```
*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 16:01:08
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 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	00:00:00.49
	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.

Case Processing Summary

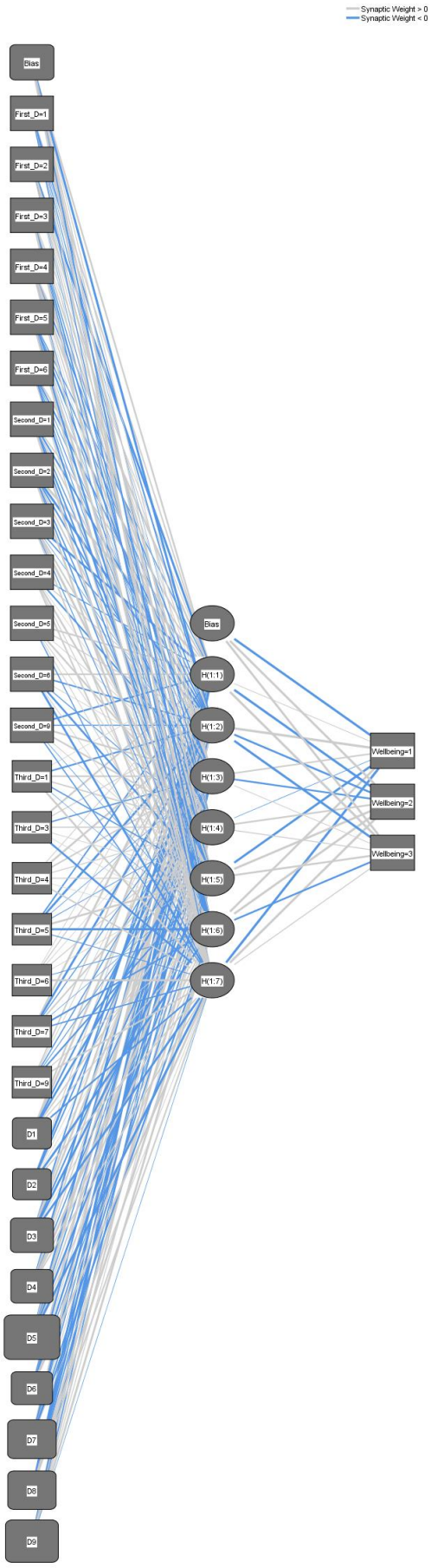
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

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]		29
	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		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	6.324
	Percent Incorrect Predictions	20.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.333
	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]
Input Layer	(Bias)	.485	-1.024	.170	.256	.790	-.406	.806			
	[First_D=1]	.320	-.360	-.013	-.175	-.029	.261	-.225			
	[First_D=2]	-1.006	.221	.619	.108	.359	-.055	.115			
	[First_D=3]	.142	.090	.369	-.226	-.381	-.224	.821			
	[First_D=4]	.661	-.294	.549	.271	.017	-.162	.489			
	[First_D=5]	-.215	-.240	-.444	-.009	.717	-.566	.524			
	[First_D=6]	.462	-.379	-.095	-.175	-.162	-.570	.233			
	[Second_D=1]	.299	-.409	.297	-.227	-.406	-.328	.872			
	[Second_D=2]	1.110	-1.017	-.389	.369	-.282	-.302	.631			
	[Second_D=3]	-.798	-.280	-.047	.408	1.064	-.185	.336			
	[Second_D=4]	-.209	.212	-.430	.034	.520	.185	.409			
	[Second_D=5]	.435	.232	.099	.506	.092	.138	-.234			
	[Second_D=6]	.491	-.394	.070	-.189	-.573	.088	-.806			

	[Second_D=9]	-.492	-.242	.478	.431	.096	-.055	-.268			
	[Third_D=1]	.042	-.430	.406	.305	-.292	-.013	.592			
	[Third_D=3]	.536	.196	-.307	.288	.091	.017	-.637			
