```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:13:23
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.44
	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

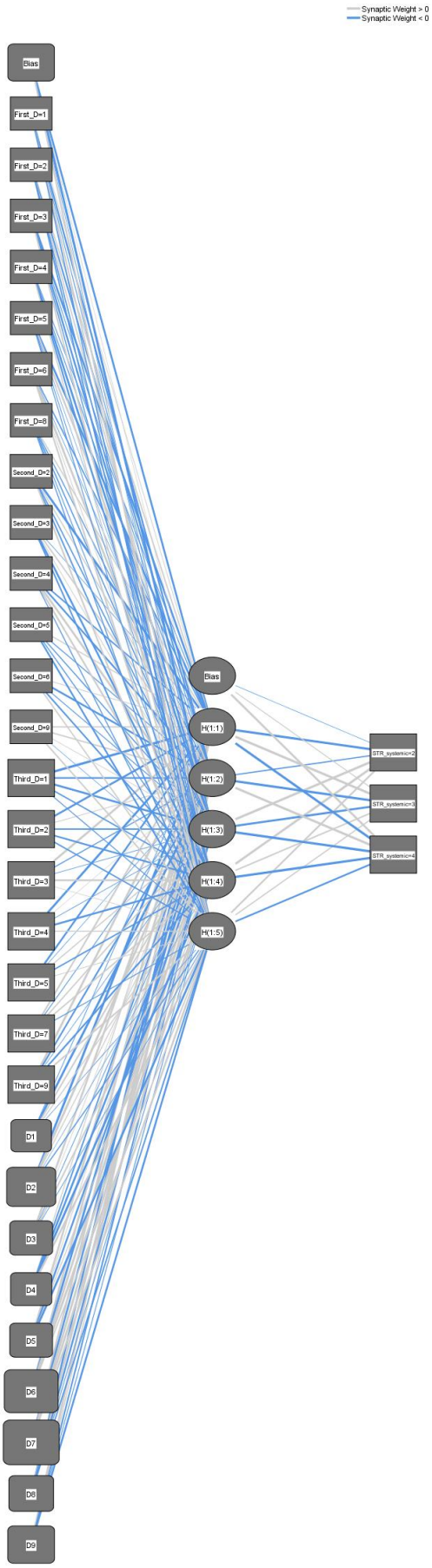
		N	Percent
Sample	Training	11	91.7%
	Testing	1	8.3%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	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]		5
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	Number of Units		3
	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	5.790E-6
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

Parameter Estimates

		Predicted							
		Hidden Layer 1					Output Layer		
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	-.582	.008	-.915	-.034	.464			
	[First_D=1]	.084	-.466	-.130	.365	-.274			
	[First_D=2]	.292	-.403	.255	-.252	-.317			
	[First_D=3]	-.583	-.129	-.513	-.217	.406			
	[First_D=4]	-.158	-.165	-.636	-.427	.240			
	[First_D=5]	-.660	.500	-.012	-.126	-.165			
	[First_D=6]	-.281	-.046	.728	.082	.421			
	[First_D=8]	.235	-.183	-.235	-.149	-.200			
	[Second_D=2]	-.855	.206	-.246	-.319	.427			
	[Second_D=3]	-.048	.314	.102	-.563	-.354			
	[Second_D=4]	-.354	-.495	.660	.488	-.191			
	[Second_D=5]	.218	-.176	-.212	-.198	-.464			
	[Second_D=6]	.116	-.537	-.160	-.408	.307			
	[Second_D=9]	.264	.315	.075	-.019	.345			
	[Third_D=1]	-1.707	-.450	-.603	-.305	-.168			

	[Third_D=2]	-.608	.127	-.372	-.461	-.309			
	[Third_D=3]	.748	-.203	-.088	.498	.035			
	[Third_D=4]	-.744	.002	-.083	-.555	.227			
	[Third_D=5]	-.518	-.038	.236	-.325	.106			
	[Third_D=7]	.440	-.159	.308	.337	-.165			
	[Third_D=9]	.745	-.428	-.064	-.461	.410			
	D1	-.105	-.780	.375	.191	-.073			
	D2	-1.093	1.040	.183	-.011	-.225			
	D3	.652	.046	-.103	.391	-.091			
	D4	.165	-.335	-.625	-.765	.600			
	D5	.695	.092	-.524	.181	-.653			
	D6	.690	-.770	.929	1.084	.302			
	D7	.626	-.577	.973	.832	.561			
	D8	-.579	.699	-.508	-.106	-.330			
	D9	1.234	.197	-.372	-.136	-.555			
Hidden Layer	(Bias)						-.022	.167	.739
1	H(1:1)						-1.057	4.137	-3.065
	H(1:2)						-.261	-1.280	1.720
	H(1:3)						2.864	-.700	-1.958
	H(1:4)						1.660	.360	-1.917
	H(1:5)						.507	.281	-.492

Classification

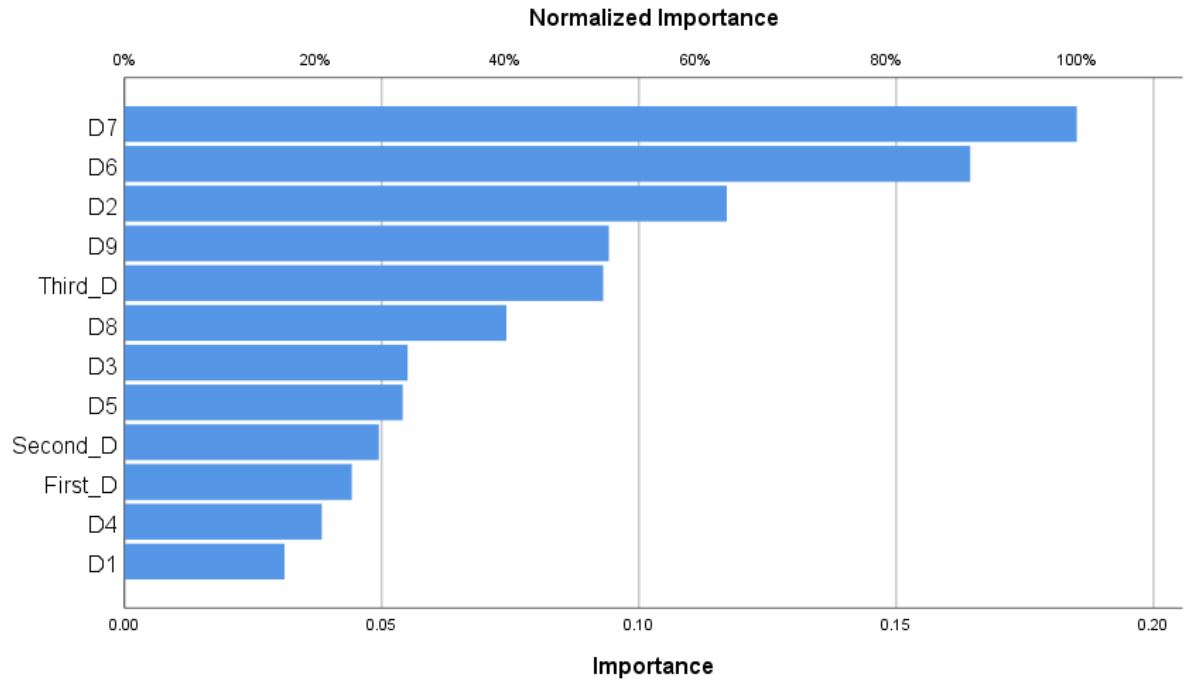
		Predicted			
Sample	Observed	mediocre option	good option	best option	Percent Correct
Training	mediocre option	2	0	0	100.0%
	good option	0	3	0	100.0%
	best option	0	0	6	100.0%
	Overall Percent	18.2%	27.3%	54.5%	100.0%
Testing	mediocre option	0	0	0	0.0%
	good option	0	0	0	0.0%
	best option	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance

First discourse in text	.044	23.9%
Second discourse in text	.049	26.7%
Third discourse in text	.093	50.3%
CONTACT RESTRICTION	.031	16.8%
SANITATION AND HYGIENE	.117	63.2%
ISOLATION OF INFECTED	.055	29.7%
TOTAL ISOLATION	.038	20.7%
HEALTH CARE	.054	29.2%
VIRUS DISSEMINATION	.164	88.8%
LIFESTYLE CHANGES	.185	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.074	40.1%
BUREAUCRATIC RESPONSE	.094	50.9%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:13:29
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.47
	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

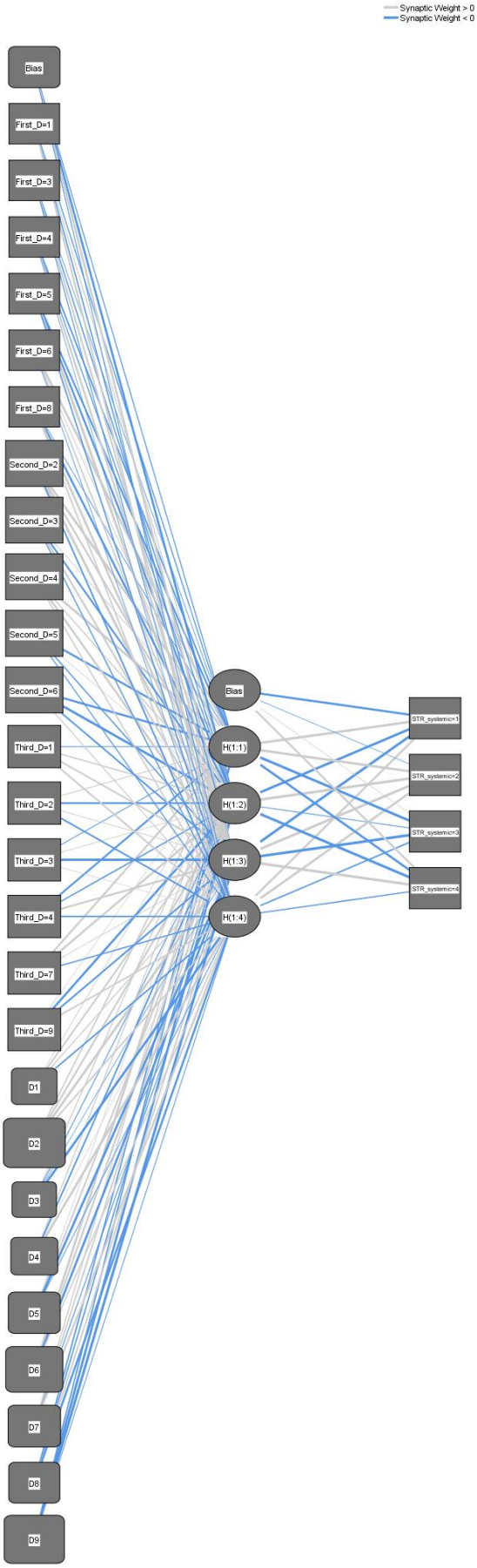
		N	Percent
Sample	Training	10	90.9%
	Testing	1	9.1%
Valid		11	100.0%
Excluded		93	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	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]		26
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		4
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	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	.123
	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	.005
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	-.243	-.723	.660	-.174				
	[First_D=1]	-.273	.234	-.343	.511				
	[First_D=3]	-.110	-.323	.508	-.213				
	[First_D=4]	-.401	-.272	.551	-.072				
	[First_D=5]	-.523	-.619	1.310	-.371				
	[First_D=6]	.777	.135	.392	-.126				
	[First_D=8]	-.153	-.637	.749	.399				
	[Second_D=2]	.984	.577	1.171	-.434				
	[Second_D=3]	.143	-.516	.536	-.323				
	[Second_D=4]	1.053	.323	.710	.381				
	[Second_D=5]	-.633	.007	-.328	-.270				
	[Second_D=6]	-.684	-1.006	-.439	.251				
	[Third_D=1]	-.169	.378	.476	.483				
	[Third_D=2]	.185	-.526	.151	-.463				
	[Third_D=3]	-.164	.124	-1.175	.007				
	[Third_D=4]	-.548	-.352	.585	-.415				
	[Third_D=7]	.619	.649	.130	-.346				
	[Third_D=9]	.002	-.740	-.489	.443				
	D1	.121	.476	.290	-.418				

	D2	.389	.545	1.162	.438				
	D3	.263	-.171	-.075	-.987				
	D4	.280	-.425	.006	.870				
	D5	.047	.472	-.822	-.157				
	D6	.813	.547	-.736	.339				
	D7	.317	.430	-.198	.636				
	D8	-.389	-.351	.433	-.659				
	D9	-.387	-.864	-1.393	-.157				
Hidden Layer 1	(Bias)					-.717	-.059	.038	.604
	H(1:1)					1.517	1.201	-1.821	-.751
	H(1:2)					-1.218	2.969	-.160	-1.914
	H(1:3)					-1.649	1.884	-3.498	3.136
	H(1:4)					.691	.958	-.389	-.327

Classification

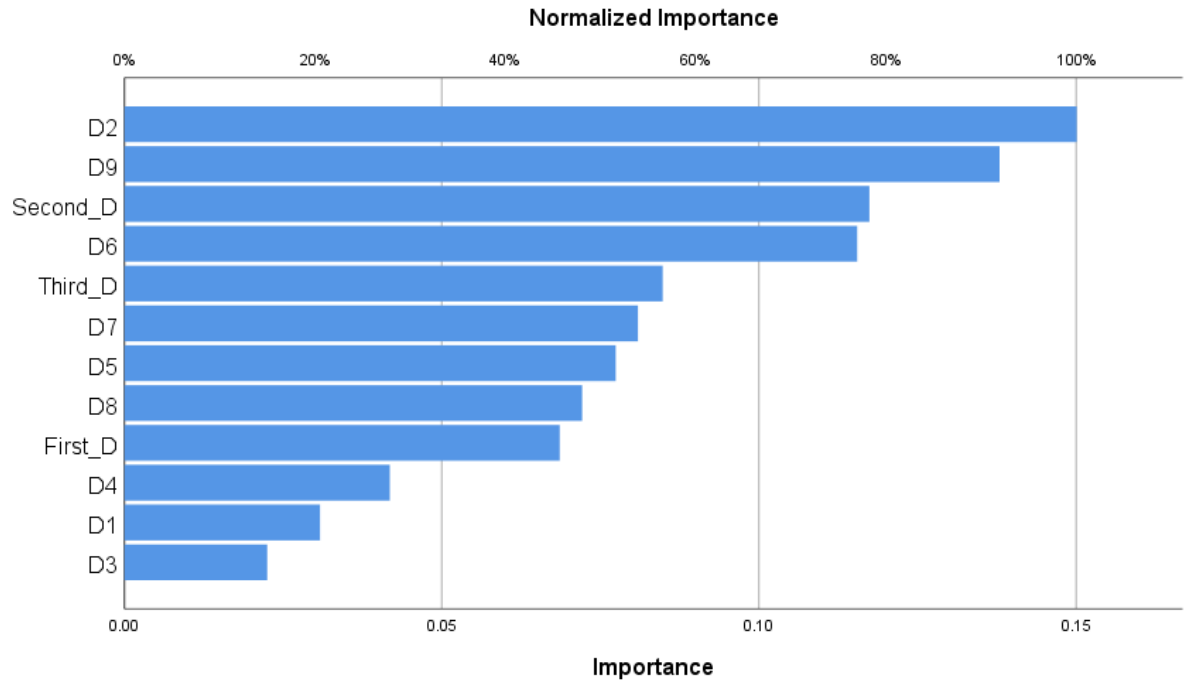
		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	3	0	100.0%
	best option	0	0	0	4	100.0%
	Overall Percent	10.0%	20.0%	30.0%	40.0%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.069	45.7%
Second discourse in text	.117	78.2%
Third discourse in text	.085	56.5%
CONTACT RESTRICTION	.031	20.5%

SANITATION AND HYGIENE	.150	100.0%
ISOLATION OF INFECTED	.023	15.0%
TOTAL ISOLATION	.042	27.9%
HEALTH CARE	.077	51.6%
VIRUS DISSEMINATION	.115	76.9%
LIFESTYLE CHANGES	.081	53.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.072	48.1%
BUREAUCRATIC RESPONSE	.138	91.9%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:13:37
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.50
