.479	.147	-.209	.263	.050	.219	.843	-.053	.069					
	D7	.206	-.392	.423	-.338	-.211	.193	.239	-.032	-.485	.016	.262					
	D8	.423	.596	.589	.429	-.697	-.006	-.179	.961	.080	.324	.032					
	D9	.135	.038	-.239	-.097	-.210	.256	.135	-.260	-.444	-.434	.483					
Hidden Layer	(Bias)												.027	-.217	-.004	.611	-.521
1	H(1:1)												.500	.540	-.927	-.354	.684
	H(1:2)												-.802	.117	.337	-.231	.652
	H(1:3)												.770	-.227	-.324	-1.555	.906
	H(1:4)												-1.224	.982	.913	-1.473	.838
	H(1:5)												.718	-1.064	.817	.324	-.921
	H(1:6)												.194	-.657	.470	.210	.379
	H(1:7)												.644	.815	-1.262	.869	-.256
	H(1:8)												-.722	-.586	-1.307	1.871	.602
	H(1:9)												-.882	-.821	.782	1.029	.506
	H(1:10)												.511	-1.054	.121	.515	1.151
	H(1:11)												.188	-.549	1.056	-.891	-.508

Classification

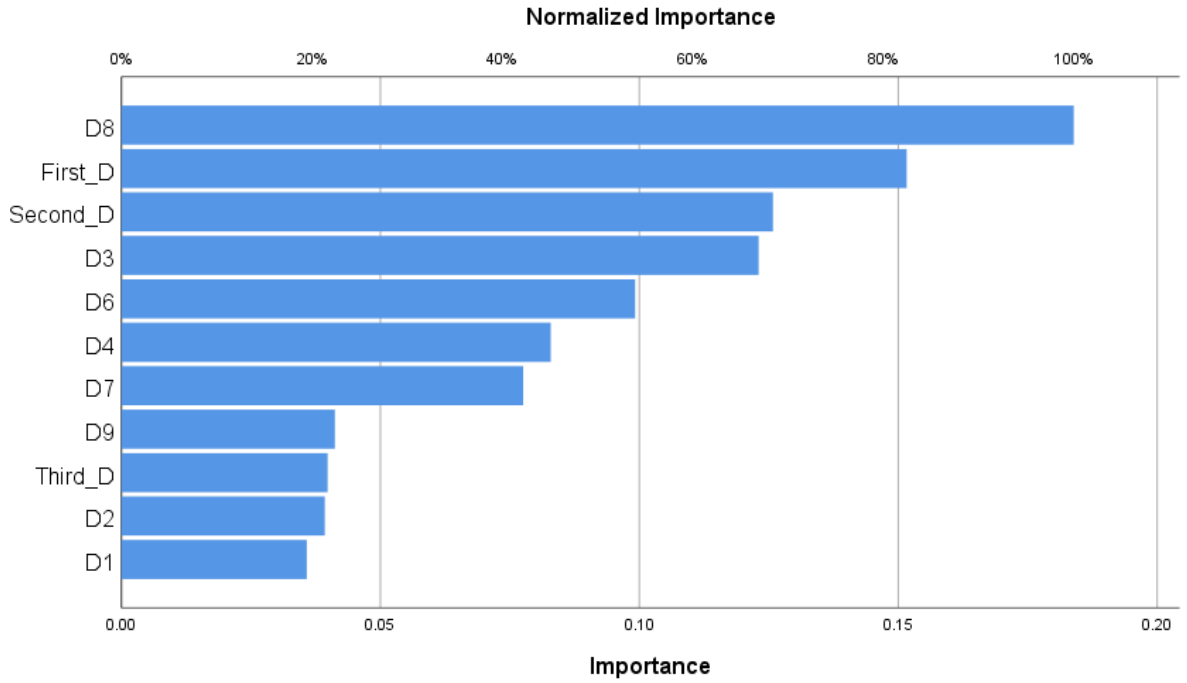
Sample	Observed	Predicted 1	3	4	6	8	Percent Correct
Training	1	2	0	0	0	0	100.0%
	3	0	1	0	0	0	100.0%
	4	0	0	2	0	0	100.0%
	6	0	0	0	3	0	100.0%
	8	0	0	0	0	1	100.0%
	Overall Percent	22.2%	11.1%	22.2%	33.3%	11.1%	100.0%
Testing	1	1	0	0	0	0	100.0%
	3	0	1	0	0	0	100.0%
	4	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0.0%