	[Third_D=4]	.112	.636	.366	.193	.198	.023	.379			
	[Third_D=5]	-.351	-.818	-.055	-.102	.675	-.807	-.153			
	[Third_D=6]	.084	.229	.044	.206	.052	-.135	.768			
	[Third_D=7]	.728	-.818	-.213	.402	-.040	-.430	-.311			
	[Third_D=9]	.362	.094	-.249	-.142	-.414	.179	.427			
	D1	.500	.734	-.477	-.725	.313	.223	-.440			
	D2	.184	-.918	-.350	.046	.011	-.982	.294			
	D3	-.368	.523	.630	-.389	-.892	.077	-.894			
	D4	-.594	.382	.268	-.263	1.537	.344	.335			
	D5	-1.159	1.795	-.278	.329	-.562	.226	-1.279			
	D6	.625	-.439	.146	-.520	-.179	.250	.739			
	D7	1.831	-.544	-.246	.158	-.312	-.462	.069			
	D8	-.802	-.658	-.622	-.294	.724	.977	.402			
	D9	-1.596	.279	-.299	.482	.168	.768	-.042			
Hidden Layer 1	(Bias)								-1.644	1.220	1.058
	H(1:1)								.137	-3.543	4.389
	H(1:2)								1.999	-.626	-1.607
	H(1:3)								.382	-.464	.104
	H(1:4)								-.058	.466	.199
	H(1:5)								-1.180	1.011	.584
	H(1:6)								.830	1.144	-.500
	H(1:7)								-2.013	1.274	.211

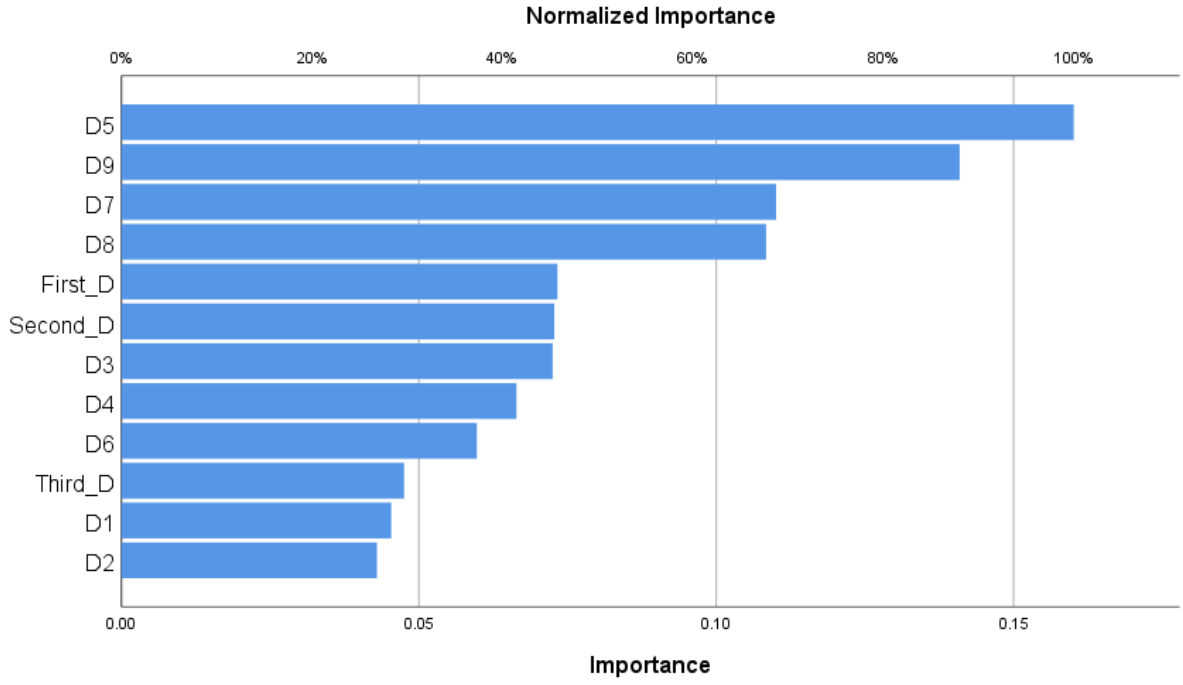
Classification

		Predicted			
Sample	Observed	worsened significantly	slightly worse	hasn't changed	Percent Correct
Training	worsened significantly	1	0	0	100.0%
	slightly worse	0	3	1	75.0%
	hasn't changed	0	1	4	80.0%
	Overall Percent	10.0%	40.0%	50.0%	80.0%
Testing	worsened significantly	0	0	0	0.0%
	slightly worse	0	2	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	.073	45.8%
Second discourse in text	.073	45.4%
Third discourse in text	.048	29.7%
CONTACT RESTRICTION	.045	28.3%
SANITATION AND HYGIENE	.043	26.8%
ISOLATION OF INFECTED	.073	45.3%
TOTAL ISOLATION	.066	41.5%
