```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:56:48
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.51

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

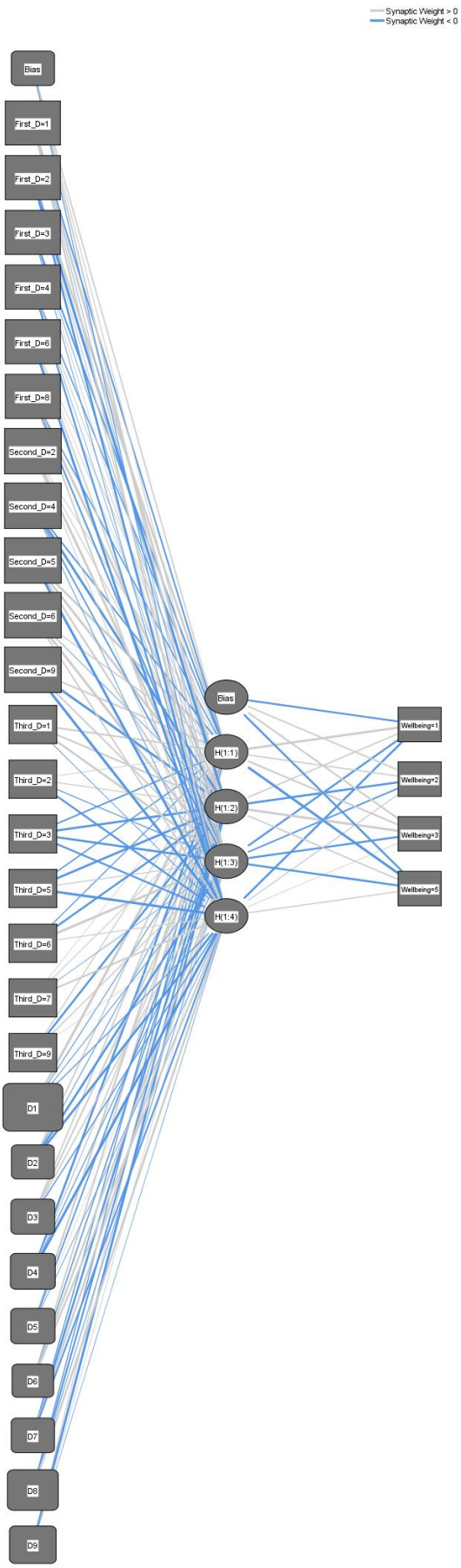
		N	Percent
Sample	Training	10	76.9%
	Testing	3	23.1%
Valid		13	100.0%
Excluded		91	
Total		104	

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]		27
	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	Dynamics of well-being
	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	8.177
	Percent Incorrect Predictions	30.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	2.473
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]	[Wellbeing=5]
Input Layer	(Bias)	.276	.134	.457	-.158				
	[First_D=1]	-.378	.881	-.004	.499				
	[First_D=2]	.680	-1.271	.175	-.648				
	[First_D=3]	-.408	-.045	.080	-.101				
	[First_D=4]	-.247	.124	-.024	-.465				
	[First_D=6]	.130	.028	.289	-.851				
	[First_D=8]	-.267	.814	-.413	.406				
	[Second_D=2]	.118	.156	.860	.113				
	[Second_D=4]	-.404	-.896	-.322	-.113				
	[Second_D=5]	.761	.816	.485	-.995				
	[Second_D=6]	.268	-.096	.958	.372				
	[Second_D=9]	.433	-.854	.425	-1.069				
	[Third_D=1]	.429	.485	.719	-.105				
	[Third_D=2]	.096	.214	-.164	-.511				
	[Third_D=3]	-.365	-.731	-.729	-.497				
	[Third_D=5]	-.269	-.743	.179	-.969				
	[Third_D=6]	-.182	-.531	.930	.172				
	[Third_D=7]	.038	.142	-.041	.488				
	[Third_D=9]	.216	-.592	.264	.025				
	D1	1.149	-.132	-.127	-.206				

	D2	.344	-.117	-.736	-.806				
	D3	.297	.429	.270	-.235				
	D4	-.666	.267	-.145	-1.061				
	D5	.505	-.304	.011	-.086				
	D6	.379	-.254	.511	.510				
	D7	-.231	-.630	.545	-.441				
	D8	-.233	-.463	-.110	.614				
	D9	.175	-.830	.051	-.032				
Hidden Layer 1	(Bias)					-.492	.345	.476	-.544
	H(1:1)					.805	.275	.459	-1.036
	H(1:2)					.282	-.683	.811	.343
	H(1:3)					-.517	-.401	-.515	-.613
	H(1:4)					-.634	.229	.056	.235

Classification

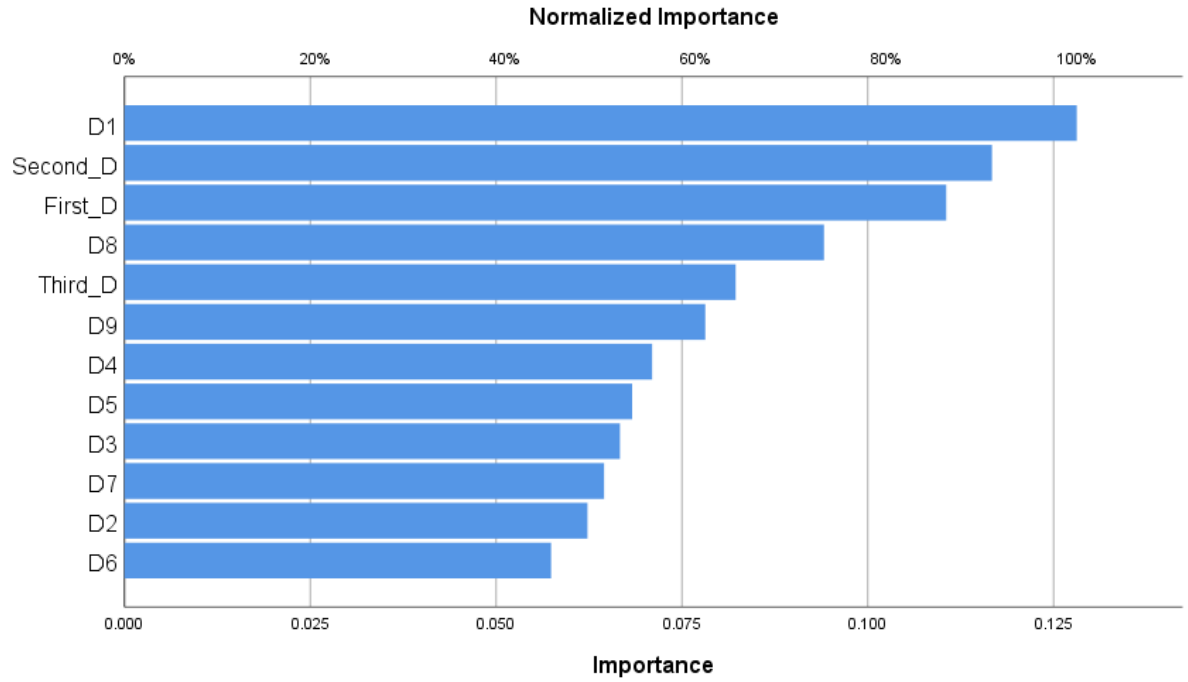
Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	0	0	1	0	0.0%
	slightly worse	0	3	1	0	75.0%
	hasn't changed	0	0	4	0	100.0%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	0.0%	40.0%	60.0%	0.0%	70.0%
Testing	worsened significantly	1	0	0	0	100.0%
	slightly worse	0	1	0	0	100.0%
	hasn't changed	0	0	1	0	100.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	33.3%	33.3%	33.3%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.111	86.3%
Second discourse in text	.117	91.1%
Third discourse in text	.082	64.2%

CONTACT RESTRICTION	.128	100.0%
SANITATION AND HYGIENE	.062	48.6%
ISOLATION OF INFECTED	.067	52.0%
TOTAL ISOLATION	.071	55.4%
HEALTH CARE	.068	53.3%
VIRUS DISSEMINATION	.057	44.8%
LIFESTYLE CHANGES	.065	50.4%
RIGHTS AND FREEDOMS INFRINGEMENT	.094	73.5%
BUREAUCRATIC RESPONSE	.078	61.0%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:56:57
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.53

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

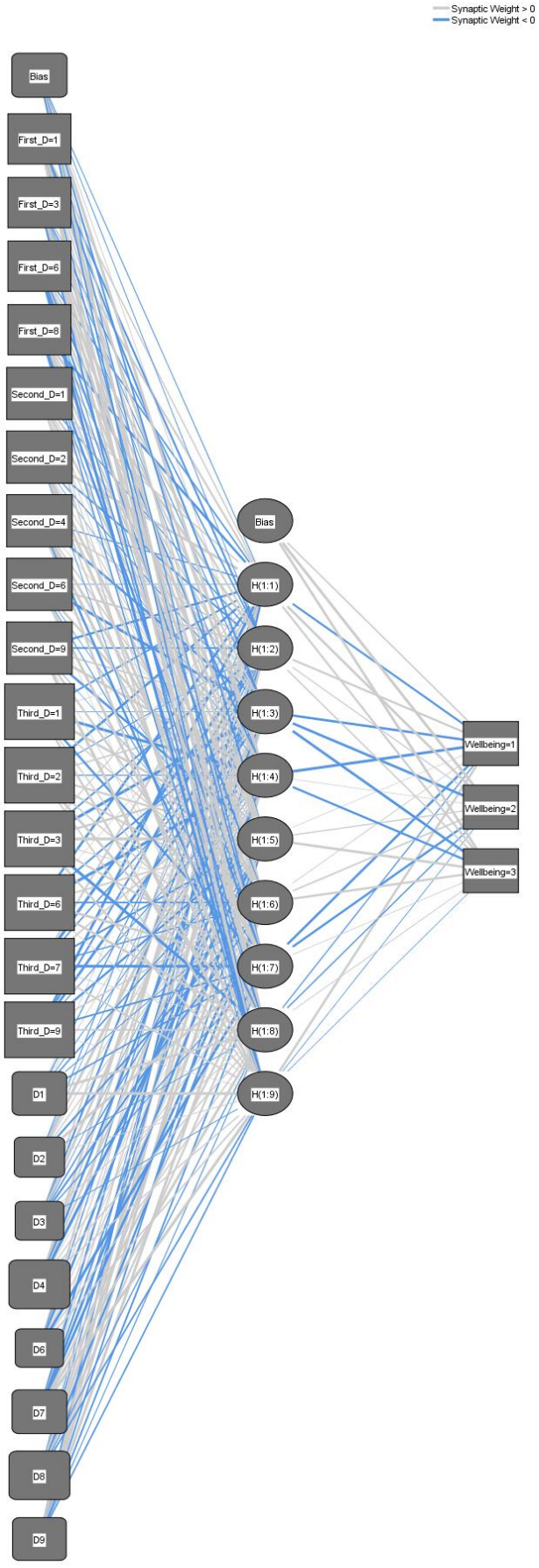
		N	Percent
Sample	Training	7	70.0%
	Testing	3	30.0%
Valid		10	100.0%
Excluded		94	
Total		104	

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	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]		9
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Dynamics of well-being
	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	6.348
	Percent Incorrect Predictions	28.6%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.02
Testing	Cross Entropy Error	2.391
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing= 1]	[Wellbeing= 2]	[Wellbeing= 3]
Input Layer	(Bias)	-.077	-.048	.038	.589	-.250	.150	-.156	.785	-.196			
	[First_D=1]	.160	-.277	-.288	.424	.239	.154	-.173	.338	.652			
	[First_D=3]	.291	-.167	-.084	-.064	.512	.585	.505	.310	-.291			
	[First_D=6]	-.185	.277	.260	-.268	.296	-.266	-.078	-.163	-.601			
	[First_D=8]	-.439	.521	.190	.474	.312	.390	-.411	-.087	-.151			
	[Second_D=1]	.141	-.121	.335	.099	.372	.105	.043	.079	.244			
	[Second_D=2]	.533	-.267	-.121	-.019	.072	.569	.622	.207	-.055			
	[Second_D=4]	-.125	.171	-.442	.033	.189	.534	.634	-.383	.420			
	[Second_D=6]	-.039	.338	-.595	.015	.389	-.035	-.082	.559	.004			
	[Second_D=9]	-.397	-.264	.250	.545	-.421	-.008	.322	.016	.721			
	[Third_D=1]	-.269	.024	-.028	-.660	.469	.159	-.357	.122	.381			