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

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.152	82.5%
Second discourse in text	.126	68.4%
Third discourse in text	.040	21.6%
CONTACT RESTRICTION	.036	19.4%
SANITATION AND HYGIENE	.039	21.3%
ISOLATION OF INFECTED	.123	66.9%
TOTAL ISOLATION	.083	45.1%
VIRUS DISSEMINATION	.099	53.9%
LIFESTYLE CHANGES	.078	42.2%
RIGHTS AND FREEDOMS INFRINGEMENT	.184	100.0%
BUREAUCRATIC RESPONSE	.041	22.4%



```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:21:26
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.42
	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

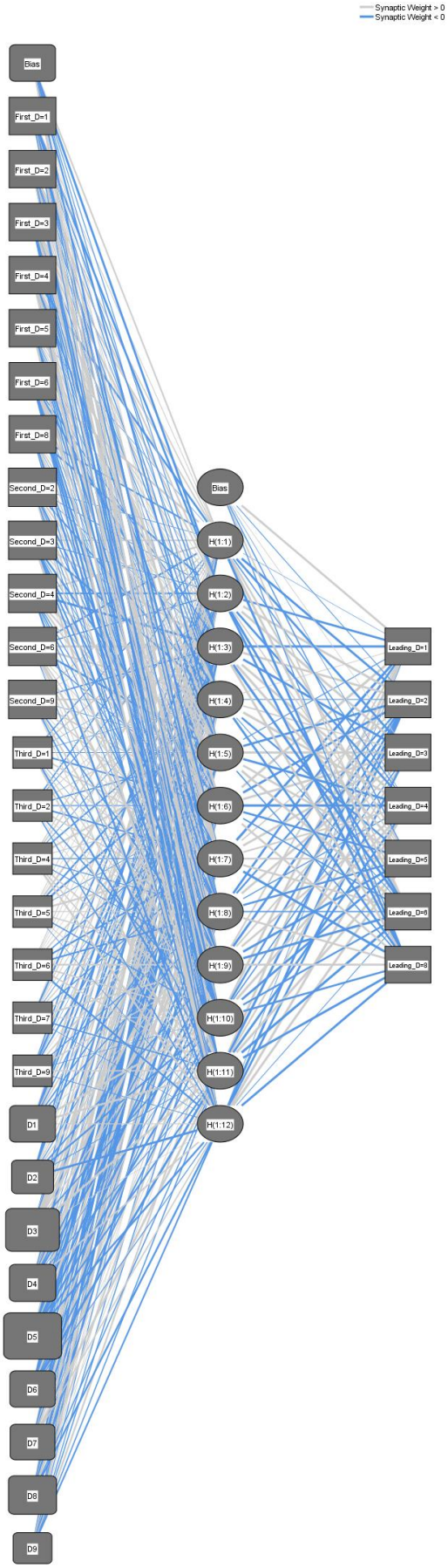
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		28
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		12
	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	.006
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.01
Testing	Cross Entropy Error	.004
	Percent Incorrect Predictions	0.0%

Dependent Variable: Leading discourse in meaning

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)	H(1:7)	H(1:8)	H(1:9)	H(1:10)	H(1:11)	H(1:12)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	.382	-.745	-.127	-.125	-.428	.001	.009	-.443	.081	.132	.266	.052							
	[First_D=1]	.080	-.622	-.245	-.194	.049	.387	-.606	-.237	-.020	.556	.161	-.143							
	[First_D=2]	.223	.396	-.073	-.200	-.021	.194	.303	.070	.151	-.440	-.510	.176							
	[First_D=3]	.333	.459	.319	-.148	.544	.587	.602	-.211	-.287	-.309	-.021	-.454							
	[First_D=4]	-.620	.062	.168	.780	-.402	-.038	.265	.201	.596	.615	-.245	.725							
	[First_D=5]	-.013	.190	.096	.129	-.079	-.037	.313	-.510	-.319	-.256	-.024	.656							
	[First_D=6]	.526	.113	-.223	-.512	.710	.284	.531	-.065	-.332	-.711	-.677	-.355							
	[First_D=8]	-.385	-.490	.048	.039	.288	-.017	.176	.164	-.148	-.502	.098	-.166							
	[Second_D=2]	-.051	-.124	-.067	-.373	.440	.144	-.382	-.199	.390	-.122	-.098	.238							
	[Second_D=3]	.396	-.147	.582	-.529	.131	-.469	-.086	-.462	-.403	-.423	.599	.012							
	[Second_D=4]	.529	-.457	-1.197	.195	1.000	.437	.404	-.168	-.211	-.108	.010	-.489							
	[Second_D=6]	-.504	-.253	.983	.576	-.605	-.151	.098	.221	.785	.378	.069	-.098							
	[Second_D=9]	.225	.030	-.359	.395	-.057	.369	.279	.042	-.330	.431	-.326	.104							
	[Third_D=1]	-.247	.364	-.001	-.029	-.096	-.399	.371	.142	-.012	.219	-.456	.373							
	[Third_D=2]	-.275	-.139	.080	.173	-.276	-.151	-.392	.283	.026	-.296	.032	-.244							
	[Third_D=4]	.148	.323	-.090	-.358	.534	.119	-.150	-.136	-.123	.321	.286	.576							
	[Third_D=5]	.082	.005	.488	-.410	-.585	-.088	.508	.128	.232	-.225	.069	-.029							
	[Third_D=6]	.113	.047	.028	.012	.325	-.267	-.449	-.402	.456	.368	.317	-.465							
	[Third_D=7]	.117	-.439	.161	.099	-.042	.217	-.249	.185	.437	.157	-.270	-.020							
	[Third_D=9]	-.290	.238	-.506	-.001	-.338	.006	.313	-.190	.271	-.017	.305	-.065							
	D1	.633	-.549	-.362	.373	-.274	.365	-.281	-.251	.066	.783	.623	.131							

	D2	-.375	-.116	-.504	.011	.062	.164	-.137	.316	-.365	-.469	-.082	-.752					
	D3	-.202	.254	-.521	.310	.524	.483	.720	1.022	.195	-.319	.789	.014					
	D4	.687	-.630	.205	-.052	.357	-.727	.635	-.379	-.596	-.039	-.134	.379					
	D5	-.021	.344	.623	-.406	-.408	-.988	.383	-.427	-.887	-.639	-.424	-.490					
	D6	.374	-.720	-.331	-.181	-.088	-.348	.113	.637	-.225	-.367	-1.078	-.144					
	D7	.182	.405	-.501	-.281	-.494	.447	-.222	.160	.120	.019	.729	.249					
	D8	-.397	-.104	.408	-.675	-.079	.702	-.669	.021	.484	.050	-.208	-.470					
	D9	-.439	.134	-.442	.495	.034	-.136	.005	-.161	-.200	.411	-.220	-.381					
Hidden Layer 1	(Bias)													.695	-.109	.026	-.025	-.219	.311	-.191
	H(1:1)													-.004	-.814	-.710	-.221	.506	1.258	-1.101
	H(1:2)													-.705	1.208	1.116	-.628	.239	-.917	-.966
	H(1:3)													-.996	.715	-.830	1.107	1.245	-1.685	1.159
	H(1:4)													.056	-.095	.320	1.314	-.524	-.096	-.773
	H(1:5)													-.142	-.795	1.268	-.955	.705	1.422	-.275
	H(1:6)													1.472	-.873	.994	-1.336	-.610	-.299	.627
	H(1:7)													-2.287	.275	.767	.417	.464	.608	-1.373
	H(1:8)													-.758	-.457	.910	-.199	-.551	-.249	.560
	H(1:9)													.408	-1.099	.416	.639	-1.072	-1.134	.730
	H(1:10)													1.766	-.596	-.229	1.186	-.880	-.457	-.526
	H(1:11)													1.089	-1.353	.430	-.779	1.794	-1.518	-1.003
	H(1:12)													-.034	-1.265	-.667	1.491	1.089	-.090	-.808

Classification

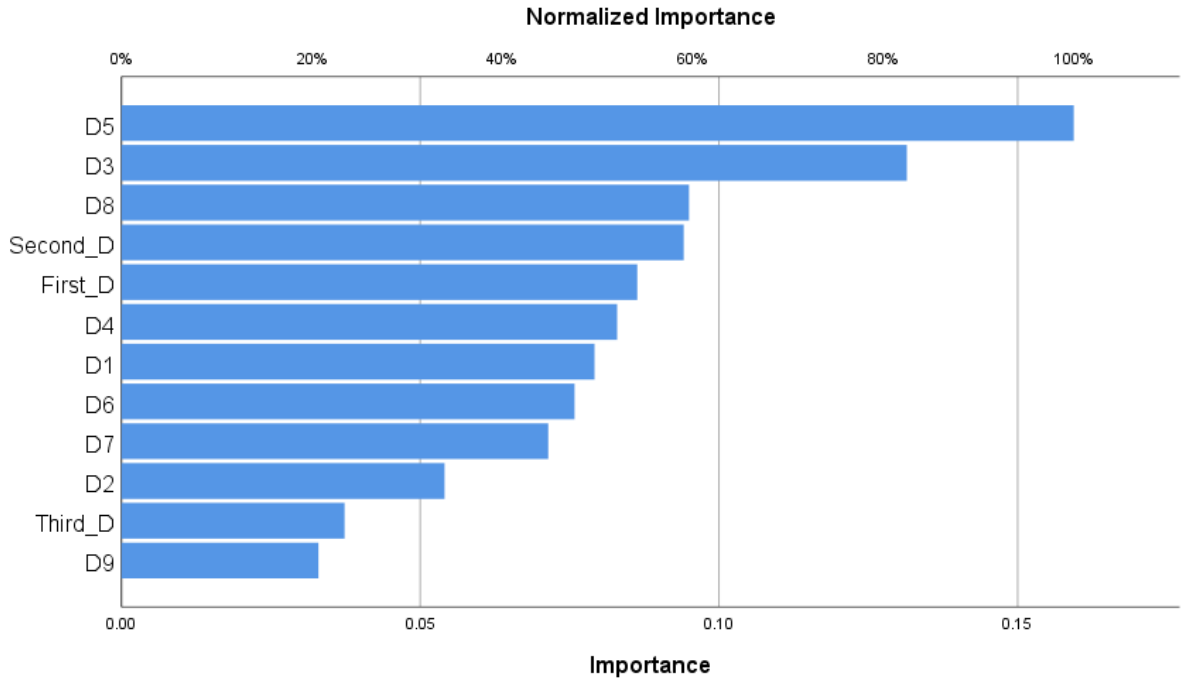
Sample	Observed	Predicted 1	2	3	4	5	6	8	Percent Correct
Training	1	4	0	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	0	100.0%
	3	0	0	1	0	0	0	0	100.0%
	4	0	0	0	2	0	0	0	100.0%
	5	0	0	0	0	1	0	0	100.0%
	6	0	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	0	1	100.0%
	Overall Percent	33.3%	8.3%	8.3%	16.7%	8.3%	16.7%	8.3%	100.0%
Testing	1	0	0	0	0	0	0	0	0.0%
	2	0	0	0	0	0	0	0	0.0%
	3	0	0	1	0	0	0	0	100.0%
	4	0	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	0.0%	0.0%	100.0%	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	.086	54.2%
Second discourse in text	.094	59.0%
Third discourse in text	.037	23.4%
CONTACT RESTRICTION	.079	49.7%
SANITATION AND HYGIENE	.054	33.9%
ISOLATION OF INFECTED	.131	82.5%
TOTAL ISOLATION	.083	52.0%
HEALTH CARE	.159	100.0%
VIRUS DISSEMINATION	.076	47.6%
LIFESTYLE CHANGES	.071	44.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.095	59.6%
BUREAUCRATIC RESPONSE	.033	20.7%

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*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:21:40
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.42

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

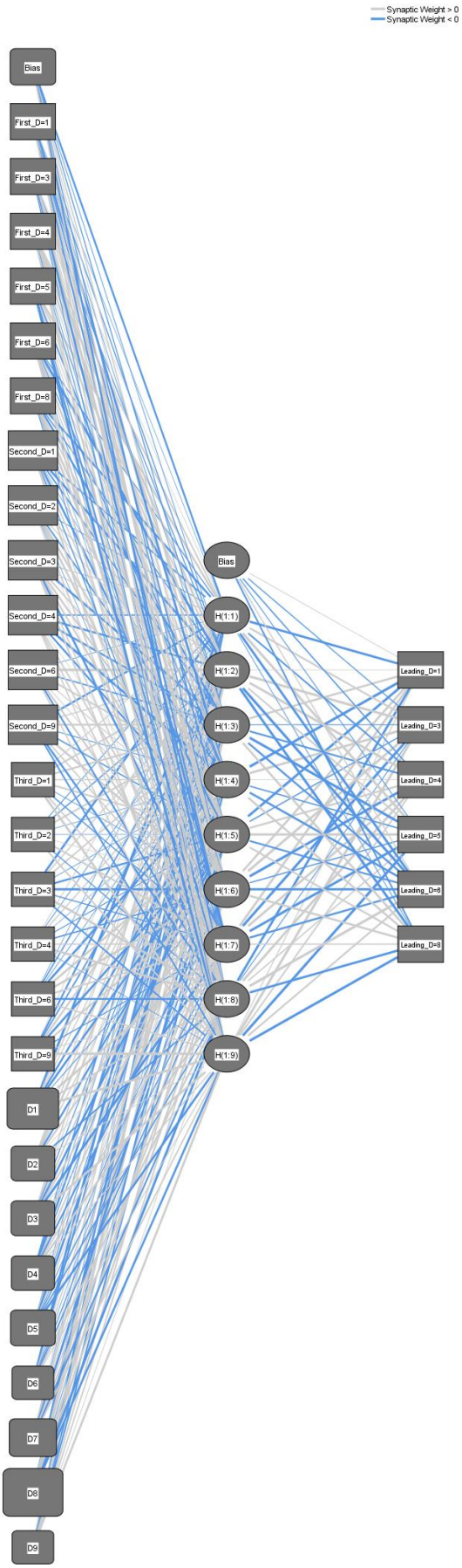
		N	Percent
Sample	Training	9	75.0%
	Testing	3	25.0%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		27
	Rescaling Method for Covariates		Standardized
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	.215
	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	.273
	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)	[Leading_D=1]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.404	-.052	-.131	.190	.057	-.141	.201	-.471	.235						
	[First_D=1]	-.016	-.143	-.039	-.551	-.225	.476	-.277	.148	.324						
	[First_D=3]	.011	-.127	.681	.190	.121	.834	-.606	.151	-.105						
	[First_D=4]	.261	.650	.244	.410	.057	-.035	-.098	.214	.294						
	[First_D=5]	.504	.263	.005	-.231	.070	.079	-.089	-.272	-.741						
	[First_D=6]	-.123	-.950	.125	-.141	.375	.112	-.042	.343	.304						
	[First_D=8]	-.514	-.173	-.435	.187	.543	.590	-.012	.264	-.104						
	[Second_D=1]	-.268	-.631	-.248	-.018	-.490	.185	-.153	.095	.408						
	[Second_D=2]	-.074	.196	.093	-.258	.468	.514	-.030	.258	.010						
	[Second_D=3]	.163	.118	-.630	.264	.454	.332	-.537	.219	.280						
	[Second_D=4]	-.221	-.504	-.453	-.852	-.429	.019	.294	.235	.193						
	[Second_D=6]	-.037	1.144	-.225	.362	.119	.061	.389	-.353	.182						
	[Second_D=9]	-.523	.156	.367	-.081	-.208	.548	.220	-.473	-.301						
	[Third_D=1]	.136	.321	.389	.157	.327	-.047	-.161	.226	.764						
	[Third_D=2]	-.113	-.184	.366	-.038	-.024	.023	.371	-.141	.309						
	[Third_D=3]	-.640	.170	.272	-.043	-.423	-.632	-.150	.711	-.275						
	[Third_D=4]	.058	-.058	.179	-.007	-.120	-.218	.193	.673	-.033						
	[Third_D=6]	-.027	-.208	-.040	-.648	.524	.698	.311	-.437	.261						
	[Third_D=9]	.035	-.372	-.228	.412	-.594	.398	-.139	.069	1.037						

	D1	-.814	.201	.143	-.419	-.546	-.088	.921	.327	.899						
	D2	.089	.171	.486	.144	-.430	.481	.033	-.293	.083						
	D3	.224	.059	-.124	.232	-.518	.322	-.890	.024	.646						
	D4	-.205	-.027	-.493	-.118	.237	-.328	.293	.525	.147						
	D5	-.064	.193	-.116	-.521	.128	-.081	-.156	-.212	-.606						
	D6	-.541	-.357	.035	.179	-.019	-.130	-.208	.402	.113						
	D7	.055	-.034	.474	.027	-.650	.137	.389	-.335	.233						
	D8	-.007	-.880	.713	.245	-.065	.705	.454	-.914	-.515						
	D9	-.434	.507	.076	-.323	-.322	.251	.226	.045	.545						
Hidden Layer 1	(Bias)										.044	-.141	-.197	-.111	.152	-.286
	H(1:1)										-.675	.379	-.316	.838	-.812	-.059
	H(1:2)										.019	.913	.994	.317	-1.887	-.907
	H(1:3)										.514	-.089	-.356	-1.213	-.434	.531
	H(1:4)										-1.415	.723	.036	-.206	-.529	.509
	H(1:5)										-.971	-.184	.426	.711	-.337	.372
	H(1:6)										.605	1.028	-1.119	-.182	-.743	.515
	H(1:7)										.675	-1.158	.693	-1.029	-.441	.192
	H(1:8)										-.752	-.107	.862	.219	1.566	-.652
	H(1:9)										.120	1.071	.262	-1.357	.394	-1.260

Classification

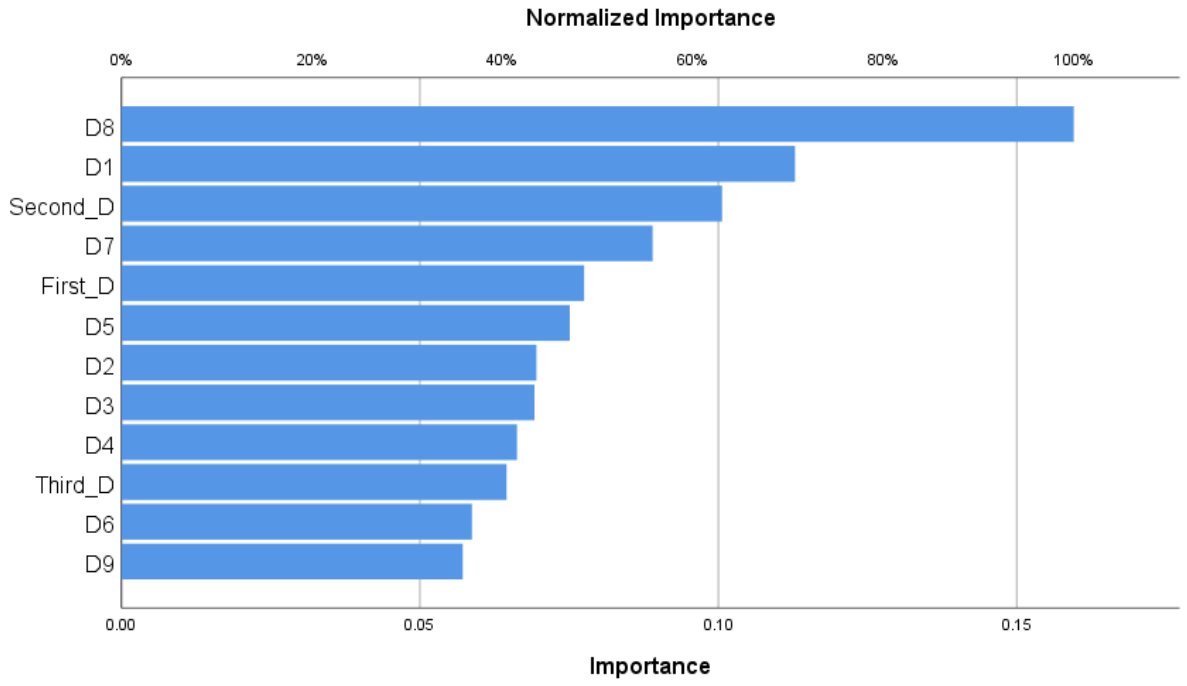
		Predicted						
Sample	Observed	1	3	4	5	6	8	Percent Correct
Training	1	2	0	0	0	0	0	100.0%
	3	0	2	0	0	0	0	100.0%
	4	0	0	1	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	22.2%	22.2%	11.1%	11.1%	22.2%	11.1%	100.0%
Testing	1	1	0	0	0	0	0	100.0%
	3	0	0	0	0	0	0	0.0%
	4	0	0	1	0	0	0	100.0%
	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	33.3%	0.0%	33.3%	0.0%	33.3%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.077	48.6%
Second discourse in text	.101	63.1%
Third discourse in text	.065	40.4%
CONTACT RESTRICTION	.113	70.7%
SANITATION AND HYGIENE	.070	43.6%
ISOLATION OF INFECTED	.069	43.4%
TOTAL ISOLATION	.066	41.5%
HEALTH CARE	.075	47.1%
VIRUS DISSEMINATION	.059	36.8%
LIFESTYLE CHANGES	.089	55.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.160	100.0%
BUREAUCRATIC RESPONSE	.057	35.8%