HEALTH CARE	.160	100.0%
VIRUS DISSEMINATION	.060	37.3%
LIFESTYLE CHANGES	.110	68.7%
RIGHTS AND FREEDOMS INFRINGEMENT	.108	67.7%
BUREAUCRATIC RESPONSE	.141	88.0%



*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 16:01:16
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 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	00:00:00.53
	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

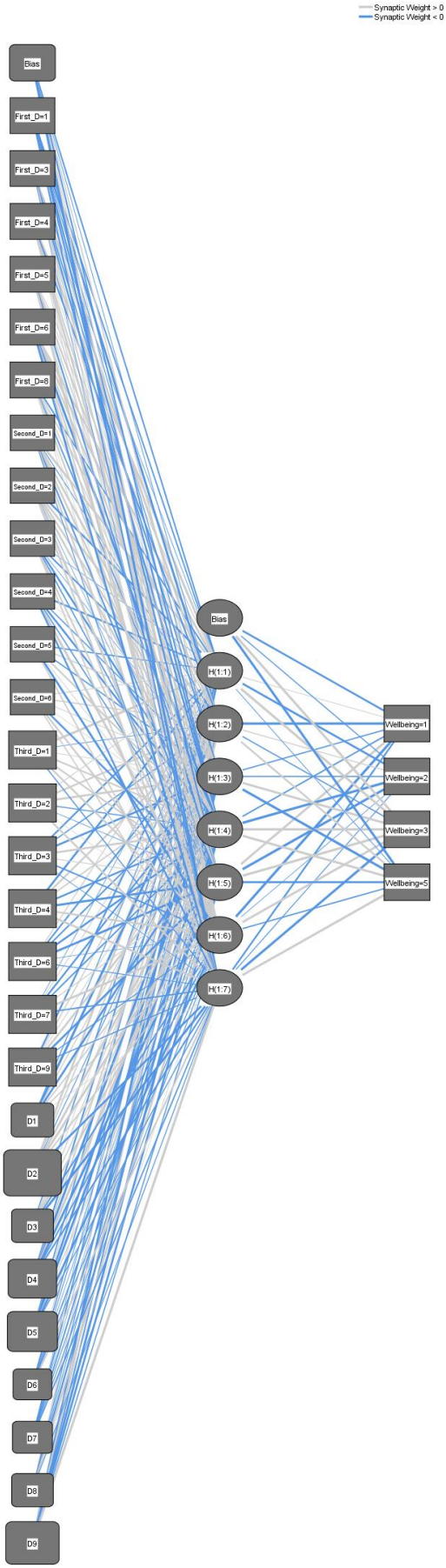
		N	Percent
Sample	Training	12	92.3%
	Testing	1	7.7%
Valid		13	100.0%
Excluded		91	
Total		104	

Network Information

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

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		28
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		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	.382
	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	.071
	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)	-.313	-.053	.213	-.337	.073	.349	-.915				
	[First_D=1]	-.291	-.701	-.121	-.423	-.461	.027	-.356				
	[First_D=3]	-.038	.723	-.263	-.468	.318	.192	-.050				
	[First_D=4]	.782	-.400	.017	.346	.705	.101	.061				
	[First_D=5]	.092	.052	.452	.171	-.388	.087	.676				
	[First_D=6]	.643	.801	.365	-.853	.402	.294	-.592				
	[First_D=8]	-.336	.288	.146	-.265	.364	.002	.048				
	[Second_D=1]	.691	-.117	.548	.497	-.355	.373	-.125				
	[Second_D=2]	-.573	.586	.493	.524	-.025	.785	.397				
	[Second_D=3]	-.029	-.355	-.031	-.528	-.242	.399	.298				
	[Second_D=4]	-.477	.022	-.217	-.510	-.233	.864	-.435				
	[Second_D=5]	-.276	.186	-.259	.451	.041	-.644	.304				
	[Second_D=6]	.088	.223	.067	.008	-.518	.479	.240				