	Elapsed Time	00:00:00.47

Case Processing Summary

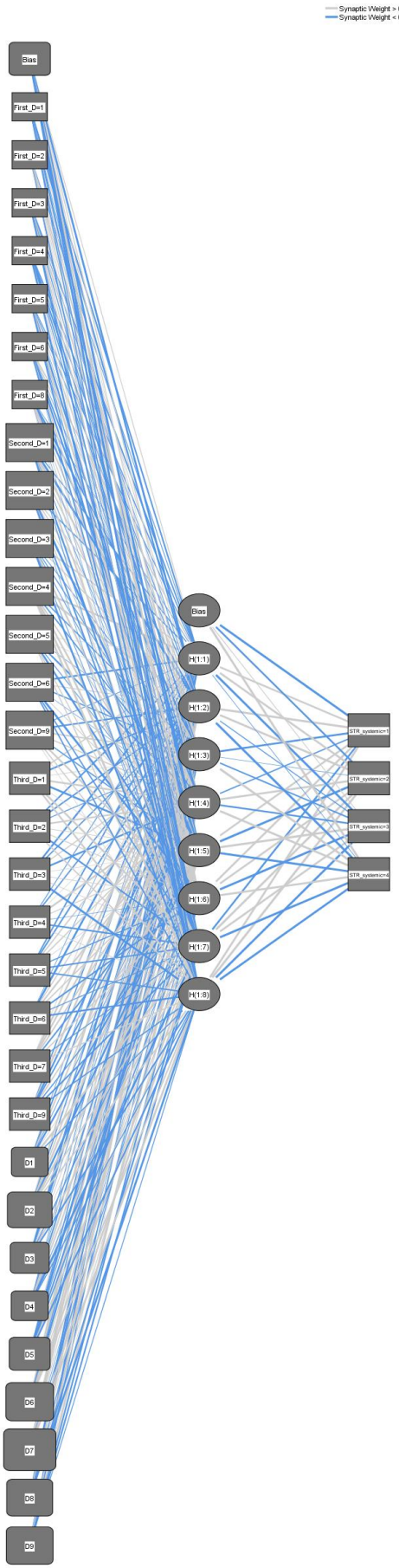
		N	Percent
Sample	Training	14	93.3%
	Testing	1	6.7%
Valid		15	100.0%
Excluded		89	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	Covariates	1	CONTACT RESTRICTION
		2	SANITATION AND HYGIENE
		3	ISOLATION OF INFECTED
		4	TOTAL ISOLATION
		5	HEALTH CARE
		6	VIRUS DISSEMINATION
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT
		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		31
	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	Systemic strategy
	Number of Units		4
	Activation Function		Softmax
	Error Function		Cross-entropy

a. Excluding the bias unit


Synaptic Weight > 0
Synaptic Weight < 0
Bias
First_D=1
First_D=2
First_D=3
First_D=4
First_D=5
First_D=6
First_D=8
Second_D=1
Second_D=2
Second_D=3
Second_D=4
Second_D=5
Second_D=6
Second_D=9
Third_D=1
Third_D=2
Third_D=3
Third_D=4
Third_D=5
Third_D=6
Third_D=7
Third_D=9
D1
D2
D3
D4
D5
D6
D7
D8
D9
Bias
H(1:1)
H(1:2)
H(1:3)
H(1:4)
H(1:5)
H(1:6)
H(1:7)
H(1:8)
STR_systemic=1
STR_systemic=2
STR_systemic=3
STR_systemic=4
Hidden layer activation function: Hyperbolic tangent
Output layer activation function: Softmax

Model Summary

Training	Cross Entropy Error	.035
	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	2.071E-5
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	.162	-.738	.216	.186	-.936	.754	-.823	-.808				
	[First_D=1]	-.379	-.486	.060	-.078	-.452	.129	-.189	-.222				
	[First_D=2]	-.127	.119	.356	.323	.086	.087	-.343	.015				
	[First_D=3]	-.356	-.100	.394	-.208	.210	.266	-.199	-.446				
	[First_D=4]	-.262	-.206	-.378	-.298	-.159	.167	.088	-.621				
	[First_D=5]	-.197	-.175	.194	-.001	-.556	.722	-.090	-.412				
	[First_D=6]	.302	.216	-.075	-.362	-.496	.342	-.336	-.013				
	[First_D=8]	-.065	-.447	-.440	.379	.154	.138	-.012	.151				
	[Second_D=1]	-.221	-1.078	.641	.351	-.122	.471	-.485	-.157				
	[Second_D=2]	-.247	.200	.220	.108	-.997	.209	-.392	-.041				
	[Second_D=3]	.343	.267	-.138	-.197	-.142	.624	-.113	-.626				
	[Second_D=4]	.728	.927	-.304	-.311	.357	.686	.878	1.043				
	[Second_D=5]	.011	.000	-.039	-.486	-.147	-.688	.225	.273				
	[Second_D=6]	-.538	.142	-.276	-.014	.126	-.889	-.317	-.333				
	[Second_D=9]	-.151	-.438	.366	.287	-.263	.588	.268	.019				
	[Third_D=1]	.314	-.510	.042	.578	-.727	.053	.702	.557				
	[Third_D=2]	-.429	-.377	-.185	.439	.093	.187	-.470	.341				
	[Third_D=3]	-.572	-.332	.251	-.552	.003	.083	.059	-.971				
	[Third_D=4]	-.154	-.320	.012	.642	.181	-.013	-.416	.062				

	[Third_D=5]	-.357	-.379	.333	.310	.056	-.259	-.360	-.352			
	[Third_D=6]	-.062	-.750	.222	.501	.317	-.409	-.186	-.496			
	[Third_D=7]	.075	.621	.513	.383	-.366	.311	-.194	.244			
	[Third_D=9]	-.298	.582	-.546	-.374	.336	-.270	-.407	-.303			
	D1	-.067	-.344	.404	-.110	-.515	.020	.793	-.242			
	D2	.433	-.268	.343	.766	-.674	1.090	.352	.361			
	D3	-.744	-.707	-.092	.087	.062	-.259	.450	-.419			
	D4	-.099	-.095	-.359	.530	.353	-.110	-.993	-.214			
	D5	.151	-.280	-1.322	-.130	-.435	-.308	.292	-.477			
	D6	.666	.823	-.238	-.736	.228	.219	.496	.406			
	D7	.564	1.158	.211	.115	-.040	-.171	.724	.803			
	D8	-.613	-.796	.538	.021	-.209	.153	-.454	-.777			
	D9	-.938	.914	-.274	.019	.938	-.419	-.424	-.181			
Hidden Layer 1	(Bias)									-1.626	-.572	.147	1.714
	H(1:1)									.654	.824	-1.810	-.066
	H(1:2)									1.404	.924	-.212	-2.069
	H(1:3)									-.709	-.030	-.374	1.878
	H(1:4)									-.323	.778	-.482	1.466
	H(1:5)									.717	-1.736	1.544	-.989
	H(1:6)									.904	.774	-1.874	.867
	H(1:7)									-.629	1.674	.819	-1.547
	H(1:8)									.878	2.169	-1.598	-1.164

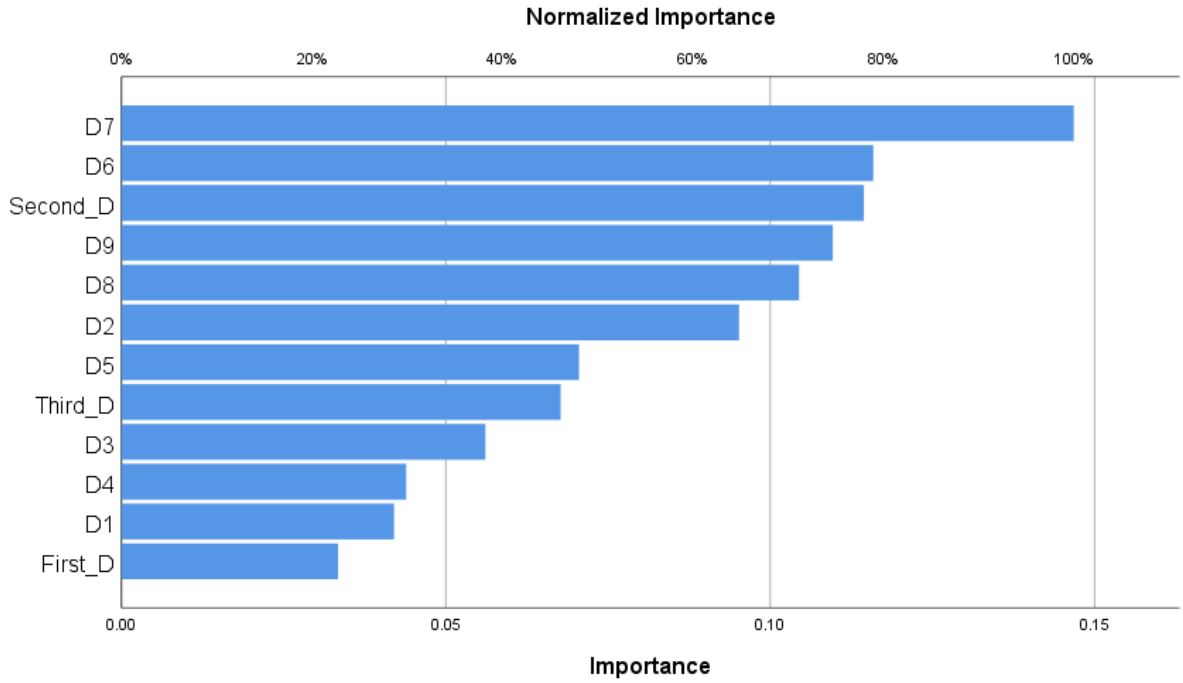
Classification

		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	2	0	0	100.0%
	good option	0	0	3	0	100.0%
	best option	0	0	0	8	100.0%
	Overall Percent	7.1%	14.3%	21.4%	57.1%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.033	22.7%
Second discourse in text	.114	78.0%
Third discourse in text	.068	46.1%
CONTACT RESTRICTION	.042	28.6%
SANITATION AND HYGIENE	.095	64.8%
ISOLATION OF INFECTED	.056	38.2%
TOTAL ISOLATION	.044	29.9%
HEALTH CARE	.071	48.0%
VIRUS DISSEMINATION	.116	79.0%
LIFESTYLE CHANGES	.147	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.104	71.2%
BUREAUCRATIC RESPONSE	.110	74.7%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:13:43
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.42
	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

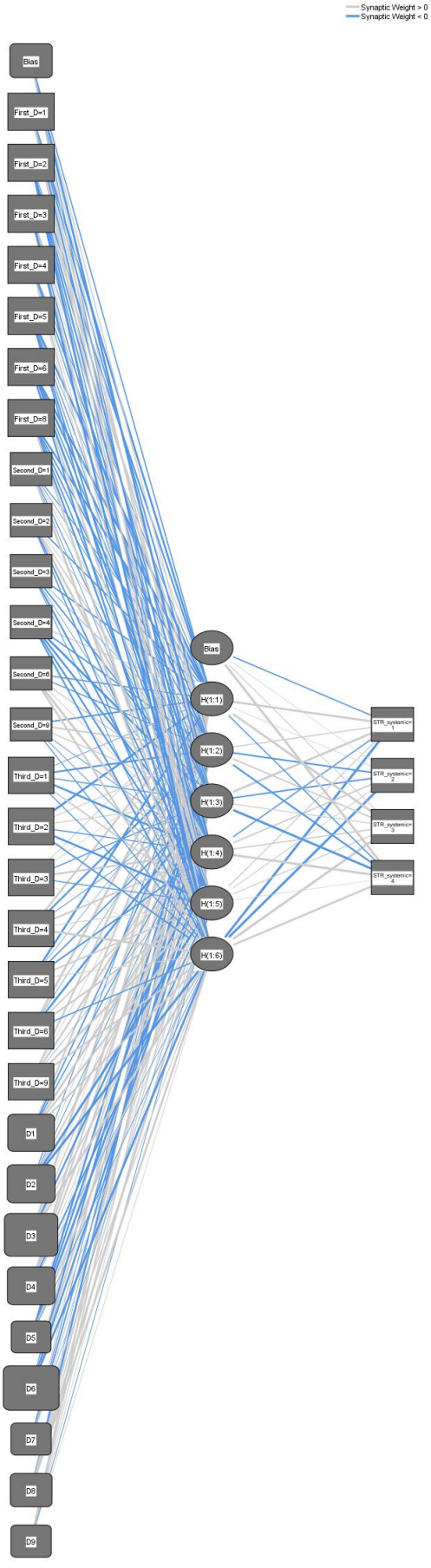
		N	Percent
Sample	Training	10	76.9%
	Testing	3	23.1%
Valid		13	100.0%
Excluded		91	
Total		104	

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]		6
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	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	4.978
	Percent Incorrect Predictions	10.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.910
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	-.208	.173	-.679	.130	-.124	.243				
	[First_D=1]	-.509	-.293	.310	-.362	.264	.313				
	[First_D=2]	-.359	.391	-.275	-.342	-.170	-.768				
	[First_D=3]	.119	.494	.044	-.234	.495	-.686				
	[First_D=4]	-.114	-.245	-.139	.051	.312	.090				
	[First_D=5]	-.669	-.042	-.146	-.122	-.330	-.298				
	[First_D=6]	-.644	-.420	-.205	-.522	.364	-.353				
	[First_D=8]	-.393	-.261	-.275	-.253	-.379	.555				
	[Second_D=1]	-.133	-.071	.130	-.151	-.074	.763				
	[Second_D=2]	-.250	.095	.241	.723	-.307	-.223				
	[Second_D=3]	-.253	-.036	-.271	-.041	-.382	-.112				
	[Second_D=4]	.153	-.259	-.675	-.445	-.384	-.349				
	[Second_D=6]	-.231	-.181	.212	.079	.915	.563				