```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created		14-DEC-2020 14:22:00
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.42
	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

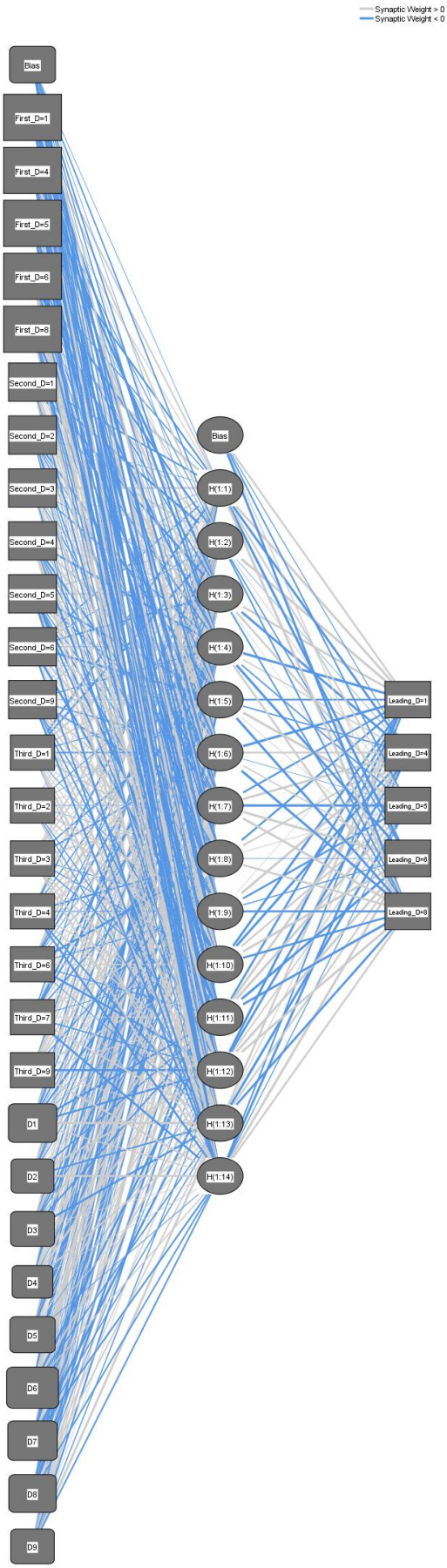
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		28
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		14
	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	.024
	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	.044
	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)	H(1:12)	H(1:13)	H(1:14)	[Leading_D=1]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.031	-.256	-.023	-.285	-.190	-.045	.408	-.505	-.437	-.156	-.168	-.265	-.187	-.223					
	[First_D=1]	.332	.364	.102	-.503	-.162	-.477	-.555	.159	-.223	-.674	-.228	-.283	.380	-.508					
	[First_D=4]	.115	-.145	-.622	.539	.255	.135	.249	-.475	.760	-.421	.030	-.834	-.057	-.598					
	[First_D=5]	-.347	-.017	.300	-.030	.148	.445	-.339	-.145	-.407	.098	-.022	.096	-.259	-.482					
	[First_D=6]	-.186	-.436	-.259	-.704	-.208	.056	-.208	-.279	-.308	.716	-.772	.689	.121	.746					
	[First_D=8]	.522	.229	.089	.539	.264	-.551	.105	.369	-.512	.144	-.397	-.260	-.160	.350					
	[Second_D=1]	-.346	-.553	-.490	-.279	.126	.057	.033	.340	.254	.402	.052	-.358	.187	-.016					
	[Second_D=2]	-.024	.478	.291	.009	-.373	-.145	-.212	.170	.097	-.275	-.160	-.018	.391	-.133					
	[Second_D=3]	.506	.210	-.096	-.264	.058	.364	-.157	.400	.013	.127	.249	-.103	-.197	.215					
	[Second_D=4]	.232	.136	.288	-.491	.499	.383	-.493	-.306	-.236	.523	-.579	.413	.190	.501					
	[Second_D=5]	.327	.433	.504	.214	-.431	-.265	.467	-.204	-.300	-.590	-.365	.336	.106	-.484					
	[Second_D=6]	-.278	-.118	-.441	-.087	-.577	-.014	.155	.505	.102	-.547	.014	.081	.142	-.340					