	[Third_D=1]	.952	-.053	.041	.396	.403	.486	-.216				
	[Third_D=2]	.087	.452	.587	-.184	-.044	.007	.533				
	[Third_D=3]	-.410	-.231	-.544	.566	.087	-.313	-.060				
	[Third_D=4]	-.588	.489	.288	-.470	-.676	.471	.628				
	[Third_D=6]	.143	-.374	-.342	-.536	-.734	-.011	-.094				
	[Third_D=7]	-.040	.055	-.410	-.334	.132	.655	-.311				
	[Third_D=9]	-.450	.186	.062	.580	-.644	-.160	-.205				
	D1	-.139	-.884	.157	-.612	.287	.234	.030				
	D2	.643	.245	-.106	.738	.869	.349	-.605				
	D3	-.259	.027	.139	.179	.463	-.325	-.833				
	D4	-.378	.313	-.841	.980	-.787	-.290	-.359				
	D5	-.260	.148	-.639	-.767	.147	-.668	-.147				
	D6	.065	-.238	-.085	-.034	-.256	-.145	.380				
	D7	-.035	-.325	-.007	-.308	-.099	-.096	-.285				
	D8	.216	-.170	-.082	-.446	.497	.023	-.126				
	D9	-.556	.699	-.298	-.851	-.558	-.192	1.162				
Hidden Layer	(Bias)								-.505	-.174	1.144	-1.026
1	H(1:1)								.050	-.608	1.311	-.060
	H(1:2)								-1.332	.147	-.226	.493
	H(1:3)								-.251	-.231	.754	-1.375
	H(1:4)								-.316	-1.682	1.183	.870
	H(1:5)								.801	-1.379	1.081	-.557
	H(1:6)								-1.776	-.045	.745	-.274
	H(1:7)								-.410	-.136	-1.016	.871

Classification

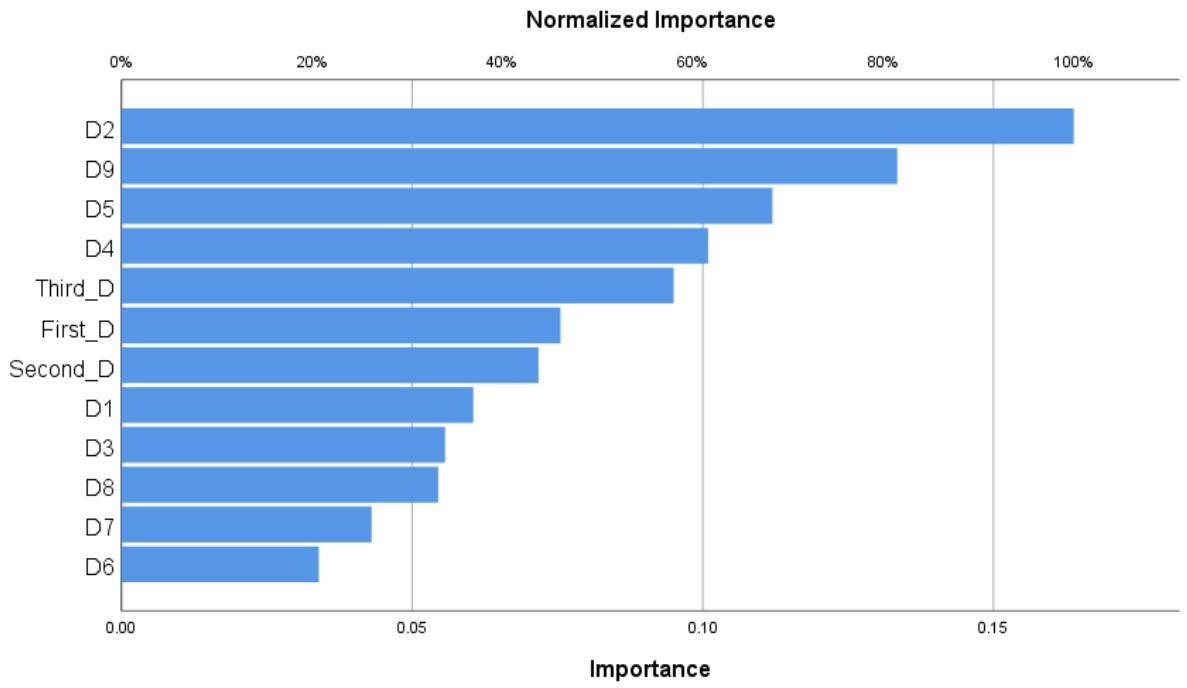
		Predicted				
Sample	Observed	worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	1	0	0	0	100.0%
	slightly worse	0	4	0	0	100.0%
	hasn't changed	0	0	6	0	100.0%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	8.3%	33.3%	50.0%	8.3%	100.0%
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	.076	46.1%
Second discourse in text	.072	43.8%