	[Third_D=2]	-.449	-.087	.190	-.102	.298	.292	.171	.446	.189			
	[Third_D=3]	.110	-.257	-.811	.383	.799	.063	.342	-.723	.301			
	[Third_D=6]	-.448	.006	-.252	-.682	.238	-.224	.489	.448	.033			

	[Third_D=7]	.285	-.643	-.164	.213	-.263	-.133	-.744	.037	.251			
	[Third_D=9]	-.549	-.267	-.500	-.102	-.381	.205	-.242	.220	.011			
	D1	.015	-.118	.038	-.073	-.175	-.077	-.191	.511	.566			
	D2	-.086	-.016	.751	.080	.103	-.282	.543	-.040	.047			
	D3	.201	-.296	.520	-.032	-.157	-.285	-.119	.081	-.048			
	D4	.539	.280	-.406	.342	-.649	.011	.109	.164	.128			
	D6	.318	-.133	.102	-.397	.068	.088	-.567	.141	.190			
	D7	.069	-.344	.112	-.229	-.486	-.482	.369	.521	.673			
	D8	.002	-.078	-.170	.460	.575	-.377	.284	-.110	-.196			
	D9	-.311	.441	.309	.527	-.217	.565	-.228	-.082	-.173			
Hidden Layer	(Bias)										.188	.588	.497
1	H(1:1)										-.317	.458	.303
	H(1:2)										.319	.117	.171
	H(1:3)										-.428	-.493	-.503
	H(1:4)										-.571	.014	-.362
	H(1:5)										.009	.120	.469
	H(1:6)										.056	.199	.345
	H(1:7)										-.439	-.388	.030
	H(1:8)										-.116	-.144	.061
	H(1:9)										.426	-.036	-.015

Classification

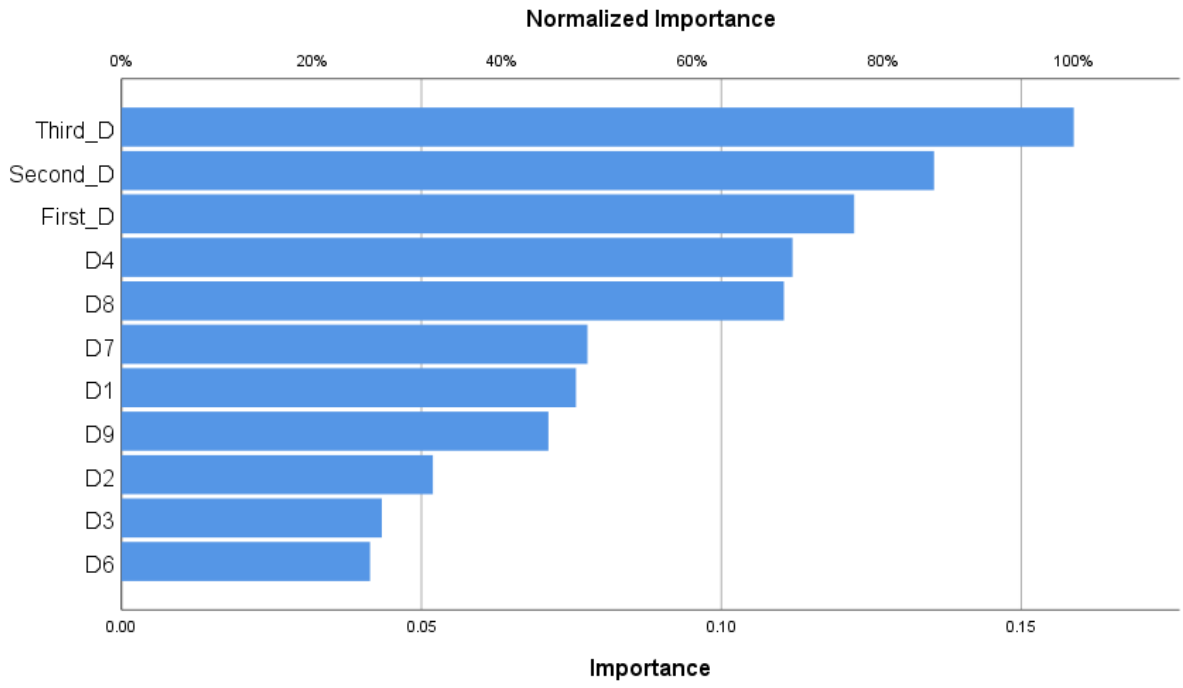
		Predicted			
Sample	Observed	worsened significantly	slightly worse	hasn't changed	Percent Correct
Training	worsened significantly	1	0	0	100.0%
	slightly worse	0	1	0	100.0%
	hasn't changed	0	2	3	60.0%
	Overall Percent	14.3%	42.9%	42.9%	71.4%
Testing	worsened significantly	0	0	0	0.0%
	slightly worse	0	3	0	100.0%
	hasn't changed	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance

First discourse in text	.122	76.9%
Second discourse in text	.135	85.3%
Third discourse in text	.159	100.0%
CONTACT RESTRICTION	.076	47.7%
SANITATION AND HYGIENE	.052	32.7%
ISOLATION OF INFECTED	.043	27.3%
TOTAL ISOLATION	.112	70.5%
VIRUS DISSEMINATION	.041	26.1%
LIFESTYLE CHANGES	.078	48.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.110	69.6%
BUREAUCRATIC RESPONSE	.071	44.8%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:57:07
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.42
	Elapsed Time	00:00:00.45

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

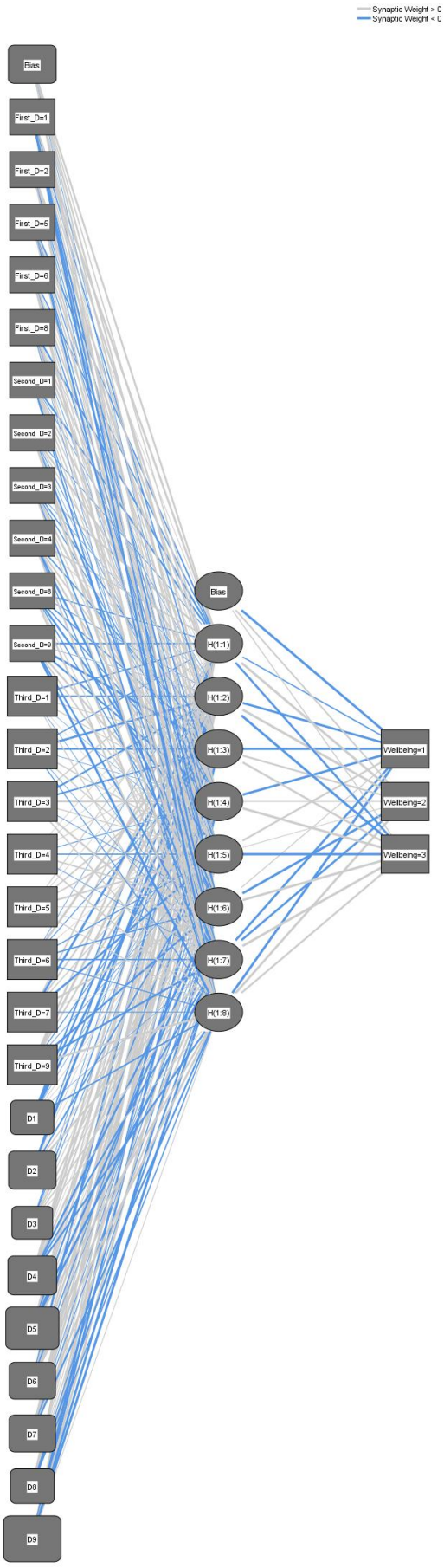
		N	Percent
Sample	Training	9	90.0%
	Testing	1	10.0%
Valid		10	100.0%
Excluded		94	
Total		104	

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]		28
	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	Dynamics of well-being
	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	.003
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	Training error ratio criterion (.001) achieved
	Training Time	0:00:00.00
Testing	Cross Entropy Error	5.553E-6
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]
Input Layer	(Bias)	.516	.288	.491	.407	-.053	.132	.409	.384			
	[First_D=1]	.763	.586	-.281	.233	.281	-.406	-.460	-.623			
	[First_D=2]	.082	.474	.717	.371	-.138	-.107	.351	.182			
	[First_D=5]	-.342	.111	.393	-.181	.337	-.190	-.509	.258			
	[First_D=6]	-.286	.016	.064	.367	-.240	.267	.180	.808			
	[First_D=8]	-.466	.130	.377	.497	-.066	.142	.434	-.056			
	[Second_D=1]	-.469	-.061	.410	.318	.349	.202	-.206	-.355			
	[Second_D=2]	-.137	.589	.288	-.102	-.017	-.439	.622	.854			
	[Second_D=3]	.553	-.058	-.308	-.220	.541	.197	-.372	.365			
	[Second_D=4]	.389	.154	-.338	.419	.499	-.641	-.230	.465			
	[Second_D=6]	-.285	-.097	-.361	-.295	-.571	-.253	.180	.447			
	[Second_D=9]	-.417	-.015	-1.038	-.492	.571	.371	-.453	-.853			
	[Third_D=1]	-.399	-.364	.168	.226	-.005	.002	-.046	.230			
	[Third_D=2]	-.296	-.714	-.587	-.037	.332	.301	-.054	-.183			
	[Third_D=3]	.288	-.445	-.417	.475	.238	-.123	.561	.350			

	[Third_D=4]	.062	.096	.134	-.149	-.318	.395	-.090	.408			
	[Third_D=5]	.200	.077	.409	.389	.535	.119	.032	.211			
	[Third_D=6]	-.059	1.149	-.170	.054	-.254	-.326	-.319	-.204			
	[Third_D=7]	.375	-.813	.420	.256	-.647	.509	.046	-.149			
	[Third_D=9]	.571	1.251	.434	-.169	-.079	-.586	-.601	.898			
	D1	-.393	-.513	-.785	-.022	.095	.039	-.016	-.387			
	D2	-.261	-1.247	.091	.021	-.401	.246	.663	.036			
	D3	-.087	-.272	-.127	.146	.427	.228	.345	.152			
	D4	.757	.925	.443	.045	.621	-.632	-.430	-.516			
	D5	.342	1.079	.417	-.426	.149	-.609	-.951	.536			
	D6	-.677	.032	.439	.581	-.280	-.058	.802	.657			