	[Second_D=9]	-.308	.325	.192	-.106	-.093	-.159				
	[Third_D=1]	-.086	-.386	-.166	-.520	.311	-.166				
	[Third_D=2]	-.670	.141	.149	-.190	-.552	-.304				
	[Third_D=3]	.116	.027	-.193	.509	-.158	.019				
	[Third_D=4]	.497	-.412	-.108	.386	.115	.727				
	[Third_D=5]	-.596	-.017	-.248	-.323	.335	.097				

	[Third_D=6]	.793	-.027	-.627	.309	.400	-.233			
	[Third_D=9]	.489	.069	.471	-.004	.683	.363			
	D1	.405	-.273	-.207	.727	.488	.411			
	D2	-.132	.064	-.111	.329	-.783	-.791			
	D3	.748	.011	.229	-.424	.236	.730			
	D4	.646	.363	.405	.070	-.311	-.011			
	D5	.027	-.529	-.464	-.627	.560	-.091			
	D6	.229	-.459	.710	-.464	.082	-.675			
	D7	.168	-.115	-.282	.153	-.024	.135			
	D8	.000	-.556	.324	.171	.784	.607			
	D9	.446	.220	.120	.072	-.102	.042			
Hidden Layer 1	(Bias)							-.230	.005	.119	1.301
	H(1:1)							.641	.012	.754	-.220
	H(1:2)							.202	-.312	.290	-.399
	H(1:3)							.724	-.283	.146	-.740
	H(1:4)							-.224	.302	.234	.779
	H(1:5)							.161	.117	.153	.007
	H(1:6)							-.879	-.990	.853	.634

Classification

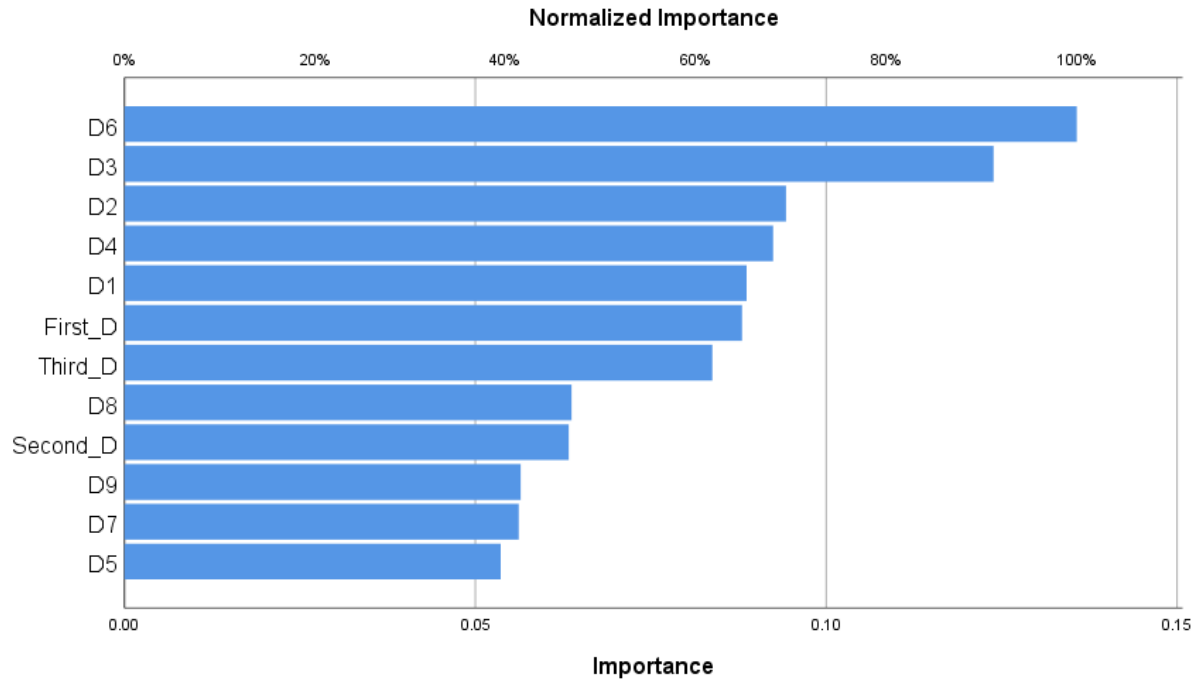
		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	1	0	100.0%
	best option	0	0	1	6	85.7%
	Overall Percent	10.0%	10.0%	20.0%	60.0%	90.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	1	0	100.0%
	best option	0	0	0	2	100.0%
	Overall Percent	0.0%	0.0%	33.3%	66.7%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance

First discourse in text	.088	64.8%
Second discourse in text	.063	46.6%
Third discourse in text	.084	61.7%
CONTACT RESTRICTION	.089	65.3%
SANITATION AND HYGIENE	.094	69.5%
ISOLATION OF INFECTED	.124	91.3%
TOTAL ISOLATION	.092	68.1%
HEALTH CARE	.054	39.5%
VIRUS DISSEMINATION	.136	100.0%
LIFESTYLE CHANGES	.056	41.4%
RIGHTS AND FREEDOMS INFRINGEMENT	.064	46.9%
BUREAUCRATIC RESPONSE	.056	41.6%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:13:49
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.47
	Elapsed Time	00:00:00.47

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

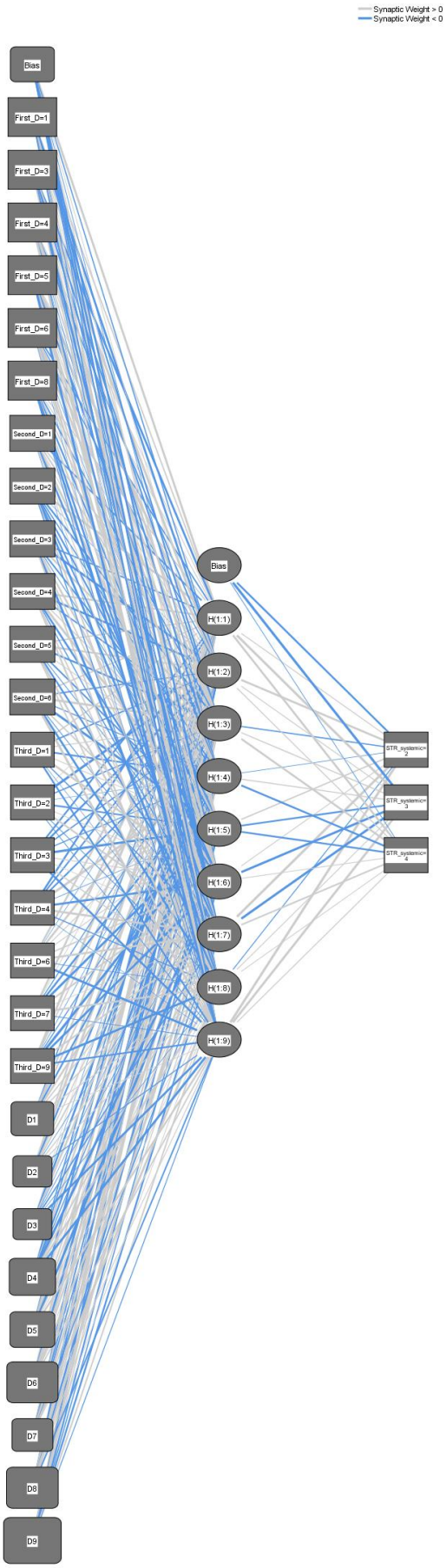
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

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]		9
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	Number of Units		3
	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	7.962
	Percent Incorrect Predictions	40.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.02
Testing	Cross Entropy Error	.971
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	.472	-.156	.037	-.045	.087	-.380	-.404	-.432	-.162			
	[First_D=1]	.194	-.432	-.267	.162	.015	.178	-.092	.281	-.231			
	[First_D=3]	-.414	.640	-.250	-.314	.064	.253	-.606	-.132	.176			
	[First_D=4]	.065	-.223	.464	.079	.230	-.038	-.003	-.328	.548			
	[First_D=5]	.074	.776	.544	-.307	.058	.581	.388	.045	-.651			
	[First_D=6]	-.206	-.138	.419	.338	-.012	.256	.529	.140	-.015			
	[First_D=8]	.121	.083	-.209	.178	-.274	.255	-.370	-.515	-.098			
	[Second_D=1]	-.254	.167	.236	.088	.462	-.385	.091	.057	-.015			
	[Second_D=2]	.478	-2.738E-5	-.324	-.158	-.271	-.252	-.474	.232	-.124			
	[Second_D=3]	-.212	-.487	.334	-.253	-.073	.330	.198	-.595	.245			
	[Second_D=4]	.384	-.432	-.212	.133	.606	-.382	-.139	.181	.308			
	[Second_D=5]	.187	.357	-.332	.050	-.246	-.072	-.326	.408	.213			
	[Second_D=6]	.186	-.195	.566	-.118	-.572	.221	-.058	-.444	.605			

	[Third_D=1]	.208	-.211	.097	-.287	.072	.468	-.148	-.007	-.303			
	[Third_D=2]	.010	-.655	-.172	-.004	-.257	.051	.325	-.070	-.059			
	[Third_D=3]	-.310	-.339	-.181	-.119	-.586	.077	.015	.152	-.430			
	[Third_D=4]	-.359	-.240	-.272	.707	-.024	-.439	.464	-.127	-.008			
	[Third_D=6]	.373	-.009	.423	.093	.088	.185	.390	-.025	-.523			
	[Third_D=7]	.399	.017	-.120	-.339	-.576	.299	.019	.330	-.052			
	[Third_D=9]	.586	.162	-.018	-.121	-.757	-.497	.306	-.521	-.277			
	D1	-.170	.330	.268	-.299	.400	.161	.158	.108	.043			
	D2	.290	.567	-.290	.127	.224	-.026	.135	.100	-.115			
	D3	.005	-.015	-.386	.401	-.038	-.052	-.187	-.038	-.449			
	D4	-.171	-.183	.327	-.317	-.115	-.726	.256	.462	-.527			
	D5	-.328	.222	.010	.227	.254	-.615	.091	.042	.335			
	D6	.474	.024	-.604	.477	.315	.041	.476	.043	.198			
	D7	-.143	.444	-.225	-.212	.457	.125	-.160	.510	.077			
	D8	-.162	-.414	.664	.167	-.334	.603	.110	.041	-.229			
	D9	.243	-.264	.666	.156	-.286	-.149	-.320	.223	-.093			
Hidden Layer	(Bias)										-.364	-.721	-.048
1	H(1:1)										.109	.610	.433
	H(1:2)										.435	.096	.120
	H(1:3)										-.165	.144	.416
	H(1:4)										-.036	.125	-.350
	H(1:5)										.206	-.297	-.307
	H(1:6)										.084	-.561	.065
	H(1:7)										.687	-.621	.268
	H(1:8)										-.100	.091	.072
	H(1:9)										.702	.599	.119

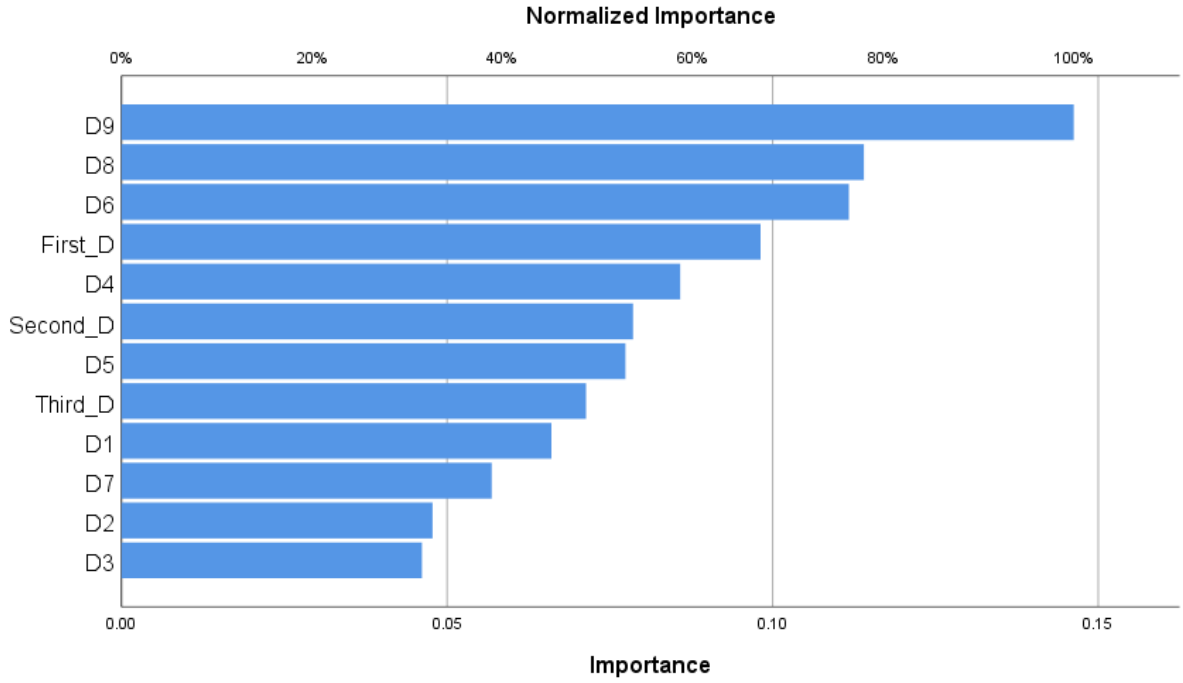
Classification

		Predicted			
Sample	Observed	mediocre option	good option	best option	Percent Correct
Training	mediocre option	1	0	1	50.0%
	good option	0	1	1	50.0%
	best option	1	1	4	66.7%
	Overall Percent	20.0%	20.0%	60.0%	60.0%
Testing	mediocre option	0	0	0	0.0%
	good option	0	1	0	100.0%
	best option	0	0	1	100.0%
	Overall Percent	0.0%	50.0%	50.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.098	67.1%
Second discourse in text	.079	53.7%
Third discourse in text	.071	48.8%
CONTACT RESTRICTION	.066	45.2%
SANITATION AND HYGIENE	.048	32.7%
ISOLATION OF INFECTED	.046	31.5%
TOTAL ISOLATION	.086	58.7%
HEALTH CARE	.077	52.9%
VIRUS DISSEMINATION	.112	76.4%
LIFESTYLE CHANGES	.057	38.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.114	78.0%
BUREAUCRATIC RESPONSE	.146	100.0%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:13:56
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.47