Third discourse in text	.095	58.0%
CONTACT RESTRICTION	.061	36.9%
SANITATION AND HYGIENE	.164	100.0%
ISOLATION OF INFECTED	.056	34.0%
TOTAL ISOLATION	.101	61.6%
HEALTH CARE	.112	68.3%
VIRUS DISSEMINATION	.034	20.7%
LIFESTYLE CHANGES	.043	26.3%
RIGHTS AND FREEDOMS INFRINGEMENT	.054	33.3%
BUREAUCRATIC RESPONSE	.133	81.5%



```
*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 16:01:23
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 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	00:00:00.48
	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

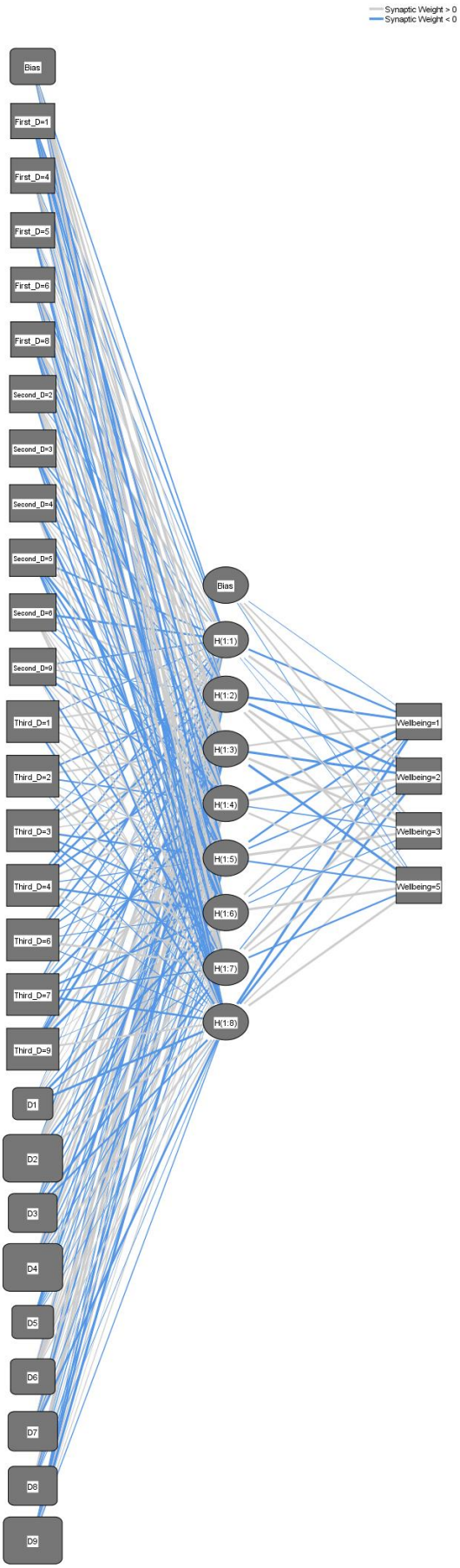
		N	Percent
Sample	Training	10	90.9%
	Testing	1	9.1%
Valid		11	100.0%
Excluded		93	
Total		104	

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]		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	.882
	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	.102
	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)	-.322	.235	.930	.800	.062	-.791	1.016	-.193				
	[First_D=1]	-.390	-.300	.437	-.723	-.451	.107	.648	-.770				
	[First_D=4]	-.088	.244	.452	.237	-.088	.410	-.249	.136				
	[First_D=5]	.034	-.068	.201	.010	-.008	.183	-.289	-.535				
	[First_D=6]	.377	-.363	.923	.622	-.008	-1.091	.485	-.125				
	[First_D=8]	.691	.658	-.156	-.541	.720	-.323	.326	-.766				
	[Second_D=2]	-.123	.021	.449	.411	.181	.365	.338	-.446				
	[Second_D=3]	.678	-.431	.428	.328	-.663	-.298	.136	-.466				
	[Second_D=4]	.281	-.247	.105	.358	-.086	-1.201	.258	.272				
	[Second_D=5]	-.531	.347	.328	-.859	-.605	-.085	-.347	-.469				
	[Second_D=6]	-.740	.633	-.089	-.290	.011	.308	.442	.539				