	D7	.807	.829	.472	.766	-.132	-.168	.468	-.465			
	D8	.443	.425	.161	.131	.272	-.216	-.466	-.281			
	D9	.345	1.190	-.975	-.816	.808	-.930	-1.120	.139			
Hidden Layer	(Bias)									-1.631	.413	.238
1	H(1:1)									-.307	1.447	-.751
	H(1:2)									-.928	2.383	-1.761
	H(1:3)									-.966	.488	.631
	H(1:4)									-1.090	.213	1.290
	H(1:5)									.519	.138	-1.161
	H(1:6)									.218	-1.439	1.413
	H(1:7)									-.891	-.787	1.972
	H(1:8)									-1.896	.987	.552

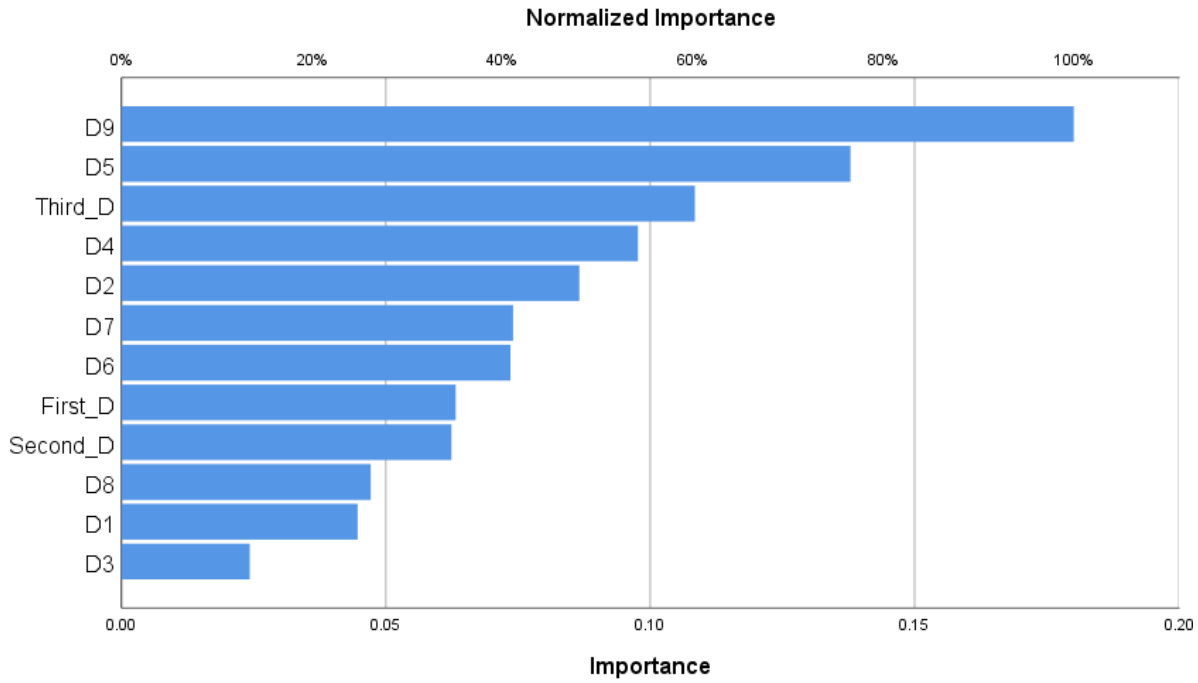
Classification

		Predicted			
Sample	Observed	worsened significantly	slightly worse	hasn't changed	Percent Correct
Training	worsened significantly	1	0	0	100.0%
	slightly worse	0	4	0	100.0%
	hasn't changed	0	0	4	100.0%
	Overall Percent	11.1%	44.4%	44.4%	100.0%
Testing	worsened significantly	0	0	0	0.0%
	slightly worse	0	1	0	100.0%
	hasn't changed	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.063	35.1%
Second discourse in text	.062	34.6%
Third discourse in text	.108	60.2%
CONTACT RESTRICTION	.045	24.8%
SANITATION AND HYGIENE	.087	48.1%
ISOLATION OF INFECTED	.024	13.5%
TOTAL ISOLATION	.098	54.2%
HEALTH CARE	.138	76.5%
VIRUS DISSEMINATION	.074	40.9%
LIFESTYLE CHANGES	.074	41.1%
RIGHTS AND FREEDOMS INFRINGEMENT	.047	26.2%
BUREAUCRATIC RESPONSE	.180	100.0%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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)
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```
  /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 16:57:21
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

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

Warnings

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

Case Processing Summary

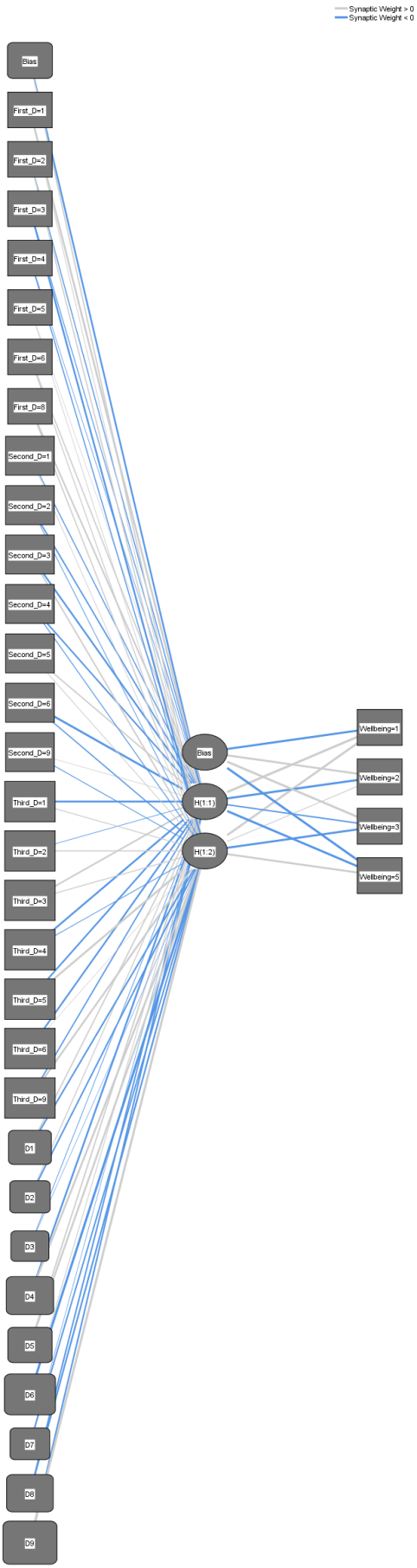
		N	Percent
Sample	Training	10	71.4%
	Testing	4	28.6%
Valid		14	100.0%
Excluded		90	
Total		104	

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]		2
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Dynamics of well-being
	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	7.418
	Percent Incorrect Predictions	30.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	2.152
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

a. Error computations are based on the testing sample.

Parameter Estimates

				Predicted			
		Hidden Layer 1		Output Layer			
Predictor		H(1:1)	H(1:2)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]	[Wellbeing=5]
Input Layer	(Bias)	-.637	.335				
	[First_D=1]	.698	.100				
	[First_D=2]	-.240	.267				
	[First_D=3]	-.190	-.644				
	[First_D=4]	-.056	-.247				
	[First_D=5]	.033	.056				
	[First_D=6]	.289	.228				
	[First_D=8]	.520	.265				
	[Second_D=1]	-.235	.057				
	[Second_D=2]	-.382	-.141				
	[Second_D=3]	-.614	.399				
	[Second_D=4]	-.469	-.181				
	[Second_D=5]	.356	.156				

	[Second_D=6]	-.954	-.274				
	[Second_D=9]	.040	-.176				
	[Third_D=1]	-.675	.193				
	[Third_D=2]	-.085	.263				
	[Third_D=3]	.571	.233				
	[Third_D=4]	-.674	-.164				
	[Third_D=5]	-.588	.889				
	[Third_D=6]	-.608	.019				
	[Third_D=9]	-.339	.649				
	D1	.316	-.487				
	D2	.201	-.447				
	D3	-.141	-.013				
	D4	-.646	.680				
	D5	.358	.660				
	D6	.172	-1.491				
	D7	-.033	-.411				
	D8	-.421	-.561				
	D9	-.471	1.435				
Hidden Layer 1	(Bias)			-.961	.888	1.095	-1.441
	H(1:1)			1.880	-1.022	-.379	-1.299
	H(1:2)			.967	.180	-.957	.876

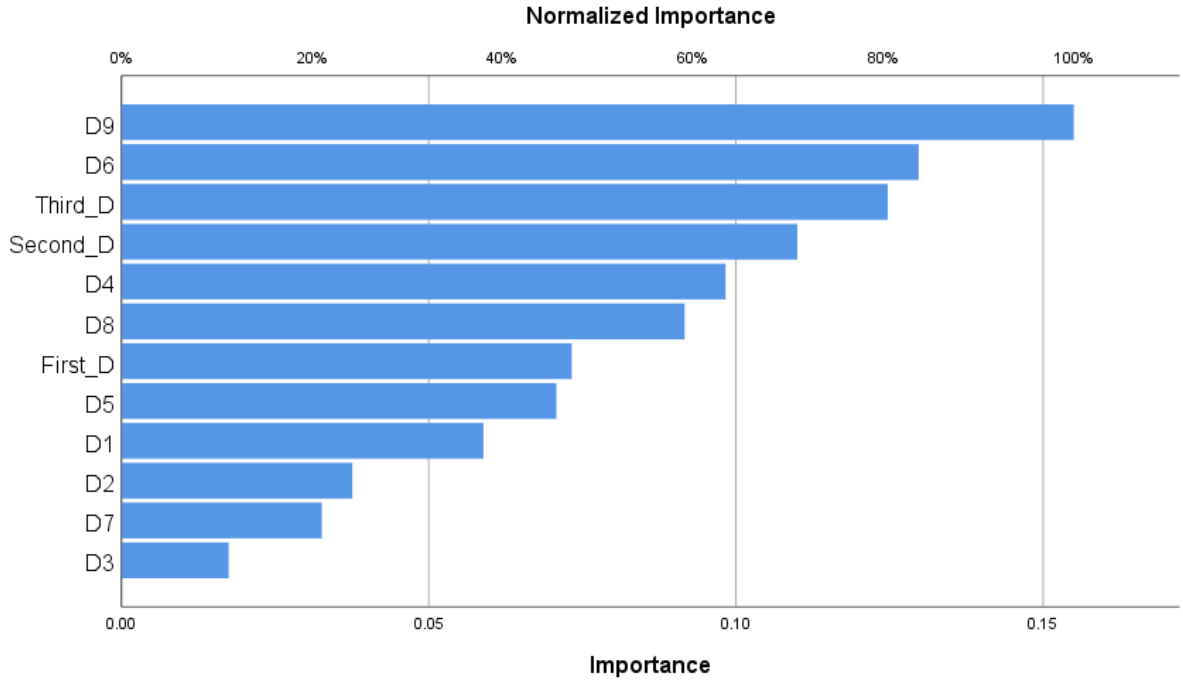
Classification

Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	1	0	0	0	100.0%
	slightly worse	0	3	1	0	75.0%
	hasn't changed	0	1	3	0	75.0%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	10.0%	50.0%	40.0%	0.0%	70.0%
Testing	worsened significantly	1	0	0	0	100.0%
	slightly worse	0	2	0	0	100.0%
	hasn't changed	0	0	1	0	100.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	25.0%	50.0%	25.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.073	47.3%
Second discourse in text	.110	71.0%
Third discourse in text	.125	80.5%
CONTACT RESTRICTION	.059	38.0%
SANITATION AND HYGIENE	.038	24.2%
ISOLATION OF INFECTED	.017	11.3%
TOTAL ISOLATION	.098	63.4%
HEALTH CARE	.071	45.7%
VIRUS DISSEMINATION	.130	83.7%
LIFESTYLE CHANGES	.033	21.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.092	59.1%
BUREAUCRATIC RESPONSE	.155	100.0%



*Multilayer Perceptron Network.