	Elapsed Time	00:00:00.47

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

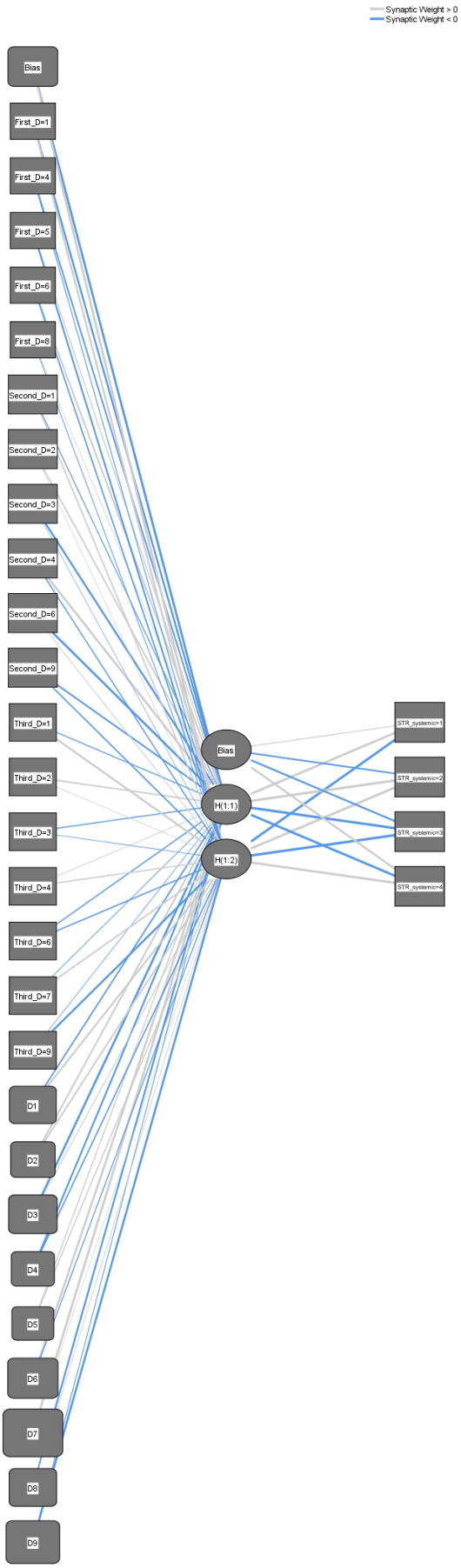
		N	Percent
Sample	Training	10	90.9%
	Testing	1	9.1%
Valid		11	100.0%
Excluded		93	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	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]		2
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	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	.004
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.04
Testing	Cross Entropy Error	.001
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

Parameter Estimates

		Predicted					
		Hidden Layer 1		Output Layer			
Predictor		H(1:1)	H(1:2)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	-1.547	1.628				
	[First_D=1]	-.970	1.005				
	[First_D=4]	-.714	-.232				
	[First_D=5]	.316	-.752				
	[First_D=6]	.813	-.479				
	[First_D=8]	.039	-.180				
	[Second_D=1]	-.269	.548				
	[Second_D=2]	.689	.009				
	[Second_D=3]	-1.014	-.004				
	[Second_D=4]	1.481	-.341				
	[Second_D=6]	-1.375	.184				
	[Second_D=9]	-.722	-.496				
	[Third_D=1]	-.284	1.063				
	[Third_D=2]	.698	.060				
	[Third_D=3]	-.338	-.074				

	[Third_D=4]	.166	.427				
	[Third_D=6]	-.398	-.452				
	[Third_D=7]	-.167	.716				
	[Third_D=9]	-.071	-1.099				
	D1	-.603	.967				
	D2	.794	.730				
	D3	-1.371	.267				
	D4	-.879	-.465				
	D5	.340	.395				
	D6	1.266	-.276				
	D7	1.617	.008				
	D8	-.929	.166				
	D9	-.227	-1.199				
Hidden Layer 1	(Bias)			.268	-.716	-.950	1.233
	H(1:1)			3.540	4.758	-4.506	-3.810
	H(1:2)			-3.972	4.037	-5.279	3.334

Classification

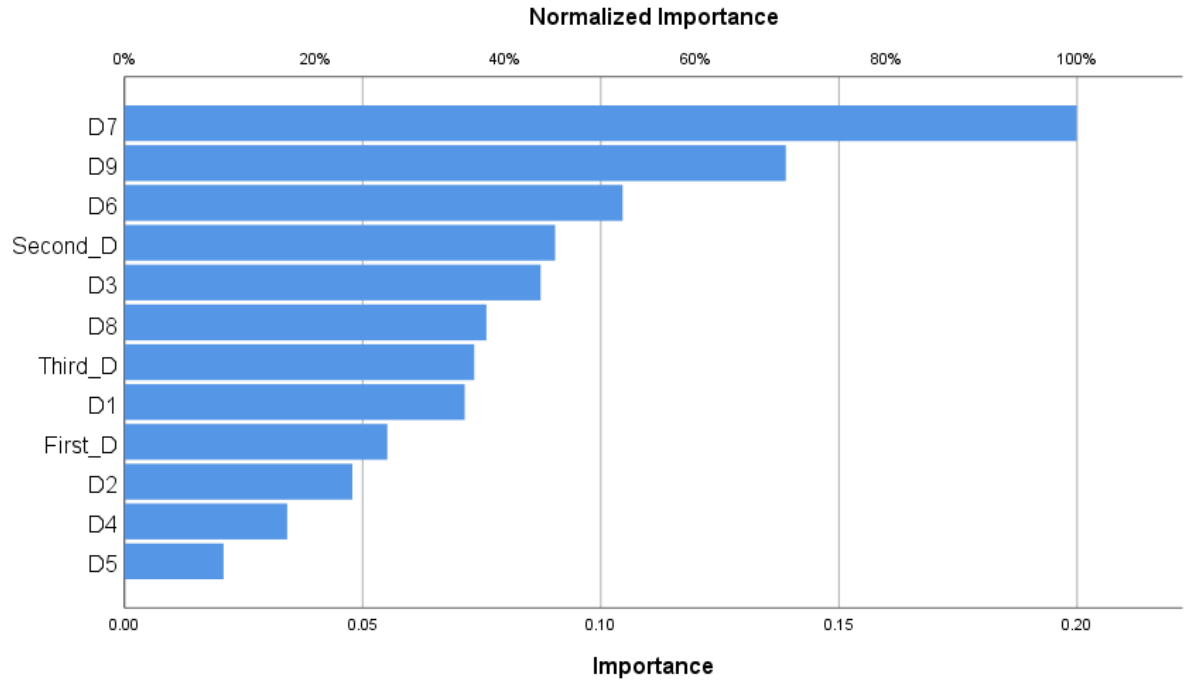
		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	1	0	100.0%
	best option	0	0	0	7	100.0%
	Overall Percent	10.0%	10.0%	10.0%	70.0%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.055	27.6%
Second discourse in text	.090	45.2%

Third discourse in text	.073	36.7%
CONTACT RESTRICTION	.071	35.7%
SANITATION AND HYGIENE	.048	23.9%
ISOLATION OF INFECTED	.087	43.7%
TOTAL ISOLATION	.034	17.1%
HEALTH CARE	.021	10.4%
VIRUS DISSEMINATION	.105	52.3%
LIFESTYLE CHANGES	.200	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.076	38.0%
BUREAUCRATIC RESPONSE	.139	69.4%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:14:01
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.45
	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

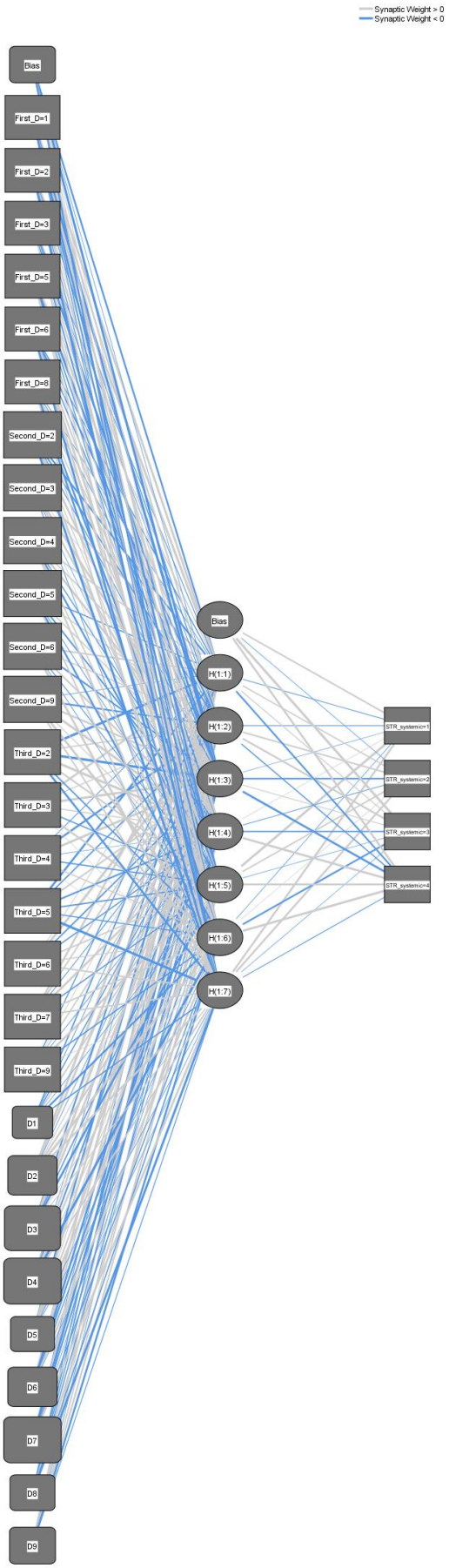
		N	Percent
Sample	Training	9	81.8%
	Testing	2	18.2%
Valid		11	100.0%
Excluded		93	
Total		104	

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	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]		7
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	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	8.638
	Percent Incorrect Predictions	44.4%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.04
Testing	Cross Entropy Error	1.155
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	-.382	-.044	-.712	.085	.121	.271	-.390				
	[First_D=1]	.639	.384	-1.024	.598	-.549	-.279	-.092				
	[First_D=2]	.725	-.152	.166	.546	-.125	.451	-1.118				
	[First_D=3]	-.108	-.072	-.545	.311	-.284	.119	.320				
	[First_D=5]	.187	.369	-.717	-.245	-.151	.386	.122				
	[First_D=6]	-.188	-.353	-.213	.335	.646	.645	-.589				
	[First_D=8]	-.073	-.115	.230	.231	-.419	-.447	.269				
	[Second_D=2]	-.387	-.279	-.140	.561	.158	.602	-.655				
	[Second_D=3]	.485	.023	.567	.432	-.036	.050	-.083				
	[Second_D=4]	.268	.264	.642	-.163	-.405	.276	.397				
	[Second_D=5]	-.212	.182	.223	-.306	-.081	-.421	.310				
	[Second_D=6]	.358	.215	-.325	.387	-.120	-.063	.617				
	[Second_D=9]	-.053	-.371	.421	.762	.140	.659	.322				

	[Third_D=2]	-1.052	.253	-1.071	.924	.378	-.272	-.511				
	[Third_D=3]	.545	.151	.705	.184	-.202	.467	.011				
	[Third_D=4]	-.107	-.454	.717	-.009	-.232	.220	.003				
	[Third_D=5]	-.527	-.258	.374	-.329	-.255	-.170	-1.011				
	[Third_D=6]	.094	.855	-.273	-.219	.280	.158	.321				
	[Third_D=7]	.527	.311	-.101	.631	-.221	.283	.289				
	[Third_D=9]	-.183	.081	.272	-.075	.608	-.231	.035				
	D1	-.259	-.078	-.200	.293	-.058	-.444	-.233				
	D2	.862	.642	-.059	.126	.425	.871	.486				
	D3	-.332	.841	.587	-.228	-.588	.107	.172				
	D4	-.070	.377	-.327	.394	.122	-1.121	.313				
	D5	-.435	.567	.120	.332	.705	-.070	-.056				
	D6	.542	.330	-.536	-.334	-.147	.446	-.034				
	D7	-.084	.665	-.756	-.290	-.036	-.192	.554				
	D8	-.176	-.257	-.178	-.207	.464	-.218	-.642				
	D9	.468	.136	-.057	.254	.383	-.474	-.120				
Hidden Layer	(Bias)								.327	-.054	.861	.507
1	H(1:1)								-.087	.242	.148	-.366
	H(1:2)								-.092	.314	.394	-.196
	H(1:3)								-.009	-.314	.115	-.521
	H(1:4)								.013	-.081	-.238	.599
	H(1:5)								.803	.287	-.032	.385
	H(1:6)								-.055	.010	-.372	.668
	H(1:7)								.471	.457	-.027	-.112

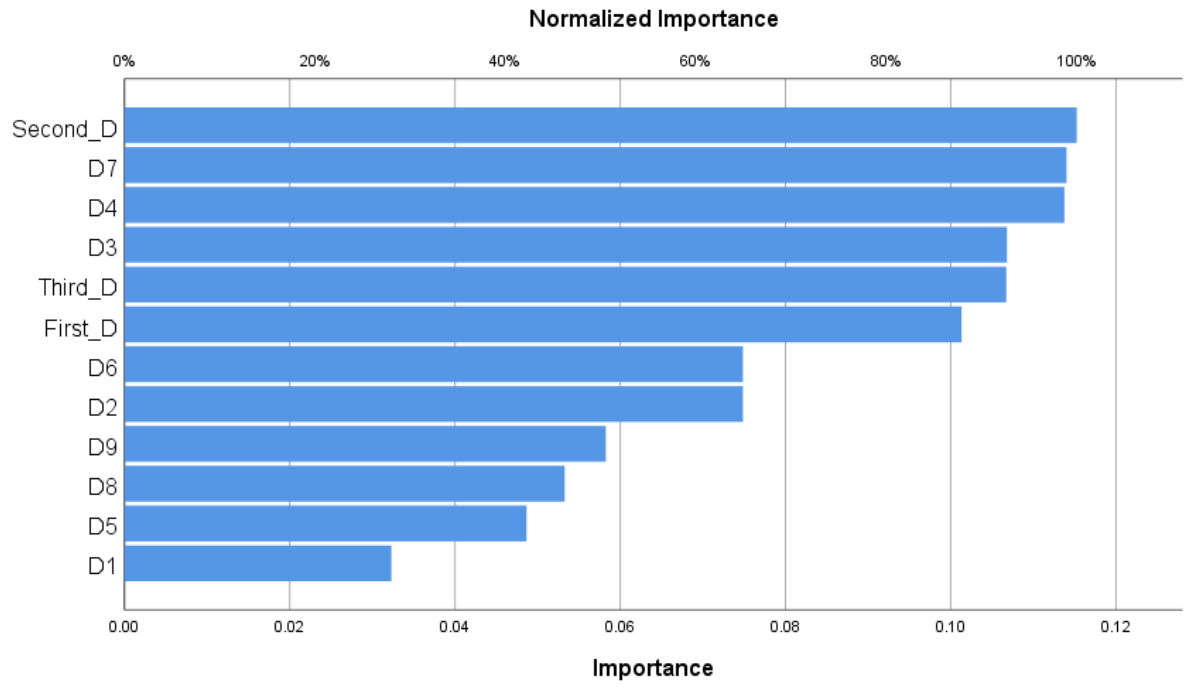
Classification

		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	0	0	0	1	0.0%
	mediocre option	0	0	0	1	0.0%
	good option	0	0	2	0	100.0%
	best option	0	0	2	3	60.0%
	Overall Percent	0.0%	0.0%	44.4%	55.6%	55.6%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	2	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.101	87.9%
Second discourse in text	.115	100.0%
Third discourse in text	.107	92.6%
CONTACT RESTRICTION	.032	28.0%
SANITATION AND HYGIENE	.075	64.9%
ISOLATION OF INFECTED	.107	92.7%
TOTAL ISOLATION	.114	98.7%
HEALTH CARE	.049	42.2%
VIRUS DISSEMINATION	.075	64.9%
LIFESTYLE CHANGES	.114	98.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.053	46.2%
BUREAUCRATIC RESPONSE	.058	50.5%



*Multilayer Perceptron Network.