	[Second_D=9]	-.440	-.065	-.297	-.548	.337	.087	-.500	.148				
	[Third_D=1]	-.273	.486	.442	.312	.522	.336	.283	-.561				
	[Third_D=2]	.344	-.488	.643	-.374	-.018	.533	.553	-.028				
	[Third_D=3]	-.293	-.409	.833	.271	-.565	-.494	-.480	-.161				
	[Third_D=4]	-.449	-.696	-.647	.490	-.171	-.616	.561	-.131				
	[Third_D=6]	.501	-.631	-.051	-.382	-.097	-.149	.761	-.232				
	[Third_D=7]	-.372	.360	-.088	-.703	.742	-.554	-.358	-.645				
	[Third_D=9]	-.015	-.467	-1.060	1.062	-.926	.061	-.010	.518				
	D1	-.024	.050	.191	.040	-.132	-.748	-.145	-.830				

	D2	-.343	.796	1.605	.449	.392	-.602	-.039	.663			
	D3	-.005	-.229	.320	-.313	-.153	.012	-.738	-.572			
	D4	.349	.959	-.712	.853	-.277	.593	-.242	.703			
	D5	-.017	-.209	-.892	-.040	-.137	-.144	-.044	-.051			
	D6	.603	-.206	.397	.258	.754	.610	.137	.325			
	D7	-.324	.829	-.645	.218	.040	-.208	.286	-.688			
	D8	.988	.978	-.035	-.225	.086	-.241	-.022	-.061			
	D9	-.137	-.538	-.701	.339	-1.249	.054	.175	-.221			
Hidden Layer 1	(Bias)									-.082	.458	.566	-.090
	H(1:1)									-.583	1.015	-.014	-.013
	H(1:2)									-.775	-1.271	1.331	.731
	H(1:3)									.538	-.996	1.707	-1.105
	H(1:4)									-1.147	.832	-.253	.578
	H(1:5)									-.590	-.401	1.566	-.452
	H(1:6)									.677	-.182	-.214	1.064
	H(1:7)									-.226	1.075	.517	-.489
	H(1:8)									-1.271	-.792	.356	.802

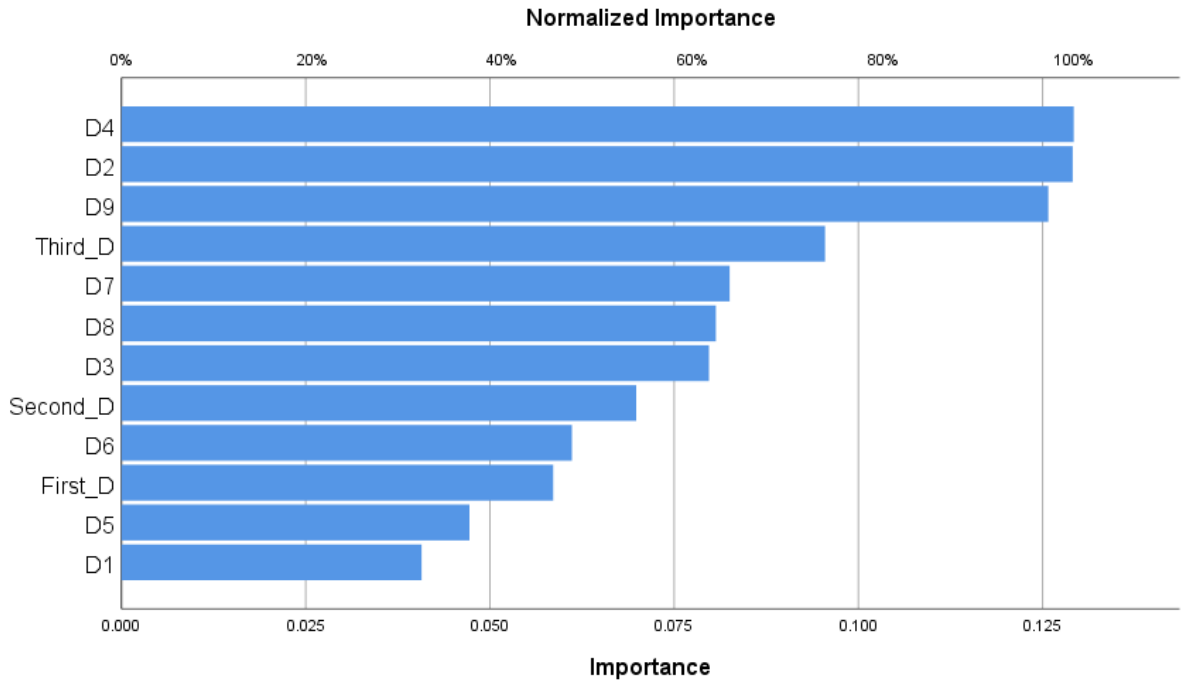
Classification

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	4	0	0	100.0%
	hasn't changed	0	0	3	0	100.0%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	20.0%	40.0%	30.0%	10.0%	100.0%