```
MLP Wellbeing (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 16:57:30
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.50
	Elapsed Time	00:00:00.53

Case Processing Summary

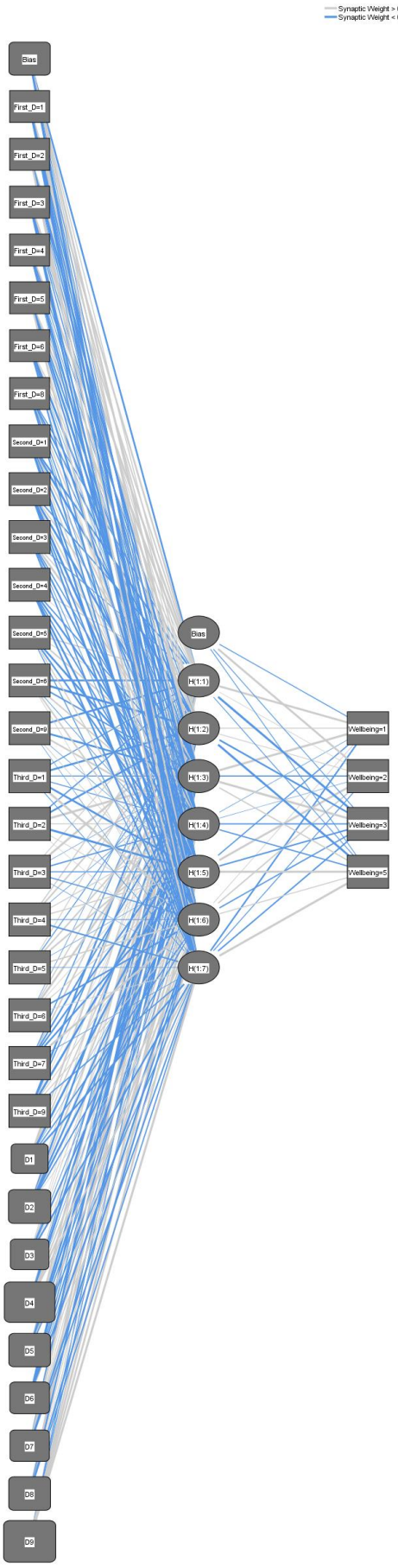
		N	Percent
Sample	Training	13	86.7%
	Testing	2	13.3%
Valid		15	100.0%
Excluded		89	
Total		104	

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]		7

	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Dynamics of well-being
	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	9.950
	Percent Incorrect Predictions	30.8%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.04
Testing	Cross Entropy Error	.952
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing= 1]	[Wellbeing= 2]	[Wellbeing= 3]	[Wellbeing= 5]
Input Layer	(Bias)	-.464	.197	.674	.350	-.093	-.114	-.755				
	[First_D=1]	.508	.321	.409	-.380	-.350	-.510	-.473				
	[First_D=2]	.327	.126	-.563	-.384	-.089	.396	.464				
	[First_D=3]	.602	.554	-.181	-.242	.018	-.466	-.662				
	[First_D=4]	.753	-.191	-.112	-.076	-.577	-.357	-.006				
	[First_D=5]	.145	.530	-.351	-.721	-.360	.074	.451				
	[First_D=6]	.200	.107	-.632	-.037	-.535	.012	-.384				
	[First_D=8]	-.211	-.407	-.249	.252	-.218	-.069	-.379				
	[Second_D=1]	-.516	-.677	.323	-.401	.205	-.405	-.565				
	[Second_D=2]	-.318	.298	-.631	.304	-.945	-.388	-.442				
	[Second_D=3]	-.139	.215	.594	-.255	-.429	-.085	-.344				
	[Second_D=4]	.199	.017	-.302	-.472	-.316	-.538	-.438				
	[Second_D=5]	.312	.101	.363	-.542	-.424	.218	-.191				

	[Second_D=6]	-.512	-.784	-.335	.320	-.081	.359	.073				
	[Second_D=9]	-.587	.209	-.527	.451	-.039	.072	-.023				
	[Third_D=1]	-.211	-.542	-.204	-.176	-.547	.787	-.108				
	[Third_D=2]	-.285	-.534	1.010	.177	-.683	.083	.034				
	[Third_D=3]	.152	.684	-.025	-.299	-.191	-.251	-.012				
	[Third_D=4]	.272	.401	-.058	.179	.237	-.081	-.374				
	[Third_D=5]	.154	-.175	.376	.425	-.027	.314	-.039				
	[Third_D=6]	-.055	.249	.624	.060	.124	-.411	.083				
	[Third_D=7]	-.244	.360	-.397	-.424	-.462	.726	-.067				
	[Third_D=9]	-.532	-.304	.016	-.734	.175	.171	-.280				
	D1	.456	.159	.309	-.664	-.002	-.286	-.461				
	D2	.126	-.526	.413	-.525	-.586	-.290	.005				
	D3	.016	.049	.112	-.100	-.416	.040	-.459				
	D4	.191	-.265	-1.097	-.053	.354	.504	.414				
	D5	.502	.202	-.593	-.574	-.249	.449	-.248				
	D6	-.569	-.205	-.238	-.375	-.081	-.524	.150				
	D7	-.676	.499	.057	.119	.420	-.466	-.335				
	D8	.602	.312	-.412	.142	.056	-.432	-.277				
	D9	.080	-.253	-.181	.468	1.146	.536	.749				
Hidden Layer 1	(Bias)								-.178	.617	-.132	-.113
	H(1:1)								.606	.042	-.736	-.123
	H(1:2)								.165	.111	-.447	-.667
	H(1:3)								.752	-.263	.906	.283
	H(1:4)								-.048	-.014	-.264	-.283
	H(1:5)								-.256	.636	-.359	1.474
	H(1:6)								.072	.306	-.290	.192
	H(1:7)								-.409	-.170	-.351	.848

Classification

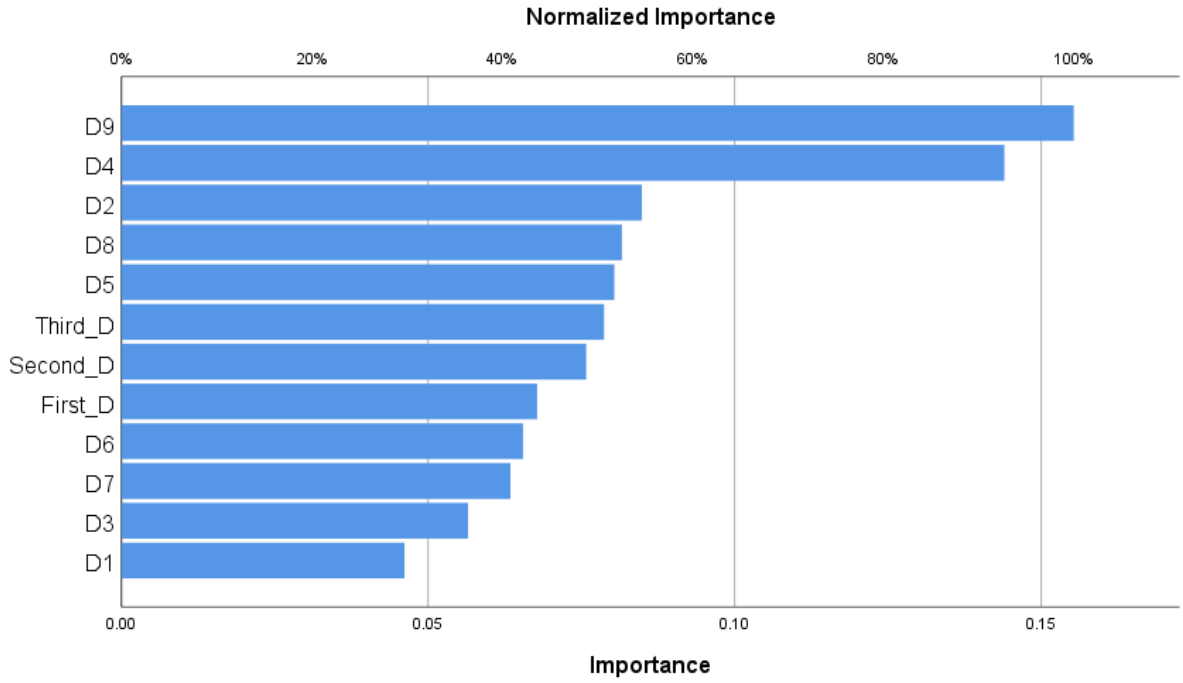
Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	1	0	1	0	50.0%
	slightly worse	0	3	2	1	50.0%
	hasn't changed	0	0	4	0	100.0%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	7.7%	23.1%	53.8%	15.4%	69.2%

Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	0	0	0	0.0%
	hasn't changed	0	0	2	0	100.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	0.0%	0.0%	100.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.068	43.7%
Second discourse in text	.076	48.8%
Third discourse in text	.079	50.7%
CONTACT RESTRICTION	.046	29.7%
SANITATION AND HYGIENE	.085	54.6%
ISOLATION OF INFECTED	.057	36.4%
TOTAL ISOLATION	.144	92.7%
HEALTH CARE	.080	51.8%
VIRUS DISSEMINATION	.065	42.2%
LIFESTYLE CHANGES	.063	40.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.082	52.6%
BUREAUCRATIC RESPONSE	.155	100.0%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:57:41
Comments	