```
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .


*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:15:57
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.39
	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

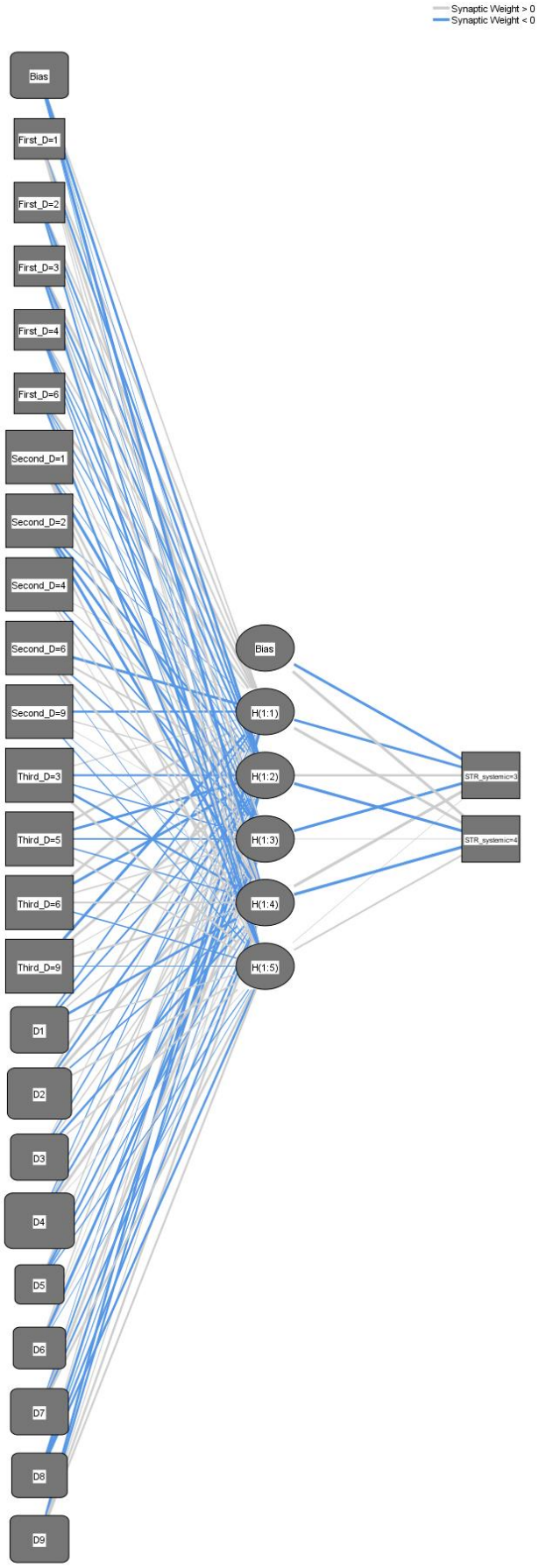
		N	Percent
Sample	Training	6	85.7%
	Testing	1	14.3%
Valid		7	100.0%
Excluded		97	
Total		104	