Testing	worsened significantly	0	0	0	0	0.0%
	slightly worse	0	0	0	0	0.0%
	hasn't changed	0	0	1	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	.059	45.3%
Second discourse in text	.070	54.1%
Third discourse in text	.095	73.9%
CONTACT RESTRICTION	.041	31.5%
SANITATION AND HYGIENE	.129	99.9%
ISOLATION OF INFECTED	.080	61.7%
TOTAL ISOLATION	.129	100.0%
HEALTH CARE	.047	36.5%
VIRUS DISSEMINATION	.061	47.3%
LIFESTYLE CHANGES	.083	63.9%
RIGHTS AND FREEDOMS INFRINGEMENT	.081	62.4%
BUREAUCRATIC RESPONSE	.126	97.3%




```
*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
```

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    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 16:01:37
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 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	00:00:00.44

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

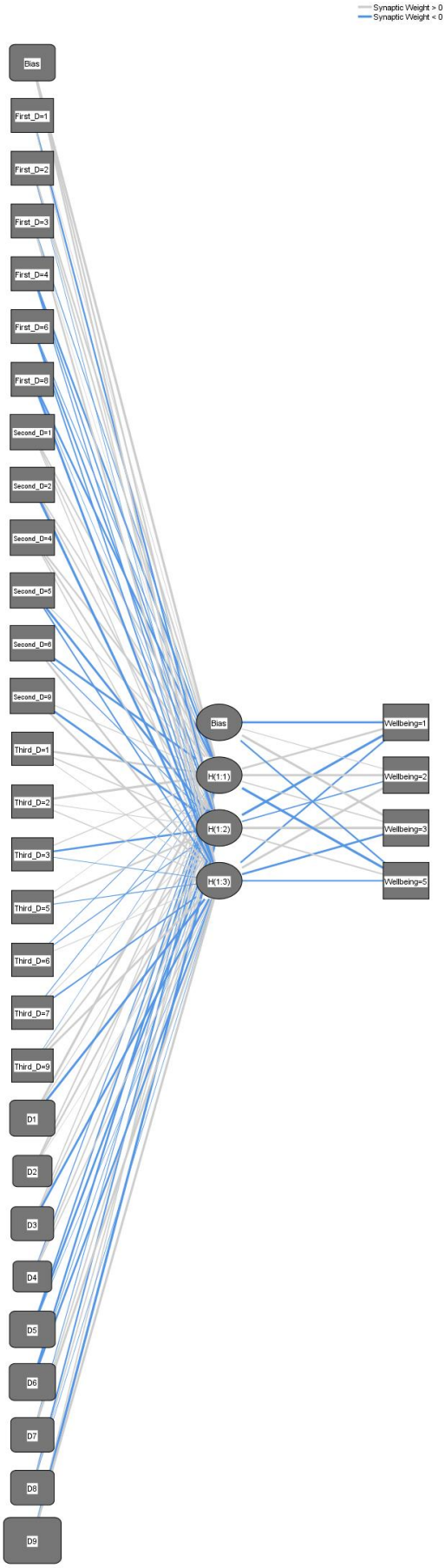
		N	Percent
Sample	Training	12	85.7%
	Testing	2	14.3%
Valid		14	100.0%
Excluded		90	
Total		104	

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]		28
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		3
	Activation Function		Hyperbolic tangent
Output Layer	Dependent Variables	1	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	7.514
	Percent Incorrect Predictions	16.7%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.204
	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)	[Wellbeing=1]	[Wellbeing=2]	[Wellbeing=3]	[Wellbeing=5]
Input Layer	(Bias)	1.191	.595	.596				
	[First_D=1]	.023	-.565	.225				
	[First_D=2]	.508	.457	-.028				