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

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

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

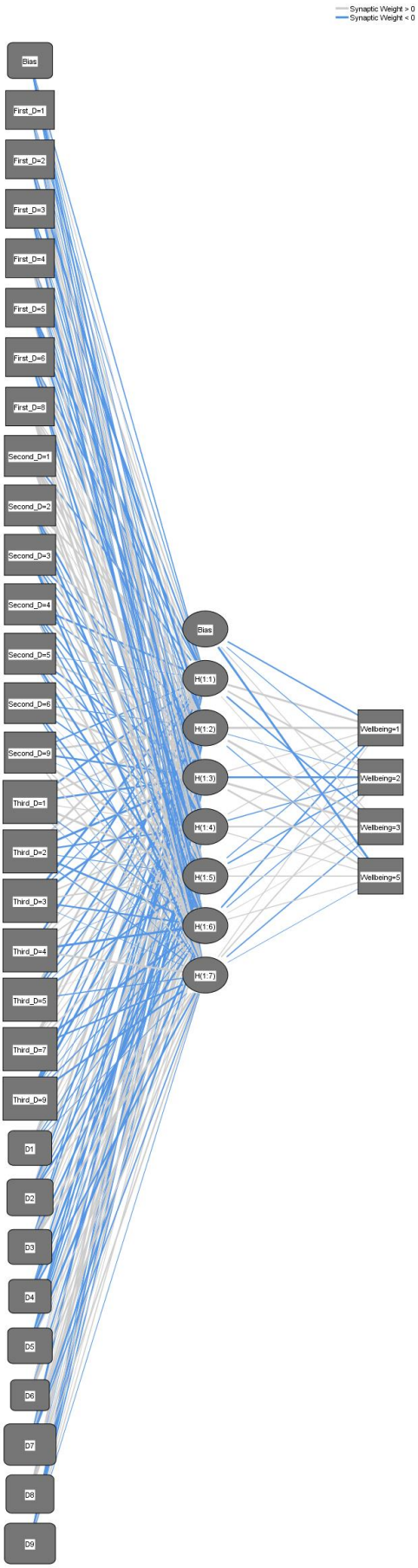
		N	Percent
Sample	Training	12	85.7%
	Testing	2	14.3%
Valid		14	100.0%
Excluded		90	
Total		104	

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]		7
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Dynamics of well-being
	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	11.316
	Percent Incorrect Predictions	33.3%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.858
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing= 1]	[Wellbeing= 2]	[Wellbeing= 3]	[Wellbeing= 5]
Input Layer	(Bias)	-.218	.094	-.056	-.188	-.417	-.031	-.272				
	[First_D=1]	-.160	.275	-.020	-.085	.326	-.087	-.104				
	[First_D=2]	.308	-1.083	.310	.688	.188	-.690	-.046				
	[First_D=3]	-.384	.003	-.030	-.280	.270	.171	-.625				
	[First_D=4]	.220	-.558	.900	-.008	-.216	-.113	.624				
	[First_D=5]	-.718	-.070	-.622	-.050	-.575	.069	.074				
	[First_D=6]	-.341	1.124	-.613	.060	.442	-.598	-.215				
	[First_D=8]	.188	.397	.130	.208	.502	.243	.695				
	[Second_D=1]	-.400	.611	.841	.394	.041	1.317	.488				
	[Second_D=2]	.540	.039	.443	-.572	-.152	-.779	.566				
	[Second_D=3]	.324	-.366	-.148	-.390	.332	-.191	-.634				
	[Second_D=4]	-.739	-.237	.964	-.357	-.261	-.288	.474				
	[Second_D=5]	-.048	.537	-.455	-.362	.143	-.700	-.075				

	[Second_D=6]	-.004	-.187	.801	-.295	.009	-.449	-.224				
	[Second_D=9]	-.366	.650	-.556	-.011	.871	.216	.309				
	[Third_D=1]	-.754	.396	-.613	.098	.774	-.210	-.013				
	[Third_D=2]	.844	.432	-.896	-.430	-.094	-.635	-.267				
	[Third_D=3]	-.886	-.203	-.768	.339	.315	-.427	-.025				
	[Third_D=4]	-.599	.331	.261	.270	-.008	-.889	.699				
	[Third_D=5]	.992	-.588	-.306	-.070	-.512	.007	-.217				
	[Third_D=7]	.580	.738	.070	.166	.393	-.767	-.439				
	[Third_D=9]	-.531	-.310	-1.460	-.017	-.077	-.240	-.596				
	D1	.184	-.016	.573	.053	-.203	-.179	-.076				
	D2	.872	-.358	-.056	.980	-.225	-.593	.242				
	D3	-.249	-.426	.538	.093	-.534	.643	1.064				
	D4	.015	-.417	.255	-1.050	-.101	.076	-.500				
	D5	-.397	-.455	-.304	-.262	.768	-.789	.204				
	D6	-.002	.116	.029	-.313	.312	.278	.388				
	D7	-1.016	.022	.044	.412	.771	-.493	-.264				
	D8	.565	.612	-.022	.120	.491	.090	.357				
	D9	-.309	-.994	-.393	-.275	.050	.206	-.075				
Hidden Layer 1	(Bias)								-.327	-.095	.123	-.794
	H(1:1)								.662	.443	-.398	.050
	H(1:2)								.883	-.073	.983	-.170
	H(1:3)								.148	-.572	.850	.475
	H(1:4)								.138	-.212	.410	.177
	H(1:5)								-.161	-.287	.092	.245
	H(1:6)								-.386	-.164	.038	.172
	H(1:7)								.140	.276	-.257	-.038

Classification

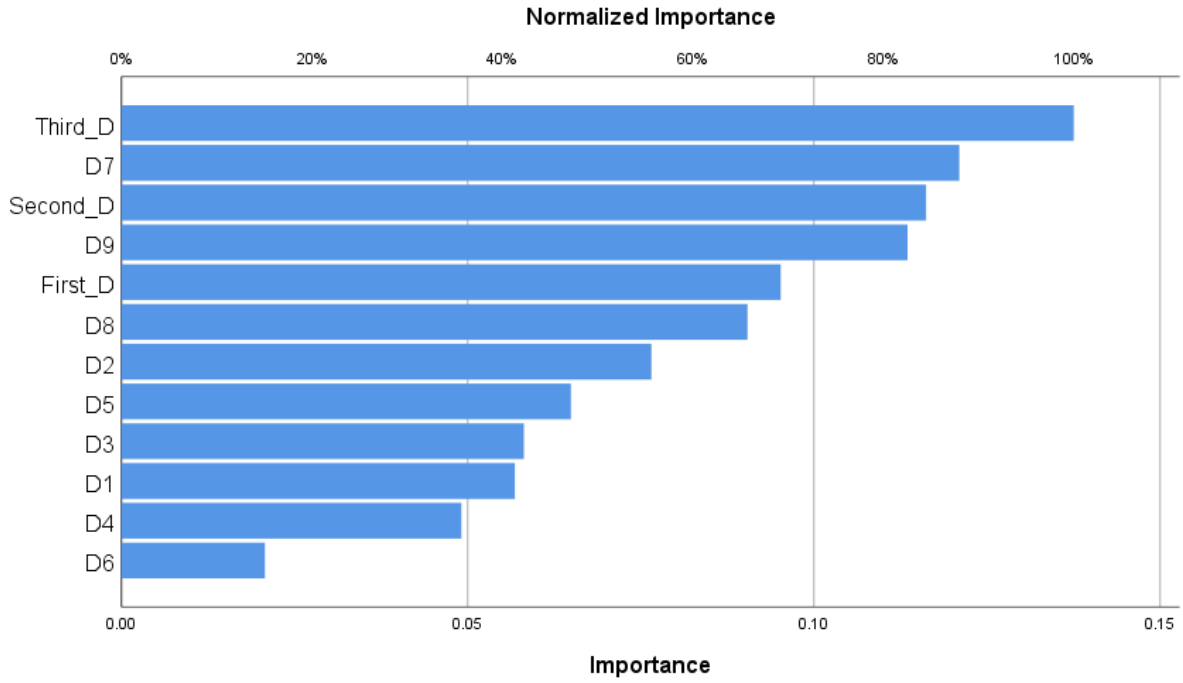
Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	1	0	1	0	50.0%
	slightly worse	0	4	0	0	100.0%
	hasn't changed	1	1	3	0	60.0%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	16.7%	50.0%	33.3%	0.0%	66.7%

Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	1	0	0	100.0%
	hasn't changed	0	0	1	0	100.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	0.0%	50.0%	50.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.095	69.2%
Second discourse in text	.116	84.5%
Third discourse in text	.138	100.0%
CONTACT RESTRICTION	.057	41.3%
SANITATION AND HYGIENE	.077	55.7%
ISOLATION OF INFECTED	.058	42.3%
TOTAL ISOLATION	.049	35.7%
HEALTH CARE	.065	47.2%
VIRUS DISSEMINATION	.021	15.1%
LIFESTYLE CHANGES	.121	88.0%
RIGHTS AND FREEDOMS INFRINGEMENT	.090	65.7%
BUREAUCRATIC RESPONSE	.114	82.5%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:57:51
Comments	

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

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

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

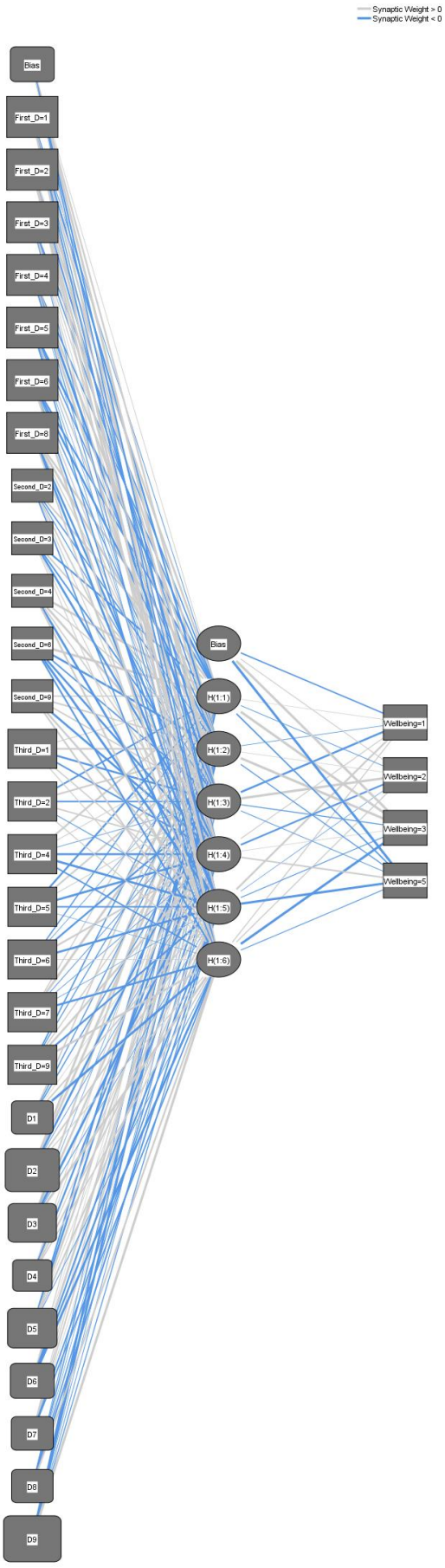
		N	Percent
Sample	Training	10	76.9%
	Testing	3	23.1%
Valid		13	100.0%
Excluded		91	
Total		104	