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]		23
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		5
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	Number of Units		2
	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	.011
	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	.204
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	.193	-.609	-.002	-1.017	-.036		
	[First_D=1]	.320	-.385	.525	.159	.092		
	[First_D=2]	.268	-.334	-.079	.135	-.301		
	[First_D=3]	.686	-.381	-.071	.366	-.507		
	[First_D=4]	.241	-.117	-.214	-.203	-.098		
	[First_D=6]	.592	-.146	-.086	.157	-.448		
	[Second_D=1]	.021	-.046	-.815	.514	.270		
	[Second_D=2]	-.042	-.381	-.627	-.808	.300		
	[Second_D=4]	.065	.109	-.248	.238	.035		
	[Second_D=6]	-.803	.327	-.229	.713	-.025		
	[Second_D=9]	-.449	.136	.012	-.001	-.138		
	[Third_D=3]	.117	-.346	-.182	-.473	.515		
	[Third_D=5]	.523	-.648	-.218	-.174	.259		
	[Third_D=6]	.809	-.718	.174	.299	-.184		

	[Third_D=9]	-.921	.697	.058	.341	-.039		
	D1	-.257	-.269	.189	-.567	.143		
	D2	.453	-.391	.857	-.234	.256		
	D3	.096	-.198	.166	-.438	.231		
	D4	-.114	.263	-.345	.798	.028		
	D5	.151	-.050	-.355	-.168	-.136		
	D6	.167	.028	-.730	.080	-.035		
	D7	-.026	-.245	.565	-.310	.385		
	D8	.138	-.484	-.110	-.358	-.439		
	D9	-.580	-.379	.109	.425	.340		
Hidden Layer 1	(Bias)						-.729	1.021
	H(1:1)						-.617	.883
	H(1:2)						.500	-1.255
	H(1:3)						-.883	.040
	H(1:4)						1.624	-1.764
	H(1:5)						.003	.285