	[Second_D=9]	.235	.442	.009	-.227	-.058	-.282	-.330	.327	.484	.329	-.254	-.279	.318	-.423					
	[Third_D=1]	-.516	-.505	.444	.384	-.180	-.341	.368	.404	.047	-.089	.112	.175	.552	-.019					
	[Third_D=2]	.168	.040	.153	-.161	-.031	.081	-.080	-.024	.281	.383	.091	-.156	-.175	.329					
	[Third_D=3]	.025	.383	.329	.119	-.317	-.318	.386	.047	-.105	-.155	-.186	.270	.358	.406					
	[Third_D=4]	.316	-.366	.029	-.203	.413	.277	.242	-.372	-.137	.074	.213	.287	-.323	-.444					
	[Third_D=6]	.132	.405	-.192	-.391	-.098	-.081	.101	-.547	-.172	.218	-.174	-.495	-.103	.102					
	[Third_D=7]	-.219	.071	.181	-.533	-.397	.185	-.296	.004	.245	-.094	.150	-.232	.387	-.483					
	[Third_D=9]	.176	-.302	.387	.370	.115	.335	.416	-.235	.149	.324	.215	-.502	.131	.427					
	D1	-.285	.482	-.051	-.317	.017	-.290	-.044	-.451	-.025	-.004	-.433	-.482	.575	.235					
	D2	.474	-.062	.343	.169	-.242	-.213	.323	-.185	.047	.060	-.277	.478	-.340	.457					
	D3	.131	.152	.073	-.286	.308	.487	-.114	-.362	-.205	.520	-.357	.007	-.500	.040					
	D4	-.156	.020	-.347	-.298	.246	.133	.148	.324	-.123	.321	.526	.009	.365	.074					
	D5	.405	-.160	.504	-.329	.116	-.246	-.655	.253	.043	.135	.294	-.020	.106	-.095					
	D6	-.595	-.388	-.369	.203	-.035	.521	.572	.338	.035	.176	-.527	.404	-.270	.214					
	D7	.347	.581	-.049	-.075	-.145	-.183	-.530	-.099	.340	.194	.136	-.526	-.209	-.351					
	D8	.515	-.085	-.581	.197	-.299	-.628	-.083	.183	-.464	-.471	-.113	.228	.280	-.285					
	D9	-.252	.152	.276	-.054	-.211	.021	.408	.220	.449	-.373	.034	-.180	.546	-.310					
Hidden Layer 1	(Bias)															.424	-.117	-.304	.176	-.617
	H(1:1)															.587	-.629	.348	-.898	.749
	H(1:2)															1.382	-.013	.069	-.247	-.309
	H(1:3)															.562	-.596	.451	.004	-.306
	H(1:4)															-1.050	.249	-.265	-.886	.486
	H(1:5)															-.372	-.263	.942	.043	-.705
	H(1:6)															-1.081	.413	-.020	.249	-.842
	H(1:7)															-.403	.607	-.994	.741	.721
	H(1:8)															-.468	.388	.085	-.030	.431
	H(1:9)															.016	1.114	-.438	-.179	-.452
	H(1:10)															-.609	-.748	.397	1.203	-.495
	H(1:11)															-.495	.707	.952	-.981	-.674
	H(1:12)															-.945	-.575	.267	.851	.671
	H(1:13)															.486	.110	-.787	.384	-.530
	H(1:14)															-.319	-.643	-.156	1.337	.442

Classification

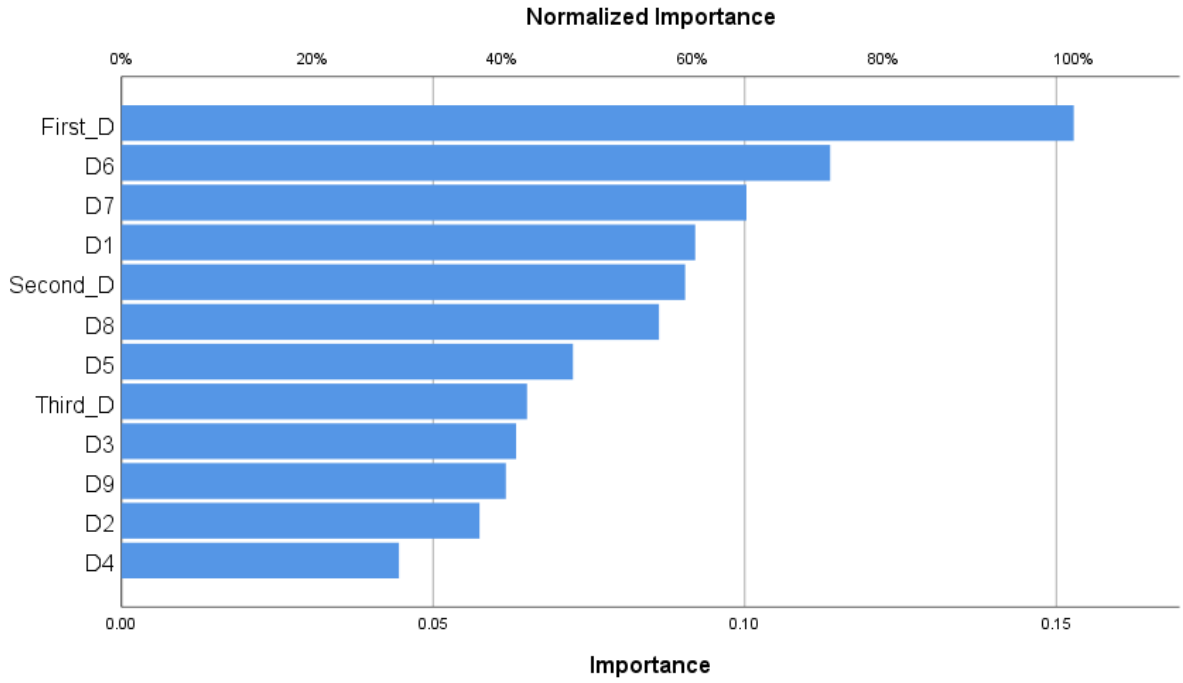
		Predicted					
Sample	Observed	1	4	5	6	8	Percent Correct
Training	1	4	0	0	0	0	100.0%

	4	0	1	0	0	0	100.0%
	5	0	0	1	0	0	100.0%
	6	0	0	0	3	0	100.0%
	8	0	0	0	0	1	100.0%
	Overall Percent	40.0%	10.0%	10.0%	30.0%	10.0%	100.0%
Testing	1	1	0	0	0	0	100.0%
	4	0	1	0	0	0	100.0%
	5	0	0	0	0	0	0.0%
	6	0	0	0	0	0	0.0%
	8	0	0	0	0	0	0.0%
	Overall Percent	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.153	100.0%
Second discourse in text	.090	59.2%
Third discourse in text	.065	42.6%
CONTACT RESTRICTION	.092	60.2%
SANITATION AND HYGIENE	.057	37.6%
ISOLATION OF INFECTED	.063	41.4%
TOTAL ISOLATION	.045	29.1%
HEALTH CARE	.072	47.4%
VIRUS DISSEMINATION	.114	74.4%
LIFESTYLE CHANGES	.100	65.6%
RIGHTS AND FREEDOMS INFRINGEMENT	.086	56.4%
BUREAUCRATIC RESPONSE	.062	40.4%

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*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
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Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:22:14
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.37
	Elapsed Time	00:00:00.43

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

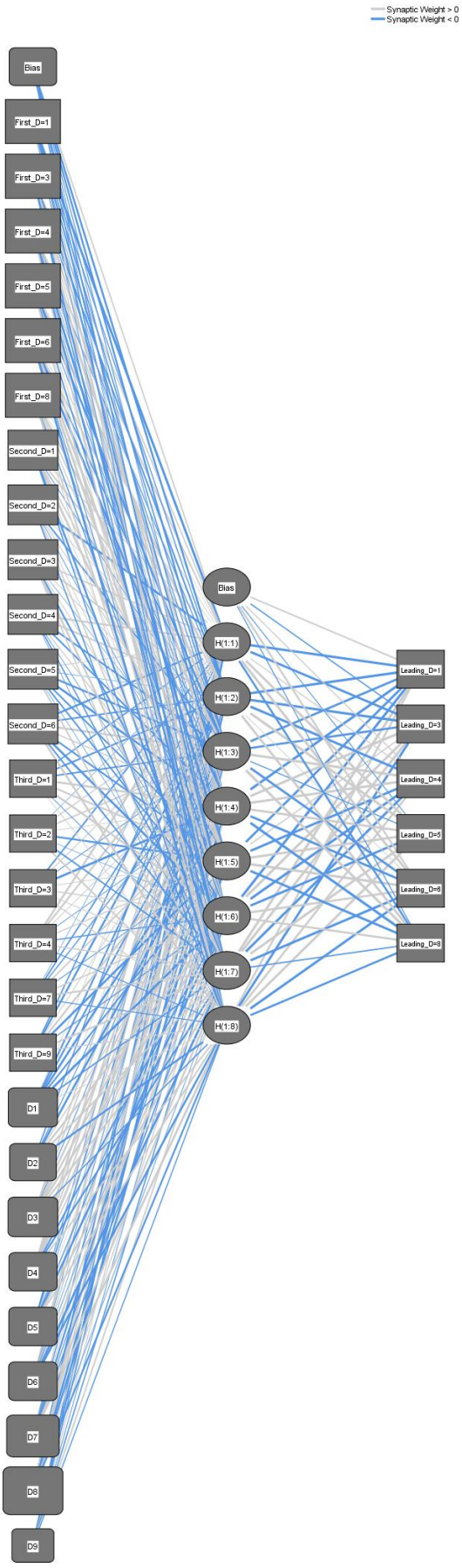
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		27
	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		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	.019
	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	.381
	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)	[Leading_D =1]	[Leading_D =3]	[Leading_D =4]	[Leading_D =5]	[Leading_D =6]	[Leading_D =8]
Input Layer	(Bias)	.304	-.512	-.470	-.162	-.119	-.324	-.060	-.207						
	[First_D=1]	-.849	-.201	-.269	-.390	-.045	-.440	.273	-.095						
	[First_D=3]	.277	-.389	-.171	.546	.179	.410	-.452	-.226						
	[First_D=4]	.384	-.192	.870	-.062	-.784	-.043	-.493	.365						
	[First_D=5]	.004	.737	-.533	-.141	.105	-.315	.081	.413						
	[First_D=6]	.057	.332	-.345	-.746	.768	.788	-.171	-.714						
	[First_D=8]	.026	.010	.528	.276	.175	-.242	.408	.165						
	[Second_D=1]	.153	.390	-.136	.273	.704	.047	-.516	-.272						
	[Second_D=2]	-.694	.084	-.388	.169	-.096	.108	.276	-.252						
	[Second_D=3]	.328	.428	.128	-.008	.151	-.453	.533	.271						
	[Second_D=4]	.484	.474	-.446	-.408	.207	-.072	-.275	-.061						
	[Second_D=5]	.138	-.013	-.483	-.683	-.394	-.363	-.051	.387						
	[Second_D=6]	-.527	-.385	.618	.235	-.423	-.687	-.371	.594						