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]		28
	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	Dynamics of well-being
	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	7.420
	Percent Incorrect Predictions	40.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.04
Testing	Cross Entropy Error	2.368
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]	[Wellbeing=5]
Input Layer	(Bias)	.048	.320	.532	-.272	-.208	.117				
	[First_D=1]	-.063	-.321	.353	-.152	-.228	.414				
	[First_D=2]	.380	.369	-.271	.412	.547	.194				
	[First_D=3]	-.206	-.203	.166	.042	.142	-.104				
	[First_D=4]	-.218	.437	-.467	.492	-.128	-.013				
	[First_D=5]	-.419	-.187	.248	-.004	-.033	-.203				
	[First_D=6]	-.310	-.387	-.176	.185	-.248	.414				
	[First_D=8]	.359	.483	.147	-.376	-.403	.225				
	[Second_D=2]	.272	-.201	-.128	.241	.108	-.209				
	[Second_D=3]	-.306	.248	-.260	-.395	.077	.111				
	[Second_D=4]	.438	.193	.401	.208	-.436	.344				
	[Second_D=6]	.556	-.388	-.217	-.383	-.464	-.290				
	[Second_D=9]	.192	.263	.223	-.407	.377	.306				
	[Third_D=1]	.073	.312	-.360	-.264	.199	.120				
	[Third_D=2]	-.276	.291	-.270	.237	-.118	.144				
	[Third_D=4]	.348	.072	-.054	-.382	-.438	-.226				
	[Third_D=5]	-.334	.296	.091	-.413	-.225	-.006				
	[Third_D=6]	-.189	-.040	-.324	.325	-.405	.040				
	[Third_D=7]	.180	.483	-.069	-.052	-.020	-.382				

	[Third_D=9]	-.215	-.140	.187	.393	-.333	.399				
	D1	.215	-.164	-.186	.035	.233	-.513				
	D2	.481	.499	-.387	-.048	.264	.127				
	D3	.332	-.025	.391	-.468	-.060	.542				
	D4	.062	.085	-.315	.134	.266	.204				
	D5	-.284	-.373	.369	.044	.309	-.063				
	D6	.141	.011	.429	-.274	-.313	-.425				
	D7	.107	.151	.248	.044	-.218	-.216				
	D8	-.067	-.189	-.002	-.186	-.255	.312				
	D9	-.379	-.460	-.035	-.059	-.140	.571				
Hidden Layer 1	(Bias)							-.215	.127	.593	-.593
	H(1:1)							.017	-.060	.663	-.221
	H(1:2)							-.045	.019	.810	-.145
	H(1:3)							-.380	.584	-.132	-.066
	H(1:4)							.131	-.296	.019	.266
	H(1:5)							.360	-.019	-.114	-.486
	H(1:6)							.161	.166	-.590	-.112

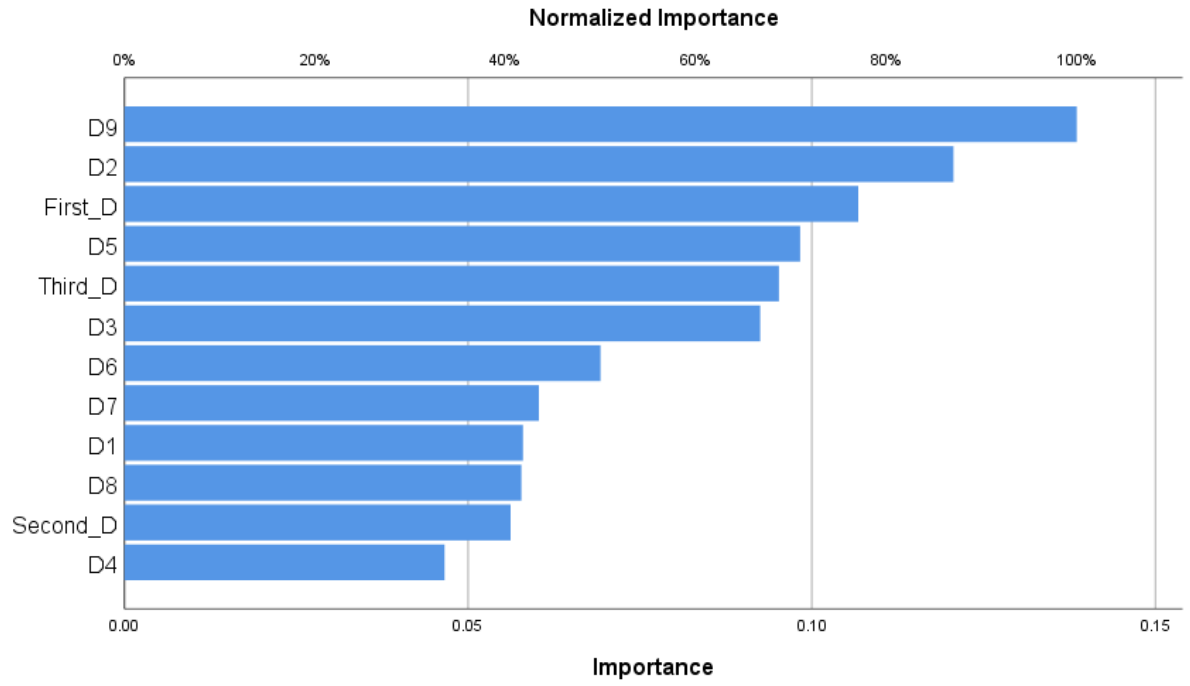
Classification

		Predicted				
Sample	Observed	worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	0	0	1	0	0.0%
	slightly worse	0	2	1	0	66.7%
	hasn't changed	0	1	4	0	80.0%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	0.0%	40.0%	60.0%	0.0%	60.0%
Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	3	0	0	100.0%
	hasn't changed	0	0	0	0	0.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.107	77.1%
Second discourse in text	.056	40.6%
Third discourse in text	.095	68.7%
CONTACT RESTRICTION	.058	41.8%
SANITATION AND HYGIENE	.121	87.0%
ISOLATION OF INFECTED	.093	66.8%
TOTAL ISOLATION	.047	33.6%
HEALTH CARE	.098	71.0%
VIRUS DISSEMINATION	.069	50.0%
LIFESTYLE CHANGES	.060	43.5%
RIGHTS AND FREEDOMS INFRINGEMENT	.058	41.7%
BUREAUCRATIC RESPONSE	.139	100.0%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:58:10
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.43

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: D7.

Case Processing Summary

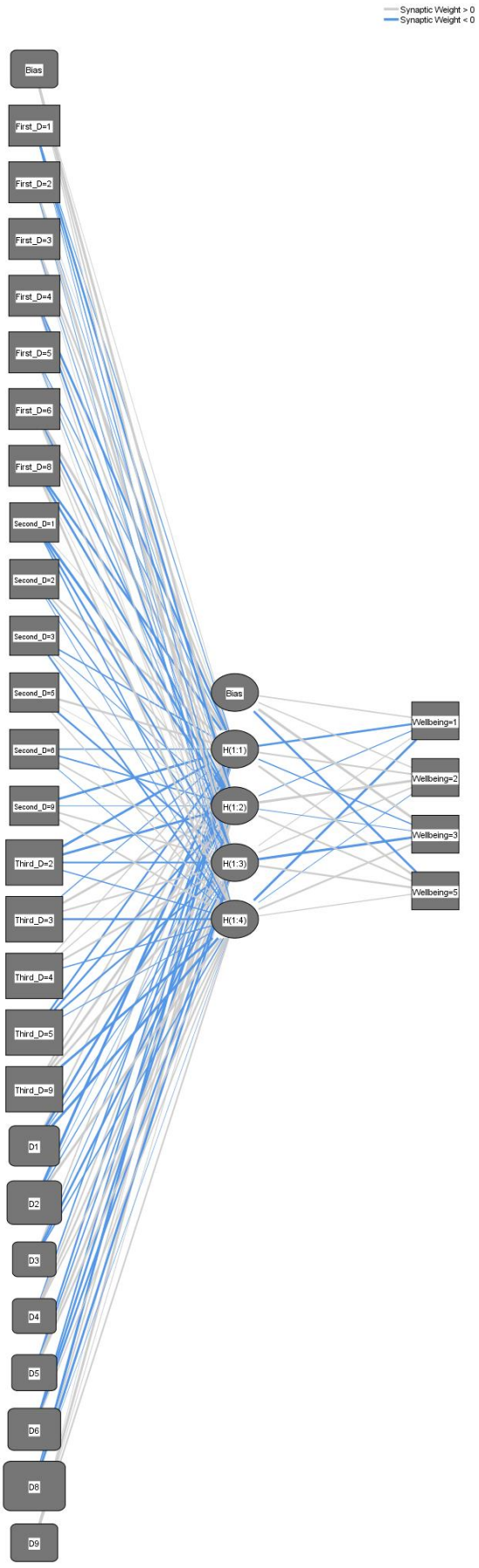
		N	Percent
Sample	Training	8	80.0%
	Testing	2	20.0%
Valid		10	100.0%
Excluded		94	
Total		104	

Network Information

Input Layer	Factors	1	First discourse in text
		2	Second discourse in text
		3	Third discourse in text
	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]		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	Dynamics of well-being
	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	6.938
	Percent Incorrect Predictions	25.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	1.264
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]	[Wellbeing=5]
Input Layer	(Bias)	.077	.970	.310	.145				
	[First_D=1]	-.138	-.646	-.211	-.057				
	[First_D=2]	.005	-.057	1.166	-.073				
	[First_D=3]	.537	.266	-.126	.048				
	[First_D=4]	-.654	.267	-.398	.149				
	[First_D=5]	-.180	.151	-.101	.010				
	[First_D=6]	1.028	-.400	.326	.164				
	[First_D=8]	-.705	-.696	.011	.671				
	[Second_D=1]	.066	-1.180	-.527	-.239				
	[Second_D=2]	.574	.327	-.265	-.086				
	[Second_D=3]	-.266	-.105	.098	-.391				
	[Second_D=5]	.586	.053	-.440	.206				
	[Second_D=6]	-.197	-.279	.302	-.104				
	[Second_D=9]	-.813	-.066	.349	.386				
	[Third_D=2]	-.798	-.799	-.353	-.219				
	[Third_D=3]	-.163	.737	.383	-.576				
	[Third_D=4]	.212	.179	.443	-.222				
	[Third_D=5]	-.460	-.487	-.404	-.132				
	[Third_D=9]	.328	.876	.706	-.821				
	D1	.382	-.814	-.132	-.906				

	D2	-1.500	-.037	-.193	.824				
	D3	.222	-.136	-.592	-.237				
	D4	-.278	.303	.537	.284				
	D5	-.417	-.244	.777	.547				
	D6	-.331	-.620	-.495	.234				
	D8	-.914	.280	-.741	-.004				
	D9	.056	.816	.079	.326				
Hidden Layer 1	(Bias)					.230	.222	.995	-.647
	H(1:1)					-.577	.337	-.228	.595
	H(1:2)					-.147	.885	-.096	.345
	H(1:3)					.119	.240	-.844	.463
	H(1:4)					-.763	-.079	.408	.173