Classification

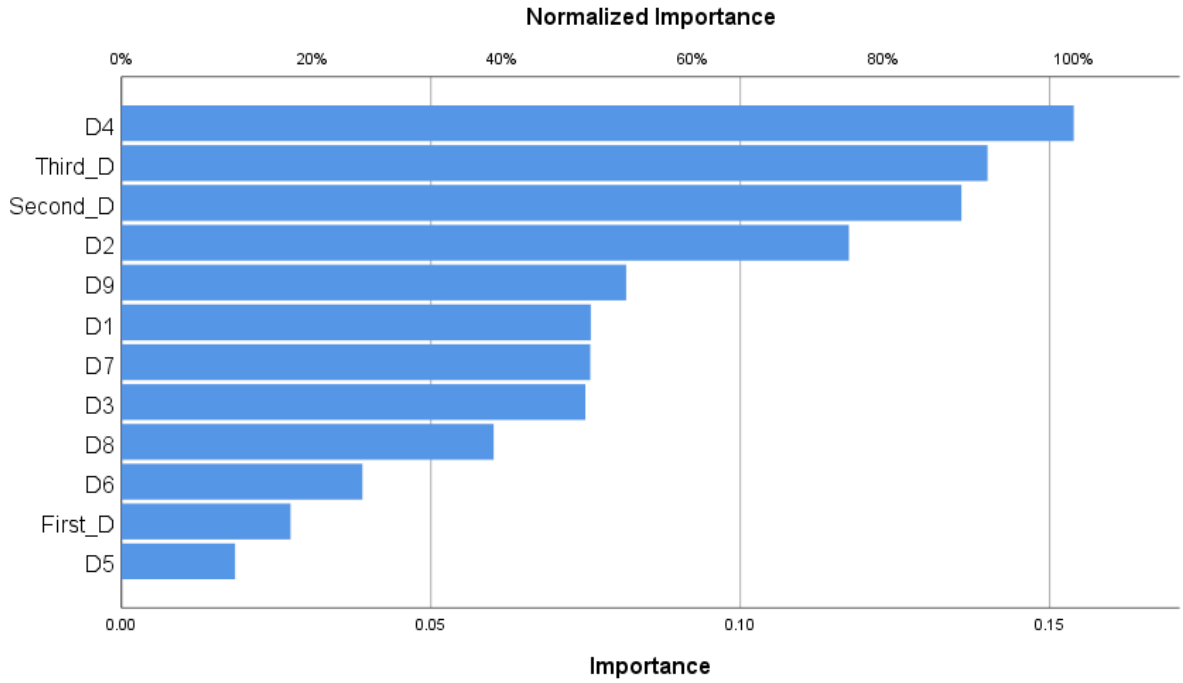
		Predicted		
Sample	Observed	good option	best option	Percent Correct
Training	good option	1	0	100.0%
	best option	0	5	100.0%
	Overall Percent	16.7%	83.3%	100.0%
Testing	good option	1	0	100.0%
	best option	0	0	0.0%
	Overall Percent	100.0%	0.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.027	17.8%
Second discourse in text	.136	88.2%
Third discourse in text	.140	90.9%
CONTACT RESTRICTION	.076	49.3%
SANITATION AND HYGIENE	.118	76.4%
ISOLATION OF INFECTED	.075	48.7%

TOTAL ISOLATION	.154	100.0%
HEALTH CARE	.018	11.9%
VIRUS DISSEMINATION	.039	25.3%
LIFESTYLE CHANGES	.076	49.2%
RIGHTS AND FREEDOMS INFRINGEMENT	.060	39.1%
BUREAUCRATIC RESPONSE	.082	53.0%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:16:17
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.39
	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.

The following independent variables are constant in the training sample and are excluded from the analysis: D7.

Case Processing Summary

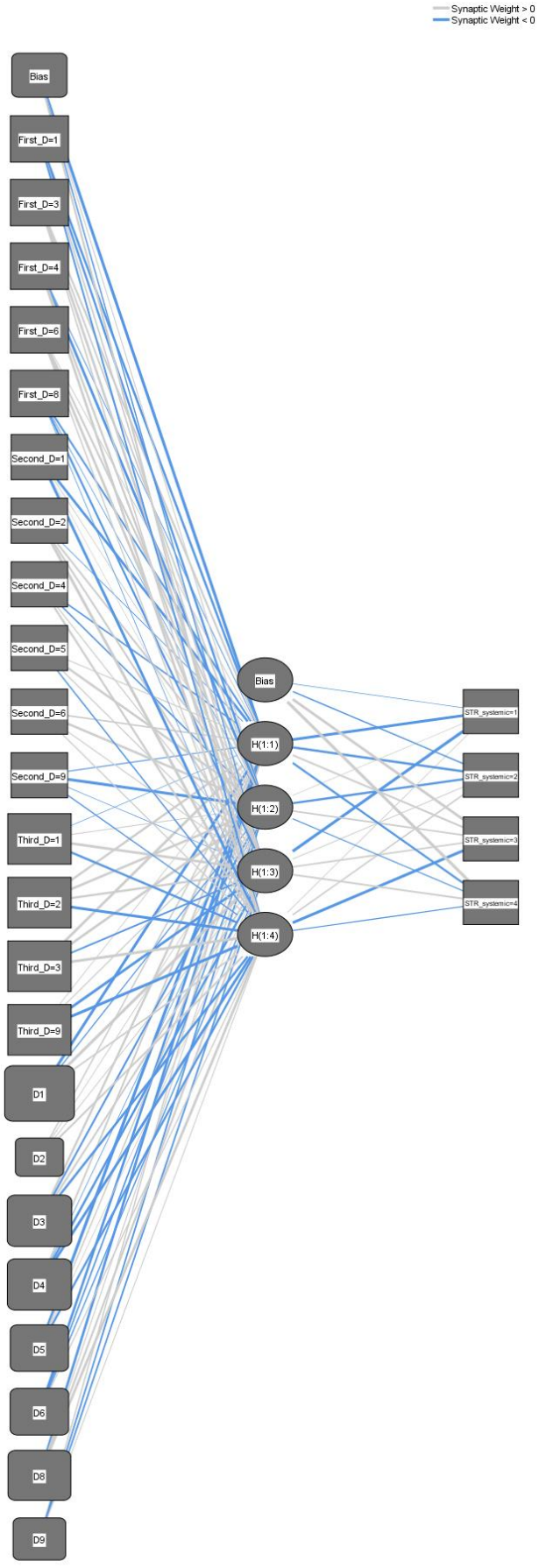
		N	Percent
Sample	Training	9	81.8%
	Testing	2	18.2%
Valid		11	100.0%
Excluded		93	
Total		104	

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	HEALTH CARE
		6	VIRUS DISSEMINATION
		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]		4
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	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	7.623
	Percent Incorrect Predictions	33.3%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.02
Testing	Cross Entropy Error	1.246
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	-1.104	.116	-.213	.405				
	[First_D=1]	-.496	-.476	.260	-.346				
	[First_D=3]	.398	.312	.562	.244				
	[First_D=4]	-.084	-.621	.458	.562				
	[First_D=6]	.098	.408	.591	.214				
	[First_D=8]	-.348	-.056	-.420	-.046				
	[Second_D=1]	-.598	.065	.006	-.741				
	[Second_D=2]	-.079	.348	.374	.937				
	[Second_D=4]	-.268	-.245	.153	.420				
	[Second_D=5]	.118	.526	.186	-.227				
	[Second_D=6]	.269	.534	.123	.191				
	[Second_D=9]	-.124	-.946	-.038	-.194				
	[Third_D=1]	-.026	.102	.606	-.482				
	[Third_D=2]	.491	.537	.469	-.817				
	[Third_D=3]	.629	.618	-.327	.753				
	[Third_D=9]	.080	.176	-.663	-1.022				
	D1	-.893	-.178	1.108	.325				
	D2	.232	.088	.107	.405				
	D3	.478	-.369	.357	-.522				

	D4	.342	-.048	-.502	-.662				
	D5	-1.392	.216	.059	-.439				
	D6	-.543	-.249	-.201	.189				
	D8	-.578	.118	.413	.604				
	D9	.226	-.301	-.305	.108				
Hidden Layer 1	(Bias)					-.027	-.226	.668	1.405
	H(1:1)					-.771	-.507	.364	-.427
	H(1:2)					.046	-.491	.298	-.144
	H(1:3)					-1.109	.099	.292	.328
	H(1:4)					.076	.247	-1.014	-.174

Classification

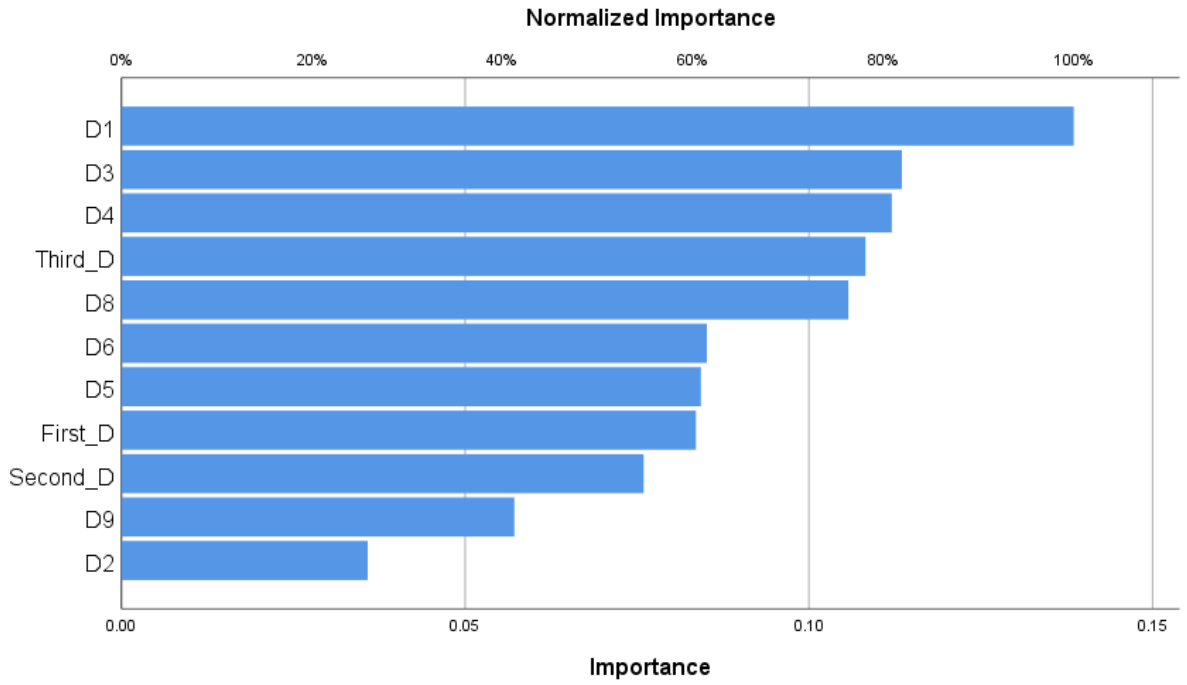
		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	0	0	1	0.0%
	good option	0	0	1	1	50.0%
	best option	0	0	1	4	80.0%
	Overall Percent	11.1%	0.0%	22.2%	66.7%	66.7%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	1	0	100.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	50.0%	50.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.084	60.3%
Second discourse in text	.076	54.8%
Third discourse in text	.108	78.1%
CONTACT RESTRICTION	.139	100.0%
SANITATION AND HYGIENE	.036	25.9%
ISOLATION OF INFECTED	.114	81.9%
TOTAL ISOLATION	.112	80.9%