	[Third_D=1]	-.322	-.414	-.337	.608	.466	.582	-.122	.078						
	[Third_D=2]	-.001	.205	.323	.060	-.488	-.006	-.334	.402						
	[Third_D=3]	-.375	.167	-.139	-.741	.107	.223	.143	.187						
	[Third_D=4]	.599	.499	.114	-.107	.225	-.242	.248	-.184						
	[Third_D=7]	-.011	-.328	-.239	.341	-.163	.306	.457	-.187						
	[Third_D=9]	-.305	-.532	.129	.506	-.654	-.187	.460	.204						
	D1	.062	-.435	-.443	-.654	-.397	-.829	-.321	.095						
	D2	-.252	.035	-.167	-.619	.245	.535	.473	-.516						
	D3	.310	.315	-.156	.511	.538	.706	.484	-.259						
	D4	.504	.422	.321	.681	.299	-.405	-.465	.362						
	D5	-.150	-.342	-.074	.018	-.211	-.584	.553	.396						
	D6	.732	-.132	.245	-.049	-.095	.391	-.737	-.556						
	D7	.190	-.240	.148	-.424	-.174	-.280	.488	.684						
	D8	-.453	.839	.297	-.601	-.519	.197	-.081	-.450						
	D9	-.346	-.533	-.304	.172	-.114	-.266	.330	-.220						
Hidden Layer 1	(Bias)									.379	-.251	.211	-.158	.507	-.180
	H(1:1)									-.934	-.858	.194	.925	1.181	-.573
	H(1:2)									-1.185	-1.107	-1.158	1.544	.063	.841
	H(1:3)									-.719	-.645	1.196	-.209	-.833	1.489
	H(1:4)									-1.373	1.391	1.070	.744	-.827	-1.462
	H(1:5)									-.799	.250	-.875	.899	1.778	-.903
	H(1:6)									-1.344	1.920	-1.328	-.920	.671	.609
	H(1:7)									1.580	1.285	-1.208	1.224	-1.081	-.278
	H(1:8)									.558	-.928	.644	1.104	-1.056	-.601

Classification

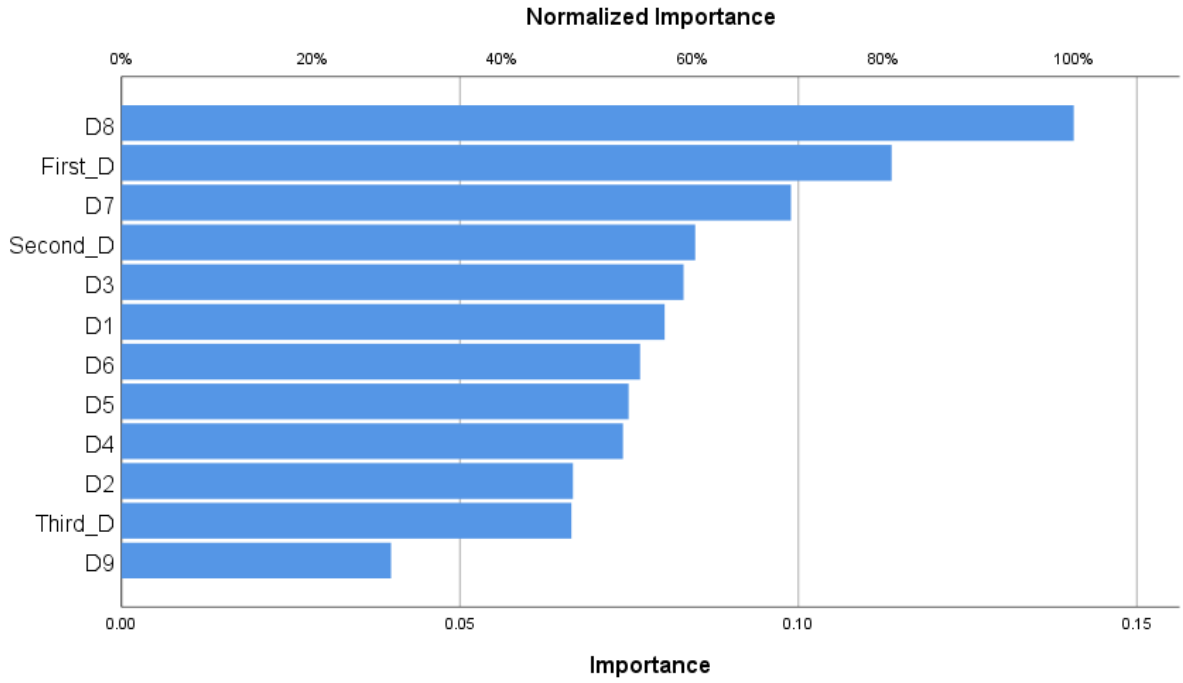
Sample	Observed	Predicted 1	3	4	5	6	8	Percent Correct
Training	1	3	0	0	0	0	0	100.0%
	3	0	1	0	0	0	0	100.0%
	4	0	0	2	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	1	100.0%
	Overall Percent	30.0%	10.0%	20.0%	10.0%	20.0%	10.0%	100.0%
Testing	1	0	0	0	0	0	0	0.0%
	3	0	1	0	0	0	0	100.0%

	4	0	0	0	0	0	0.0%
	5	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	.114	80.9%
Second discourse in text	.085	60.3%
Third discourse in text	.066	47.2%
CONTACT RESTRICTION	.080	57.0%
SANITATION AND HYGIENE	.067	47.4%
ISOLATION OF INFECTED	.083	59.0%
TOTAL ISOLATION	.074	52.7%
HEALTH CARE	.075	53.3%
VIRUS DISSEMINATION	.077	54.5%
LIFESTYLE CHANGES	.099	70.3%
RIGHTS AND FREEDOMS INFRINGEMENT	.141	100.0%
BUREAUCRATIC RESPONSE	.040	28.3%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:22:22
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
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

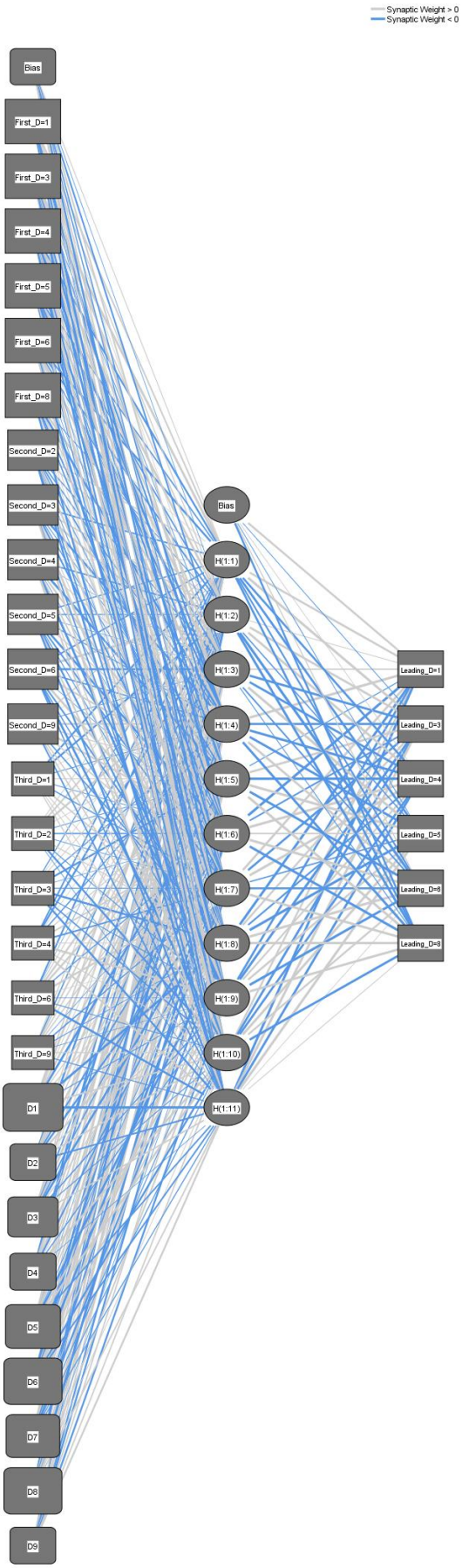
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		27
	Rescaling Method for Covariates		Standardized
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	.069
	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	.441
	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)	.102	-.042	-.332	.357	-.238	-.160	.190	-.428	.185	.197	.101						
	[First_D=1]	.324	.142	.024	.550	.119	-.822	-.079	.023	-.675	.296	-.299						
	[First_D=3]	.654	.245	-.073	-.350	.298	.059	-.476	.369	-.597	-.002	.101						
	[First_D=4]	-.406	.562	.366	-.719	-.391	.383	.371	-.363	.652	-.351	-.369						
	[First_D=5]	-.242	-.275	.628	-.378	-.082	-.350	-.366	.003	-.040	.518	-.103						
	[First_D=6]	-.471	-.311	-.243	.660	.131	.134	-.020	-.056	-.654	.358	.009						
	[First_D=8]	.012	-.095	.442	-.541	.172	-.295	-.257	.077	.038	.045	-.427						
	[Second_D=2]	.196	.271	-.223	-.228	-.281	-.136	.391	-.081	.421	-.286	-.511						
	[Second_D=3]	-.324	.275	.527	-.552	-.086	-.135	-.364	.084	.599	-.276	.458						
	[Second_D=4]	.035	-.323	-.004	.147	-.627	.402	-.048	.272	-.656	.205	.342						
	[Second_D=5]	-.233	-.175	-.012	-.164	.187	-.582	-.313	-.116	-.412	.358	-.447						
	[Second_D=6]	-.297	.732	-.551	-.252	.404	-.044	.599	-.335	-.193	-.628	-.233						
	[Second_D=9]	.215	.021	-.082	.513	.157	.425	.266	-.251	.212	.293	-.287						