Classification

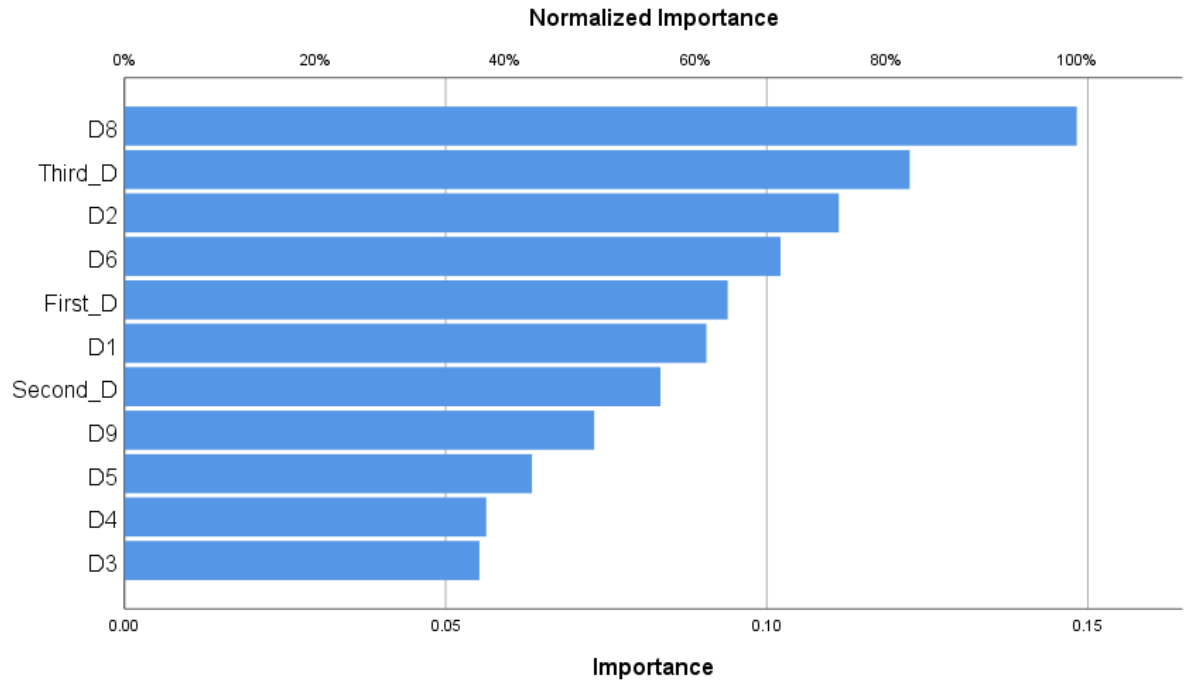
		Predicted				
Sample	Observed	worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	2	0	0	0	100.0%
	slightly worse	0	2	0	0	100.0%
	hasn't changed	0	1	2	0	66.7%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	25.0%	50.0%	25.0%	0.0%	75.0%
Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	2	0	0	100.0%
	hasn't changed	0	0	0	0	0.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.094	63.3%
Second discourse in text	.083	56.3%
Third discourse in text	.122	82.5%
CONTACT RESTRICTION	.091	61.1%

SANITATION AND HYGIENE	.111	75.0%
ISOLATION OF INFECTED	.055	37.3%
TOTAL ISOLATION	.056	38.0%
HEALTH CARE	.063	42.8%
VIRUS DISSEMINATION	.102	68.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.148	100.0%
BUREAUCRATIC RESPONSE	.073	49.3%




```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:58:21
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.
Weight Handling		not applicable

Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.37
	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

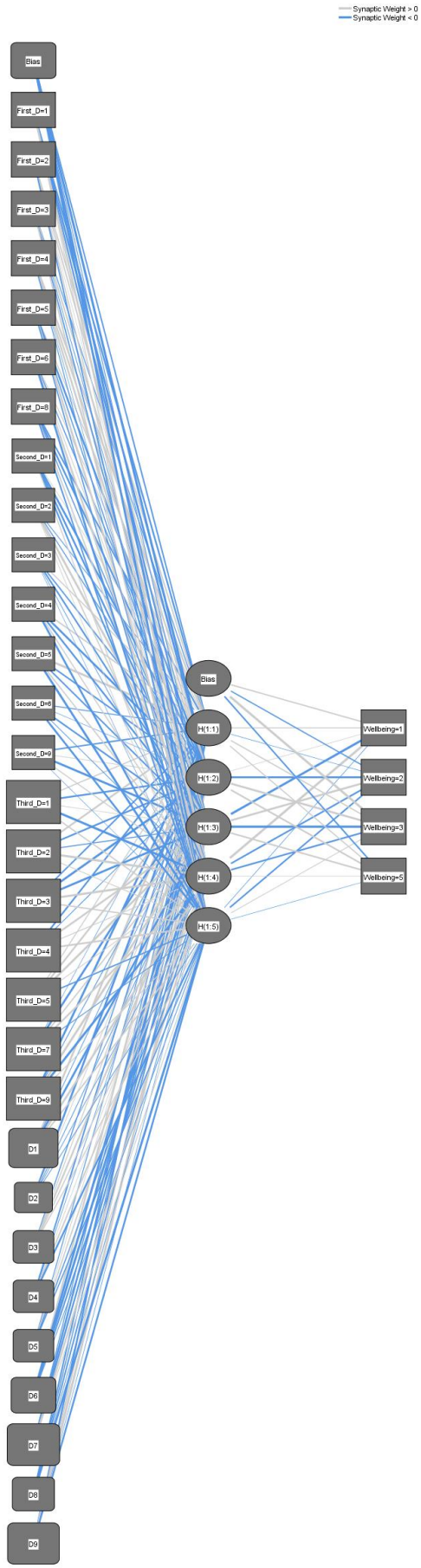
		N	Percent
Sample	Training	12	85.7%
	Testing	2	14.3%
Valid		14	100.0%
Excluded		90	
Total		104	

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]		5
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	Dynamics of well-being
	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	8.444
	Percent Incorrect Predictions	25.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.562
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

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)	[Wellbeing= 1]	[Wellbeing= 2]	[Wellbeing= 3]	[Wellbeing= 5]
Input Layer	(Bias)	-.280	-1.279	-.142	-.722	-.644				
	[First_D=1]	-.409	-.539	-.379	.683	.176				
	[First_D=2]	.277	.273	.018	.258	-.295				
	[First_D=3]	-.185	.349	-.121	-.257	.284				
	[First_D=4]	.472	.378	.478	-.026	-.169				
	[First_D=5]	.208	-.477	-.223	.506	-.252				
	[First_D=6]	.167	-.208	.128	.478	-.526				
	[First_D=8]	-.348	-.436	-.209	.262	-.304				
	[Second_D=1]	.064	-.519	-.437	-.349	.203				
	[Second_D=2]	-.140	-.204	.601	.244	.059				
	[Second_D=3]	.217	-.263	-.367	-.088	-.005				
	[Second_D=4]	.275	-.541	-.441	.211	-.525				
	[Second_D=5]	.767	-.349	-.326	.248	-.688				

	[Second_D=6]	-.189	-.018	-.387	-.136	-.501				
	[Second_D=9]	-.301	.090	-.655	.204	-.007				
	[Third_D=1]	.240	-.427	.077	-.994	.257				
	[Third_D=2]	.468	-.428	-.206	.732	.160				
	[Third_D=3]	-.339	-.690	-.647	.715	.266				
	[Third_D=4]	-.413	-.155	.488	.164	.434				
	[Third_D=5]	.196	.456	.673	.140	-.265				
	[Third_D=7]	-.024	-.583	.258	.471	-.166				
	[Third_D=9]	-.605	-.154	.805	-.891	.180				
	D1	.493	-.120	-.594	.601	.294				
	D2	-.562	.081	-.135	-.105	-.137				
	D3	-.207	.188	.450	.227	.213				
	D4	-.329	-.067	.054	.302	-.459				
	D5	-.169	.074	.243	-.230	-.233				
	D6	.414	-.886	-.938	-.309	-.133				
	D7	-.189	-.477	-.407	.472	.161				
	D8	-.343	-.206	-.281	-.105	-.796				
	D9	-.462	.320	1.094	-.040	-.458				
Hidden Layer 1	(Bias)						.267	-.241	1.289	-.343
	H(1:1)						.194	-.026	.246	.233
	H(1:2)						.043	-.473	.576	.411
	H(1:3)						-.860	.562	-1.552	.366
	H(1:4)						1.534	-.408	-.397	.054
	H(1:5)						-.055	-.366	.143	-.012

Classification

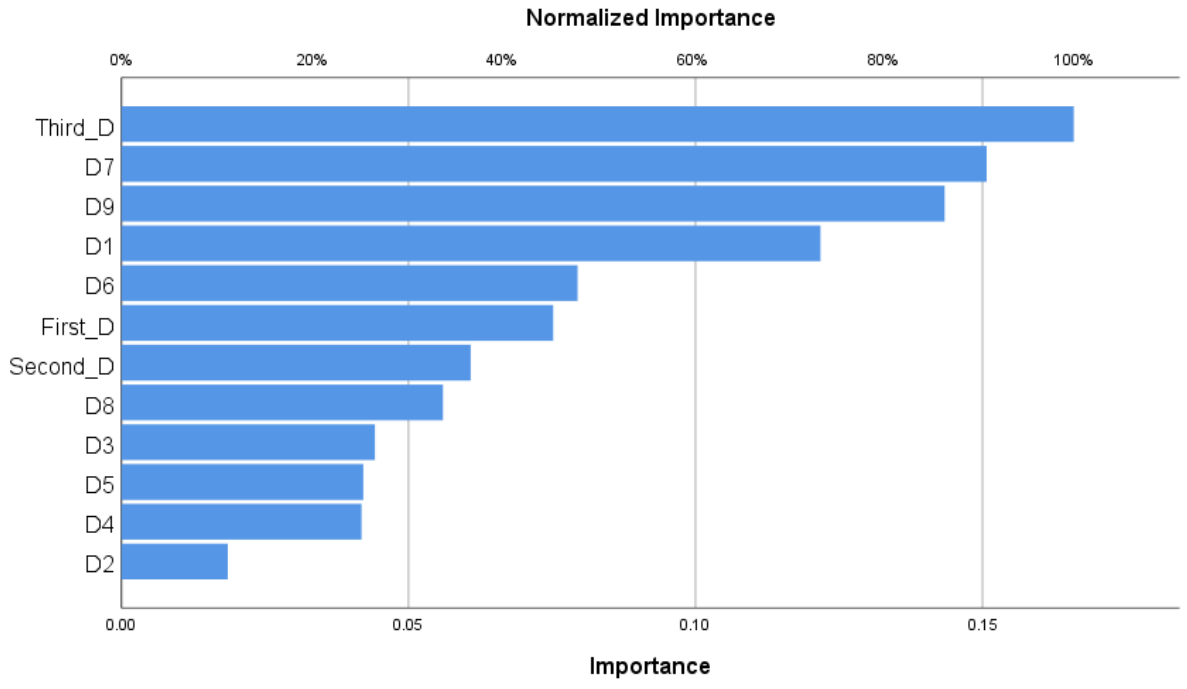
Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	2	0	0	0	100.0%
	slightly worse	0	3	0	0	100.0%
	hasn't changed	1	1	4	0	66.7%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	25.0%	41.7%	33.3%	0.0%	75.0%
Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	2	0	0	100.0%

	hasn't changed	0	0	0	0.0%
	improved significantly	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.075	45.3%
Second discourse in text	.061	36.7%
Third discourse in text	.166	100.0%
CONTACT RESTRICTION	.122	73.4%
SANITATION AND HYGIENE	.019	11.2%
ISOLATION OF INFECTED	.044	26.6%
TOTAL ISOLATION	.042	25.2%
HEALTH CARE	.042	25.4%
VIRUS DISSEMINATION	.079	47.9%
LIFESTYLE CHANGES	.151	90.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.056	33.8%
BUREAUCRATIC RESPONSE	.143	86.4%



```
*Multilayer Perceptron Network.
MLP Wellbeing (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 16:58:28
Comments		
Input	Data	C:\Users\vitart0\OneDrive\Documents\!MyDocs\!Sience\Quarantine definition survey\SPSS\NN_EN_covid_nominal_9D.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	104
Missing Value Handling	Definition of Missing	User- and system-missing values are treated as missing.
	Cases Used	Statistics are based on cases with valid data for all variables used by the procedure.