HEALTH CARE	.084	60.8%
VIRUS DISSEMINATION	.085	61.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.106	76.3%
BUREAUCRATIC RESPONSE	.057	41.2%




```
*Multilayer Perceptron Network.
MLP STR_systemic (MLEVEL=O) 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=EXCLUDE .
```

Multilayer Perceptron

Notes

Output Created		13-DEC-2020 16:16:25
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_ordinal_9D.sav
	Active Dataset	DataSet2
	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 STR_systemic (MLEVEL=O) 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=EXCLUDE .
Resources	Processor Time	00:00:00.37
	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

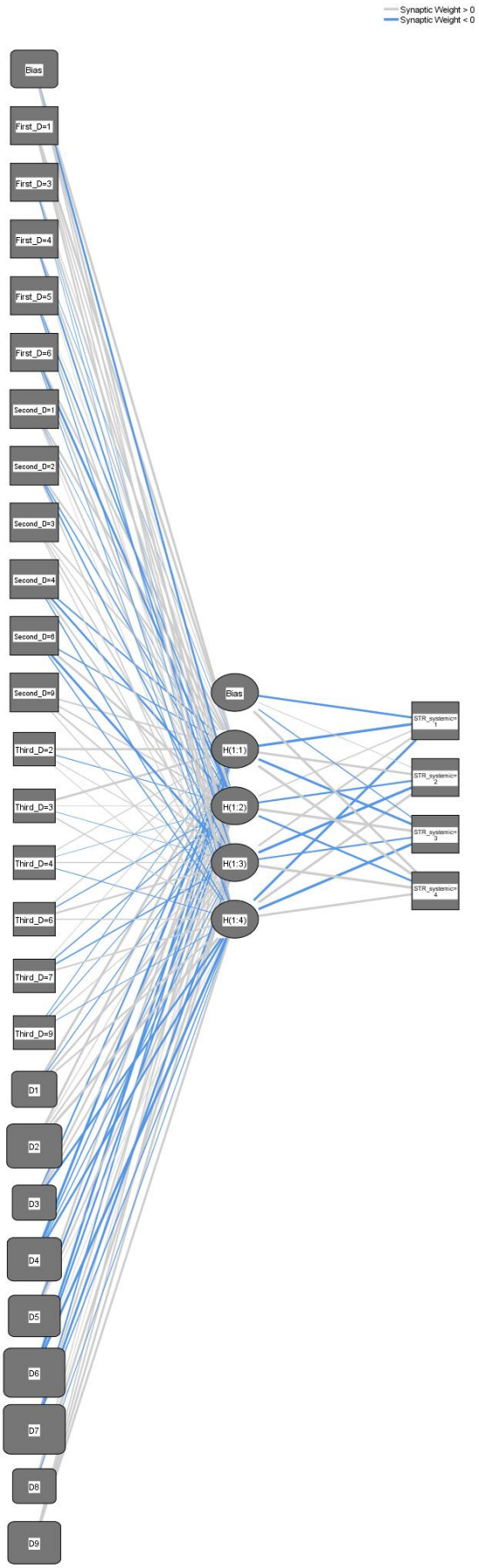
		N	Percent
Sample	Training	9	90.0%
	Testing	1	10.0%
Valid		10	100.0%
Excluded		94	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	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]		26
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		4
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Systemic strategy
	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	.482
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.02
Testing	Cross Entropy Error	4.095E-6
	Percent Incorrect Predictions	0.0%

Dependent Variable: Systemic strategy

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)	[STR_systemic=1]	[STR_systemic=2]	[STR_systemic=3]	[STR_systemic=4]
Input Layer	(Bias)	2.073	-1.211	1.473	.600				
	[First_D=1]	2.309	.518	.683	1.039				
	[First_D=3]	.141	1.134	-.073	-.065				
	[First_D=4]	-.043	.817	-.775	.007				
	[First_D=5]	.000	-.661	.621	-.311				
	[First_D=6]	1.049	-1.426	.917	-.140				
	[Second_D=1]	1.226	-.054	.875	.036				
	[Second_D=2]	.909	-.495	-.639	.513				
	[Second_D=3]	.737	.275	.679	.269				
	[Second_D=4]	-.738	-1.173	.817	-.458				
	[Second_D=6]	-.423	1.530	-1.610	-.402				
	[Second_D=9]	.762	.732	.901	.409				
	[Third_D=2]	1.277	-.225	.235	.091				
	[Third_D=3]	1.592	.082	-.035	.487				
	[Third_D=4]	.288	-.014	.352	-.145				
	[Third_D=6]	.421	-.393	1.031	.475				
	[Third_D=7]	.088	-.425	-.547	.761				
	[Third_D=9]	-.174	-.149	.296	-.125				
	D1	2.380	-.317	1.184	.945				

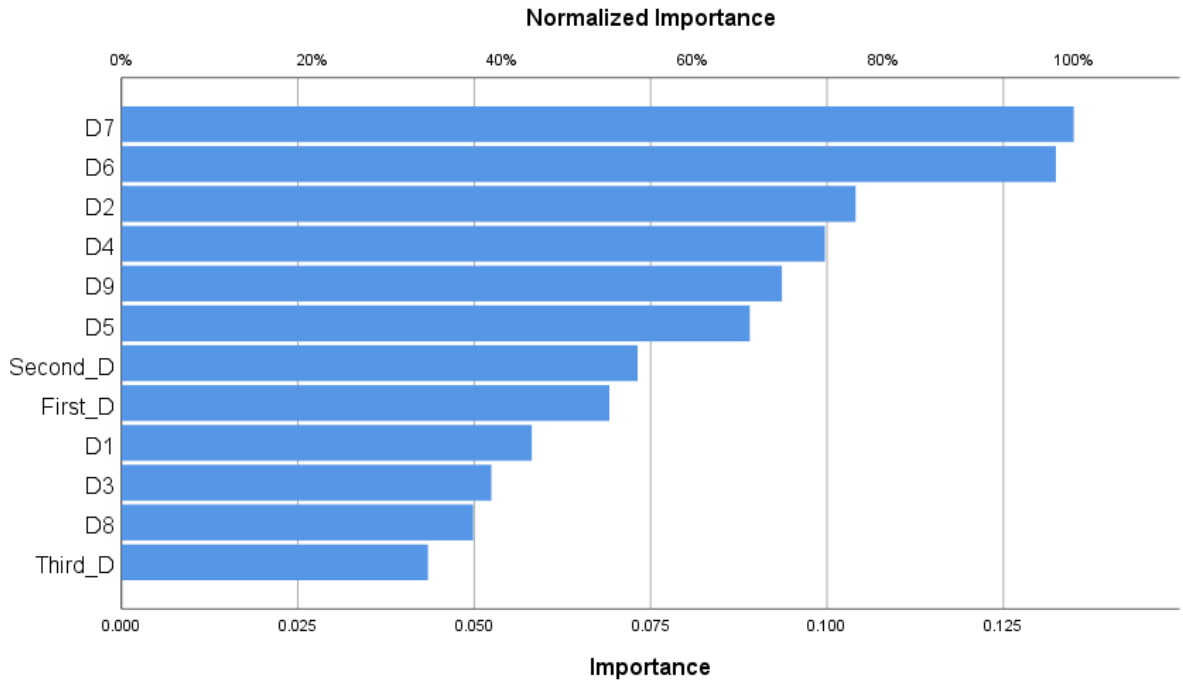
	D2	1.874	.216	.917	2.784				
	D3	-.763	1.156	.819	-1.394				
	D4	-2.553	-.575	-.376	-1.296				
	D5	1.214	-1.002	1.028	.080				
	D6	-2.277	-.987	.029	-2.316				
	D7	-.758	.936	-1.474	-.463				
	D8	.283	.080	1.865	-.189				
	D9	.619	.868	1.417	1.397				
Hidden Layer 1	(Bias)					-1.340	.114	-.398	2.413
	H(1:1)					-2.844	1.657	-1.901	5.011
	H(1:2)					.500	-.959	2.830	-1.091
	H(1:3)					1.062	-3.564	-.803	3.841
	H(1:4)					-2.002	2.106	-3.009	1.829

Classification

		Predicted				
Sample	Observed	worst option	mediocre option	good option	best option	Percent Correct
Training	worst option	1	0	0	0	100.0%
	mediocre option	0	1	0	0	100.0%
	good option	0	0	2	0	100.0%
	best option	0	0	0	5	100.0%
	Overall Percent	11.1%	11.1%	22.2%	55.6%	100.0%
Testing	worst option	0	0	0	0	0.0%
	mediocre option	0	0	0	0	0.0%
	good option	0	0	0	0	0.0%
	best option	0	0	0	1	100.0%
	Overall Percent	0.0%	0.0%	0.0%	100.0%	100.0%

Dependent Variable: Systemic strategy

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.069	51.2%
Second discourse in text	.073	54.2%
Third discourse in text	.043	32.2%
CONTACT RESTRICTION	.058	43.1%

SANITATION AND HYGIENE	.104	77.1%
ISOLATION OF INFECTED	.052	38.8%
TOTAL ISOLATION	.100	73.9%
HEALTH CARE	.089	66.0%
VIRUS DISSEMINATION	.132	98.1%
LIFESTYLE CHANGES	.135	100.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.050	36.9%
BUREAUCRATIC RESPONSE	.094	69.4%