	[Third_D=1]	-.403	-.412	.001	-.086	.093	-.081	-.214	.315	.110	.085	.162						
	[Third_D=2]	.097	.332	.495	.072	-.083	-.229	-.069	.162	-.122	-.438	-.051						
	[Third_D=3]	-.159	.034	.091	-.180	-.408	-.027	-.107	-.491	-.111	-.249	-.465						
	[Third_D=4]	-.297	-.434	.035	-.221	.128	.324	-.308	.073	.568	.117	.386						
	[Third_D=6]	-.359	-.008	.112	.433	.483	-.165	.487	.012	-.031	-.103	-.536						
	[Third_D=9]	.143	-.254	.324	.229	.223	-.045	-.234	-.089	-.019	.173	-.144						
	D1	.241	.499	.073	.455	-.591	.142	.154	-.690	-.113	.333	-.956						
	D2	.144	-.493	.496	.171	.435	-.329	-.462	.515	.228	.291	-.333						
	D3	.161	.460	.056	-.310	.700	-.248	-.618	.134	-.226	-.128	.281						
	D4	-.520	-.325	.348	.256	.001	.511	-.343	.056	-.184	.558	-.041						
	D5	.267	.194	.409	-.027	.562	.230	-.102	-.644	.499	.622	-.284						
	D6	.176	.260	-.523	-.826	-.199	.395	-.637	.824	.299	-.434	-.319						
	D7	.717	.371	.298	.222	.096	-.353	.061	-.400	-.140	-.138	-.146						
	D8	-.419	-.649	.082	.001	.843	-.736	.530	-.039	.338	.079	.280						
	D9	.377	-.128	.166	.202	.201	-.371	-.414	.266	-.411	.260	.414						
Hidden Layer	(Bias)												.510	-.087	.056	-.082	.148	-.465
1	H(1:1)												.538	.846	-.551	-.603	-.361	-.529
	H(1:2)												.088	.582	.665	-.216	-1.250	-.752
	H(1:3)												.237	-.633	-.627	1.229	-.299	-.110
	H(1:4)												1.250	-.610	-.700	-.692	.628	-.745
	H(1:5)												-.136	.618	-1.009	.923	-.814	1.010
	H(1:6)												-1.054	-.347	1.310	.264	.919	-.842
	H(1:7)												.617	-.573	.884	-.246	-.507	.761
	H(1:8)												-.879	.509	-.376	-1.058	1.005	.681
	H(1:9)												-.579	-.837	.388	.557	-.853	.694
	H(1:10)												.455	-.631	-.603	.795	.457	-.654
	H(1:11)												-.832	.793	-.667	.852	.062	.104

Classification

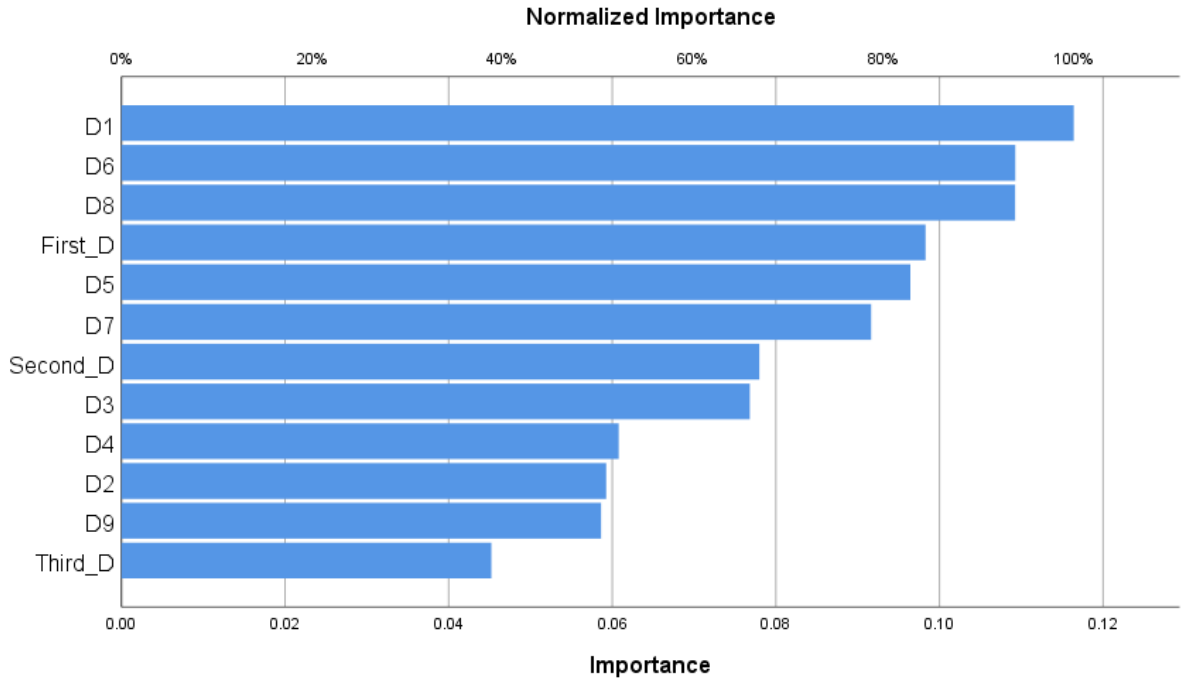
Sample	Observed	Predicted 1	3	4	5	6	8	Percent Correct
Training	1	4	0	0	0	0	0	100.0%
	3	0	1	0	0	0	0	100.0%
	4	0	0	1	0	0	0	100.0%
	5	0	0	0	1	0	0	100.0%
	6	0	0	0	0	2	0	100.0%
	8	0	0	0	0	0	1	100.0%

	Overall Percent	40.0%	10.0%	10.0%	10.0%	20.0%	10.0%	100.0%
Testing	1	0	0	0	0	0	0	0.0%
	3	0	1	0	0	0	0	100.0%
	4	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%	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%

Dependent Variable: Leading discourse in meaning

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.098	84.4%
Second discourse in text	.078	67.0%
Third discourse in text	.045	38.8%
CONTACT RESTRICTION	.116	100.0%
SANITATION AND HYGIENE	.059	50.9%
ISOLATION OF INFECTED	.077	66.0%
TOTAL ISOLATION	.061	52.2%
HEALTH CARE	.096	82.8%
VIRUS DISSEMINATION	.109	93.9%
LIFESTYLE CHANGES	.092	78.7%
RIGHTS AND FREEDOMS INFRINGEMENT	.109	93.8%
BUREAUCRATIC RESPONSE	.059	50.4%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:22:27
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
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