Weight Handling		not applicable
Syntax		MLP Wellbeing (MLEVEL=O) BY First_D Second_D Third_D WITH D1 D2 D3 D4 D5 D6 D7 D8 D9 /RESCALE COVARIATE=STANDARDIZ ED /PARTITION TRAINING=7 TESTING=3 HOLDOUT=0 /ARCHITECTURE AUTOMATIC=YES (MINUNITS=1 MAXUNITS=50) /CRITERIA TRAINING=BATCH OPTIMIZATION=SCALEDC ONJUGATE LAMBDAINITIAL=0.0000005 SIGMAINITIAL=0.00005 INTERVALCENTER=0 INTERVALOFFSET=0.5 MEMSIZE=1000 /PRINT CPS NETWORKINFO SUMMARY CLASSIFICATION SOLUTION IMPORTANCE /PLOT NETWORK /STOPPINGRULES ERRORSTEPS= 1 (DATA=AUTO) TRAININGTIMER=ON (MAXTIME=15) MAXEPOCHS=AUTO ERRORCHANGE=1.0E-4 ERRORRATIO=0.001 /MISSING USERMISSING=EXCLUDE .
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.49

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

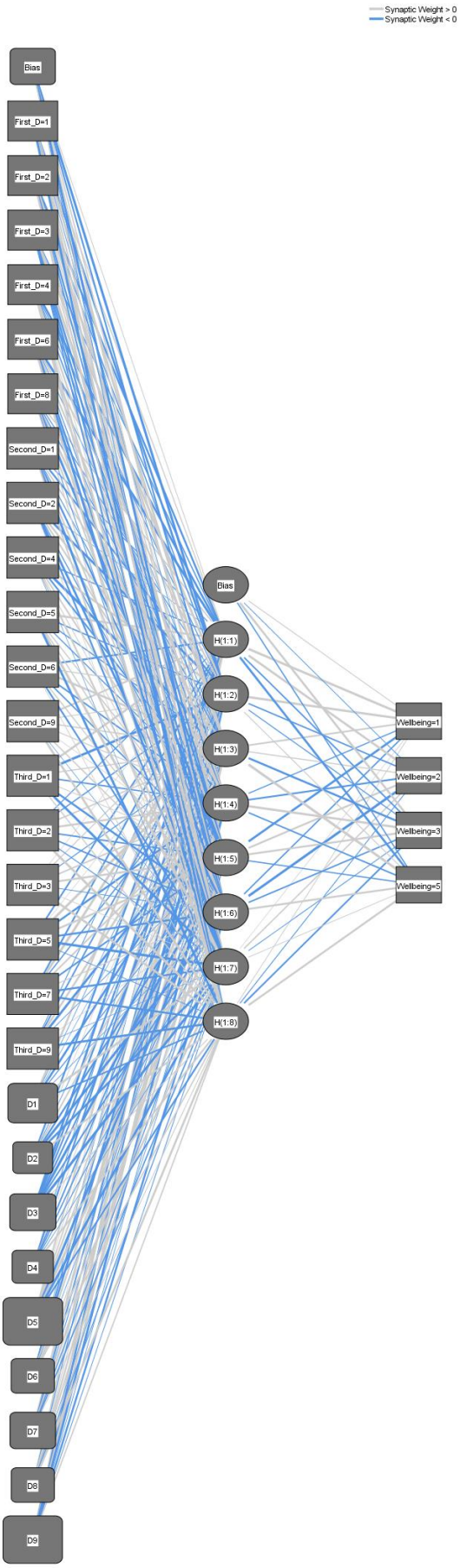
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

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]		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	Dynamics of well-being
	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	11.658
	Percent Incorrect Predictions	41.7%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.04
Testing	Cross Entropy Error	.355
	Percent Incorrect Predictions	0.0%

Dependent Variable: Dynamics of well-being

a. Error computations are based on the testing sample.

Parameter Estimates

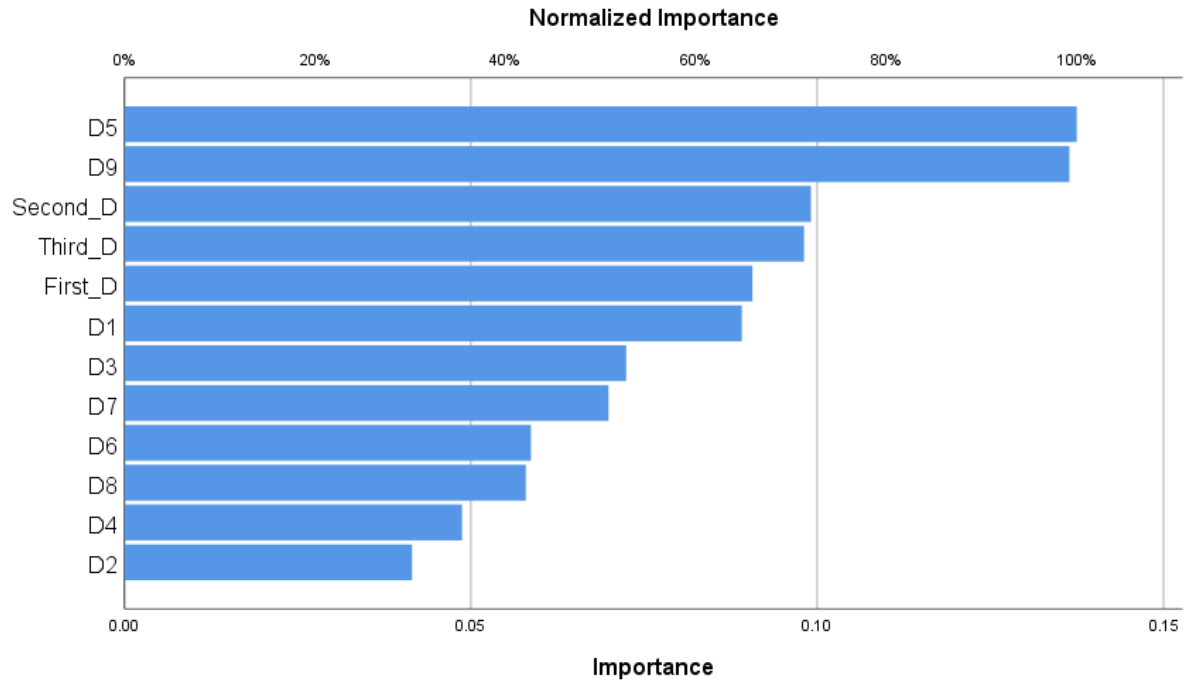
		Predicted											
		Hidden Layer 1								Output Layer			
Predictor		H(1:1)	H(1:2)	H(1:3)	H(1:4)	H(1:5)	H(1:6)	H(1:7)	H(1:8)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]	[Wellbeing=5]
Input Layer	(Bias)	.078	-.637	-.309	.238	.228	-.582	-.090	.135				
	[First_D=1]	.163	-.473	.682	-.050	.285	.255	.626	-.539				
	[First_D=2]	-.408	-.182	.636	.187	-.353	-.242	.379	.149				
	[First_D=3]	-.202	.555	.016	.707	-.413	-.414	-.350	-.250				
	[First_D=4]	-.461	-.123	-.045	-.215	.351	.045	.522	.393				
	[First_D=6]	-.686	.324	-.092	.338	-.110	-.426	-.723	.477				
	[First_D=8]	.209	-.122	-.160	.464	-.582	.289	-.089	.118				
	[Second_D=1]	-.146	-.390	.239	-.118	-.376	.302	-.685	.281				
	[Second_D=2]	-.010	-.564	.410	.292	-.148	-.561	-.352	.016				
	[Second_D=4]	-.185	.460	-.753	-.343	.274	.076	.376	-.002				
	[Second_D=5]	.479	-.220	-.183	-.162	.192	.202	.880	-.601				
	[Second_D=6]	-.389	.165	.469	-.289	-.246	.188	-.346	.042				
	[Second_D=9]	.361	.087	.203	.131	.006	.222	-.004	.533				
	[Third_D=1]	.510	-.715	.189	-.242	.074	-.460	-.613	.176				
	[Third_D=2]	-.139	-.191	.245	.416	-.267	-.256	-.124	.657				
	[Third_D=3]	.001	.151	-.130	.273	.430	-.047	.024	.533				
	[Third_D=5]	-.331	.002	.790	-.427	.427	-.423	-.719	-.054				
	[Third_D=7]	-.346	.704	-.208	.338	-.324	.148	-.396	-.431				
	[Third_D=9]	-.083	-.272	.455	-.576	-.042	.030	-.003	-.507				
	D1	.481	-.026	-.001	-.468	-.136	-.019	.551	-.291				

	D2	-.354	.012	-.042	.300	-.375	-.653	-.489	.387			
	D3	-.521	-.382	-.300	-.309	-.737	-.285	-.917	.099			
	D4	-.060	-.349	.039	-.248	-.209	-.108	-.031	.369			
	D5	.356	.040	.248	.345	-.687	.695	-.687	-.351			
	D6	-.026	-.254	-.463	.347	-.017	.099	.437	.230			
	D7	.001	.493	-.284	-.089	.522	-.157	-.233	.090			
	D8	.225	-.130	.109	.396	.292	-.035	-.141	.461			
	D9	.488	-.457	.562	-.620	-.040	-.401	-.062	.235			
Hidden Layer 1	(Bias)									.117	-.062	.472	-.206
	H(1:1)									.628	.534	-.269	-.485
	H(1:2)									.554	-.248	-.147	.128
	H(1:3)									.342	.166	-.450	.910
	H(1:4)									-.163	-.345	.526	-.258
	H(1:5)									-.523	.394	.401	-.189
	H(1:6)									-.245	-.710	-.264	.404
	H(1:7)									.009	.238	-.083	.061
	H(1:8)									.068	-.108	-.338	.436

Classification

Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	1	1	0	0	50.0%
	slightly worse	1	1	1	0	33.3%
	hasn't changed	0	1	4	1	66.7%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	16.7%	25.0%	41.7%	16.7%	58.3%
Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	1	0	0	100.0%
	hasn't changed	0	0	0	0	0.0%
	improved significantly	0	0	0	0	0.0%
	Overall Percent	0.0%	100.0%	0.0%	0.0%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.091	65.9%
Second discourse in text	.099	72.1%
Third discourse in text	.098	71.4%
CONTACT RESTRICTION	.089	64.8%
SANITATION AND HYGIENE	.042	30.2%
ISOLATION OF INFECTED	.072	52.7%
TOTAL ISOLATION	.049	35.4%
HEALTH CARE	.137	100.0%
VIRUS DISSEMINATION	.059	42.7%
LIFESTYLE CHANGES	.070	50.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.058	42.1%
BUREAUCRATIC RESPONSE	.136	99.2%