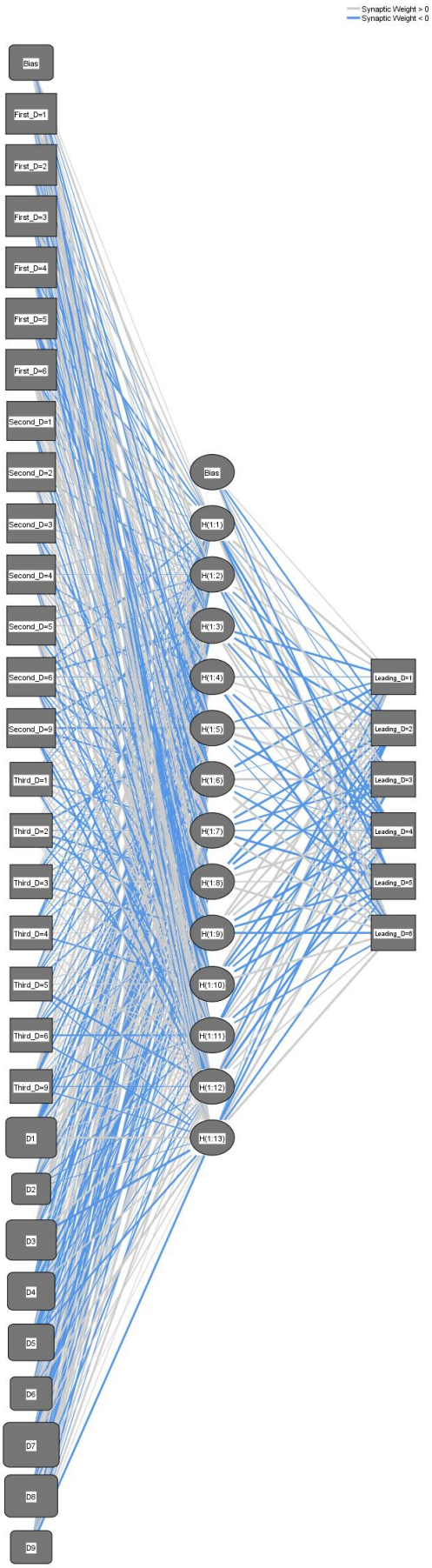
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		29
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		13
	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	.039
	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	.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)	H(1:6)	H(1:7)	H(1:8)	H(1:9)	H(1:10)	H(1:11)	H(1:12)	H(1:13)	[Leading_D=1]	[Leading_D=2]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]
Input Layer	(Bias)	.078	.516	-.104	.113	-.381	-.196	.256	.238	.378	-.143	-.448	.873	.311						
	[First_D=1]	.313	.569	.134	.398	-.064	-.653	.262	-.168	.420	.138	-.466	.726	-.075						
	[First_D=2]	-.130	-.134	-.275	.430	.289	.037	-.414	.010	.251	-.420	-.140	.076	.318						
	[First_D=3]	.541	-.255	.340	.139	.568	-.196	.093	-.350	-.057	-.455	.410	.481	-.089						
	[First_D=4]	-.445	.306	-.330	.001	-.055	-.155	-.332	.076	-.276	-.298	.086	-.406	.445						
	[First_D=5]	-.336	.470	.116	.254	-.506	-.555	-.661	-.021	.207	.342	-.019	.188	-.073						
	[First_D=6]	.860	-.365	.288	-.477	-.142	.859	.620	.074	-.317	.757	.086	.840	.664						
	[Second_D=1]	.169	-.240	.002	.295	.105	.547	.303	.102	-.286	-.205	.146	-.368	.026						
	[Second_D=2]	.398	-.346	.470	.452	.364	-.013	.222	.054	.233	-.343	.135	.277	.298						
	[Second_D=3]	.057	-.084	-.062	.060	.090	-.035	-.545	.130	.277	-.510	.368	-.104	.003						
	[Second_D=4]	.833	-.001	.402	-.371	-.166	.499	.489	.148	.090	.442	-.494	.520	-.163						
	[Second_D=5]	.529	-.307	.344	.201	.142	-.258	.220	-.423	.371	.467	.311	-.325	.516						
	[Second_D=6]	-.474	-.321	-.724	-.136	-.180	-.525	-.744	-.127	-.455	-.227	.472	-.698	.290						

	[Second_D=9]	.228	.251	-.595	-.032	-.507	-.471	-.073	-.159	.330	.374	-.348	-.518	.226					
	[Third_D=1]	-.118	-.283	.283	.283	-.008	.550	-.402	.370	-.486	.176	.421	-.414	.109					
	[Third_D=2]	.116	.257	.029	-.132	-.576	-.052	-.118	-.466	-.403	.431	-.385	.173	.135					
	[Third_D=3]	.205	-.007	-.520	-.183	.049	-.203	-.096	.356	-.405	.628	.089	-.035	.036					
	[Third_D=4]	-.417	-.296	-.083	.361	-.284	-.253	.001	.141	.161	-.387	.094	.236	.253					
	[Third_D=5]	-.366	.230	.101	-.356	-.269	.261	-.374	.050	.323	.186	.406	-.691	-.255					
	[Third_D=6]	-.334	.181	.276	.031	-.192	-.248	-.489	.074	-.085	.222	-.464	.078	-.395					
	[Third_D=9]	.661	.332	.440	-.341	-.474	.056	.194	-.091	.403	.342	-.222	-.156	-.270					
	D1	.163	.062	-.246	-.354	-1.104	-.552	1.005	-.487	.493	.584	.337	.241	.489					
	D2	.218	.076	-.323	.034	.182	.307	-.224	-.393	.437	.143	-.323	-.249	-.087					
	D3	.160	1.047	.911	-.055	.209	.808	-.340	-.219	.056	.275	.031	.705	-.900					
	D4	-.576	-.252	.182	-.339	-.675	-.290	.137	.514	-.792	-.242	-.187	-.164	.374					
	D5	-.546	.178	.025	.371	.333	-.587	-.153	-.558	-.190	-.220	-.336	-.236	-.505					
	D6	-.150	-.305	.188	-.311	.066	.319	-.066	.061	-.113	.218	.591	-.239	.602					
	D7	-.048	.295	-.807	.492	.063	-.901	-.425	-.626	.169	.488	.080	.596	.194					
	D8	.748	-.047	-.657	.017	.322	-.358	-.243	-.419	.537	.121	-.406	.217	.036					
	D9	-.042	-.359	-.106	.323	.427	.608	-.060	-.502	.482	-.138	.502	.081	-.591					
Hidden Layer 1	(Bias)														.144	-.436	-.108	.277	-.406	.312
	H(1:1)														.951	-.135	1.123	-1.065	-1.059	1.372
	H(1:2)														.387	-.357	.250	-.639	.319	-.365
	H(1:3)														-.686	-1.392	.608	-.544	.369	.678
	H(1:4)														-.100	.441	.093	-.649	.134	-1.212
	H(1:5)														-.383	.775	1.169	-.702	-.156	-.188
	H(1:6)														-1.413	-.004	1.330	-.099	-.571	1.636
	H(1:7)														.796	-.804	-.483	-.159	-.884	1.186
	H(1:8)														-1.264	-.755	-.547	.677	.274	.723
	H(1:9)														.887	.693	.549	-1.127	-.579	-.561
	H(1:10)														1.181	-.732	-.466	-.406	-.850	.602
	H(1:11)														-.906	-.421	.415	.446	-.496	-.341
	H(1:12)														.936	-1.171	.670	-1.628	.408	.294
	H(1:13)														-.026	-.424	-.654	.858	-.519	.994

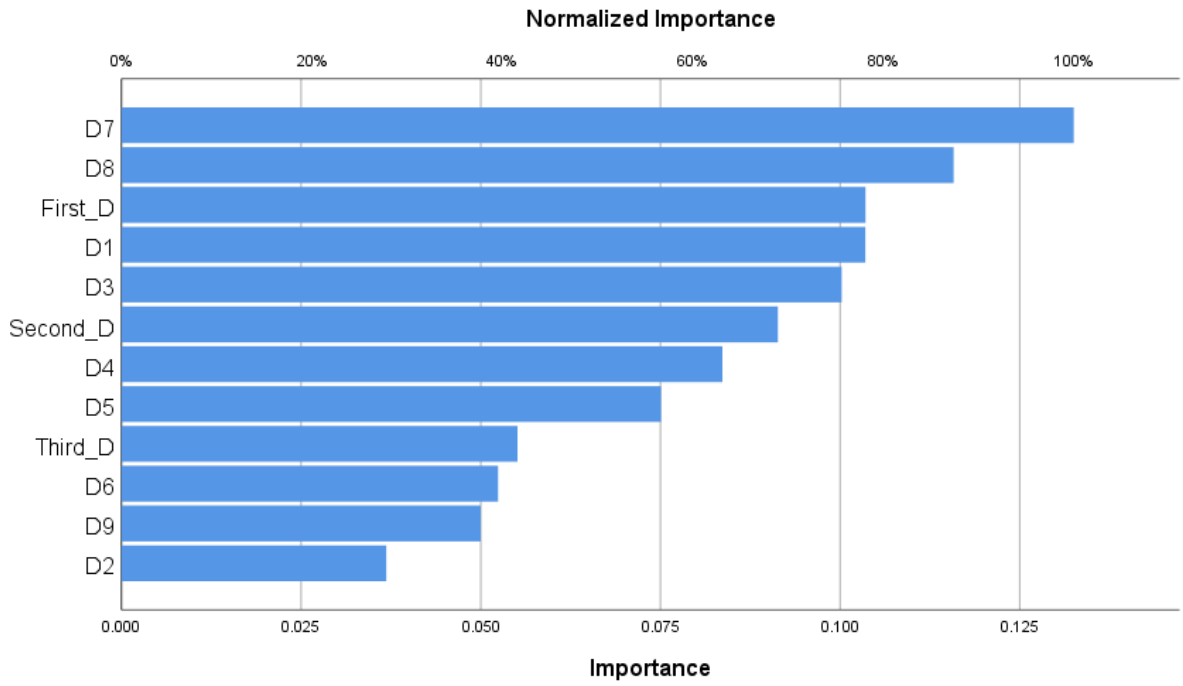
Classification

Sample	Observed	Predicted 1	2	3	4	5	6	Percent Correct
Training	1	3	0	0	0	0	0	100.0%
	2	0	1	0	0	0	0	100.0%
	3	0	0	2	0	0	0	100.0%
	4	0	0	0	2	0	0	100.0%
	5	0	0	0	0	1	0	100.0%
	6	0	0	0	0	0	3	100.0%
	Overall Percent	25.0%	8.3%	16.7%	16.7%	8.3%	25.0%	100.0%
Testing	1	1	0	0	0	0	0	100.0%
	2	0	0	0	0	0	0	0.0%
	3	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%
	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	.104	78.1%
Second discourse in text	.091	68.9%
Third discourse in text	.055	41.6%
CONTACT RESTRICTION	.104	78.1%
SANITATION AND HYGIENE	.037	27.8%
ISOLATION OF INFECTED	.100	75.6%
TOTAL ISOLATION	.084	63.1%
HEALTH CARE	.075	56.6%
VIRUS DISSEMINATION	.052	39.6%
LIFESTYLE CHANGES	.133	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.116	87.4%
BUREAUCRATIC RESPONSE	.050	37.7%




```
*Multilayer Perceptron Network.
MLP Leading_D (MLEVEL=N) BY First_D Second_D Third_D 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=INCLUDE .
```

Multilayer Perceptron

Notes

Output Created	14-DEC-2020 14:22:58
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-missing values for categorical variables are are treated as valid data. User-missing values for scale variables and system-missing values for any variables 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 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=INCLUDE .
Resources	Processor Time	00:00:00.37
	Elapsed Time	00:00:00.43

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

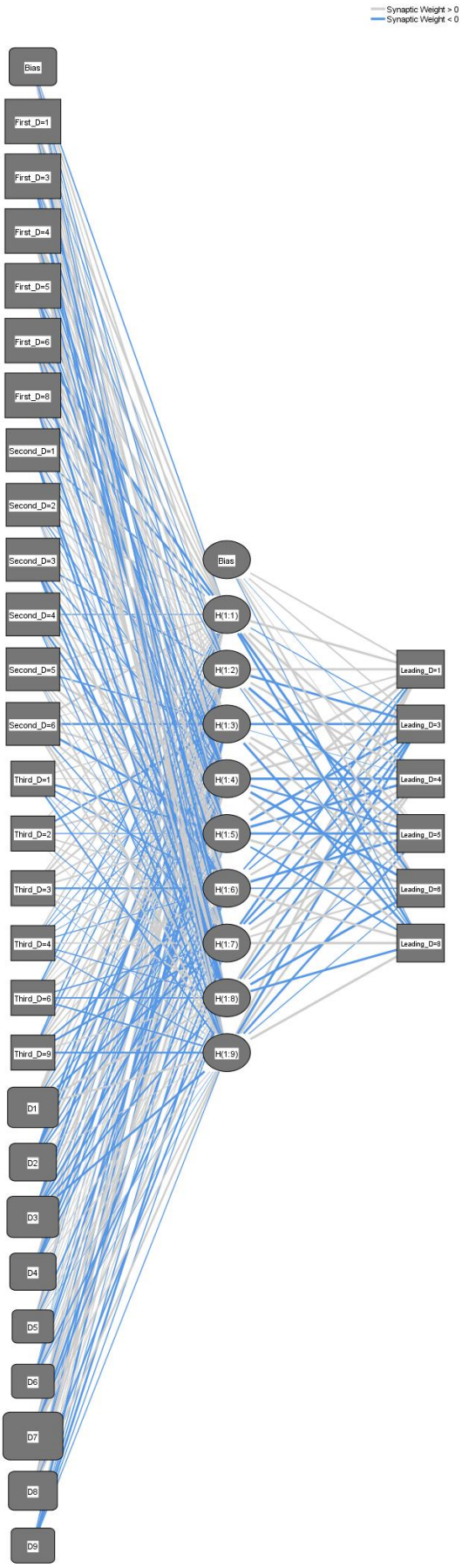
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		27
	Rescaling Method for Covariates		Standardized
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	.037
	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	.035
	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)	[Leading_D=1]	[Leading_D=3]	[Leading_D=4]	[Leading_D=5]	[Leading_D=6]	[Leading_D=8]
Input Layer	(Bias)	-.264	.440	.138	-.233	-.057	.089	-.121	-.169	.323						
	[First_D=1]	.596	-.137	.313	.337	.364	.290	-.712	-.076	.449						
	[First_D=3]	.232	-.244	.044	.272	-.451	.200	.088	-.525	-.323						
	[First_D=4]	.875	.384	.166	-.430	-.325	.468	-.365	.777	.458						
	[First_D=5]	.267	-.242	.056	-.293	-.279	-.588	.103	.330	-.007						
	[First_D=6]	-1.001	.436	.139	-.618	.655	.149	.249	-.857	.133						
	[First_D=8]	-.557	.095	-.255	.040	-.108	.477	.178	-.591	-.024						
	[Second_D=1]	-.340	.116	.038	-.257	.058	.050	.025	-.669	-.428						
	[Second_D=2]	.483	.419	.329	-.208	-.064	.056	.276	-.053	.086						
	[Second_D=3]	.055	-.331	.350	-.332	.080	-.551	.394	-.480	-.451						
	[Second_D=4]	-.214	.142	.236	.253	.987	-.531	.509	-.064	-.233						
	[Second_D=5]	.394	.130	-.377	.626	.648	.282	.190	-.032	.474						
	[Second_D=6]	.721	.081	-.576	.503	-.824	.504	-.287	.607	.421						
	[Third_D=1]	.081	.148	.248	.069	-.582	-.376	-.214	-.016	-.424						
	[Third_D=2]	.205	.052	-.496	.410	-.177	.301	.201	-.189	.067						
	[Third_D=3]	.241	.482	.502	.385	.398	-.507	.238	.411	-.025						
	[Third_D=4]	.309	-.101	-.124	-.204	-.061	-.191	.307	-.229	-.209						
	[Third_D=6]	-.340	-.062	.405	.055	.482	.418	-.284	-.324	-.392						
	[Third_D=9]	-.284	-.298	.324	.459	.240	-.442	-.610	.257	-.502						

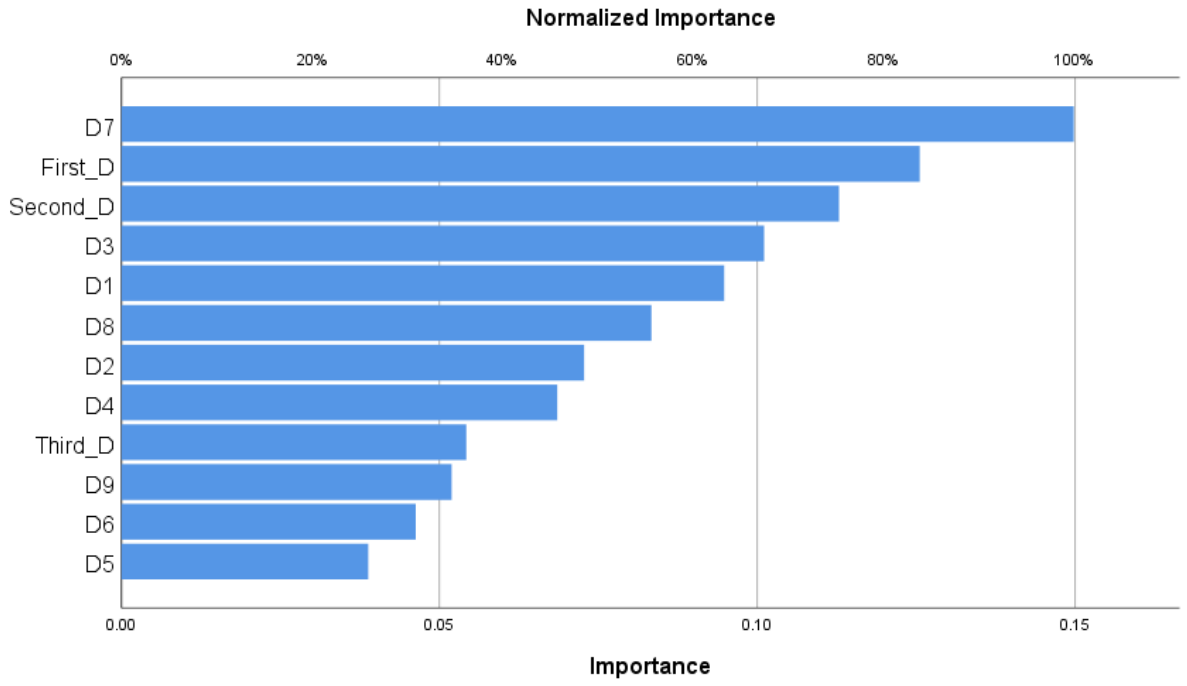
	D1	.126	.771	.169	-.286	.463	-.185	-.529	.547	.484						
	D2	-.566	-.383	-.483	.502	-.292	-.377	.076	.067	.125						
	D3	.212	-1.015	-.300	.539	-.199	-.574	-.357	-.444	-.769						
	D4	.656	-.105	.508	-.679	-.325	-.383	.045	.221	.158						
	D5	.491	-.118	.089	.126	.050	-.392	.224	.157	-.003						
	D6	-.043	.153	-.139	-.556	-.102	.108	.397	-.366	-.049						
	D7	.124	.405	-.311	.852	.441	-.576	-.442	.718	.352						
	D8	.230	-.163	-.404	.771	.471	.013	.133	-.431	.485						
	D9	.094	.107	-.871	.074	-.126	-.289	-.670	-.205	-.192						
Hidden Layer 1	(Bias)										.410	.334	-.039	.065	.591	-.164
	H(1:1)										1.007	-.204	1.188	.948	-1.661	-.779
	H(1:2)										.676	-.860	.869	-1.578	.894	-.198
	H(1:3)										.378	-.809	-.044	.957	.687	-.959
	H(1:4)										2.161	1.203	-1.614	-.526	-1.255	1.012
	H(1:5)										2.029	-1.341	-1.505	-.814	1.120	-.443
	H(1:6)										-.335	-.289	.590	-1.074	-.278	.776
	H(1:7)										-.755	-.711	-.518	.774	.413	1.355
	H(1:8)										.928	-.725	1.129	-.193	-1.243	-.789
	H(1:9)										.840	-1.307	.780	-.711	-.187	1.060

Classification

		Predicted						
Sample	Observed	1	3	4	5	6	8	Percent Correct
Training	1	2	0	0	0	0	0	100.0%
	3	0	2	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	20.0%	20.0%	20.0%	10.0%	20.0%	10.0%	100.0%
Testing	1	1	0	0	0	0	0	100.0%
	3	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	1	0	100.0%
	8	0	0	0	0	0	0	0.0%

Overall Percent	50.0%	0.0%	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	.126	83.8%
Second discourse in text	.113	75.3%
Third discourse in text	.054	36.2%
CONTACT RESTRICTION	.095	63.3%
SANITATION AND HYGIENE	.073	48.6%
ISOLATION OF INFECTED	.101	67.5%
TOTAL ISOLATION	.069	45.8%
HEALTH CARE	.039	25.9%
VIRUS DISSEMINATION	.046	30.9%
LIFESTYLE CHANGES	.150	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.083	55.6%
BUREAUCRATIC RESPONSE	.052	34.7%