	[First_D=3]	-.141	.001	.669				
	[First_D=4]	-.624	-.357	-.209				
	[First_D=6]	-.101	-.467	-.365				
	[First_D=8]	-.634	-.007	-.987				
	[Second_D=1]	.454	.322	.217				
	[Second_D=2]	.360	.452	-1.394				
	[Second_D=4]	.580	.558	.276				
	[Second_D=5]	.191	-.974	-.407				
	[Second_D=6]	-.877	-.177	.784				
	[Second_D=9]	.175	-.924	.799				

	[Third_D=1]	.842	.341	.035				
	[Third_D=2]	1.240	.053	.242				
	[Third_D=3]	.183	-.754	-.035				
	[Third_D=5]	.033	.589	-.139				
	[Third_D=6]	-.041	-.168	.037				
	[Third_D=7]	-.090	.033	-.425				
	[Third_D=9]	-.003	.496	.862				
	D1	1.064	.152	-1.032				
	D2	.391	.610	.001				
	D3	.250	.381	-.887				
	D4	-.199	.387	.283				
	D5	-.465	-.819	-.022				
	D6	-.774	-.032	-.740				
	D7	-.105	.373	.953				
	D8	-.504	.327	-.023				
	D9	.259	-1.366	1.063				
Hidden Layer 1	(Bias)				-.899	.143	1.156	-.538
	H(1:1)				.781	1.034	.284	-1.823
	H(1:2)				-1.375	-.333	1.578	.433
	H(1:3)				-.559	1.045	-.854	-.386

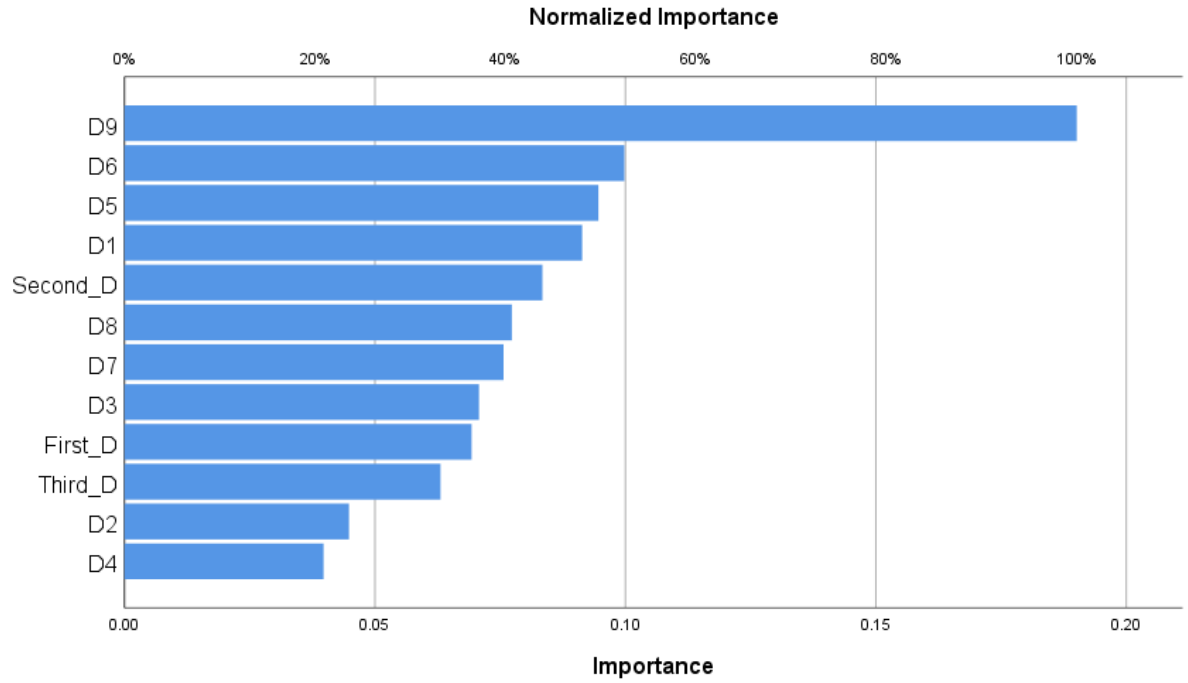
Classification

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	0	3	1	0	75.0%
	hasn't changed	0	0	5	0	100.0%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	8.3%	33.3%	50.0%	8.3%	83.3%
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	.069	36.5%
Second discourse in text	.083	43.9%
Third discourse in text	.063	33.2%
CONTACT RESTRICTION	.091	48.1%
SANITATION AND HYGIENE	.045	23.6%
ISOLATION OF INFECTED	.071	37.2%
TOTAL ISOLATION	.040	20.9%
HEALTH CARE	.095	49.8%
VIRUS DISSEMINATION	.100	52.5%
LIFESTYLE CHANGES	.076	39.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.077	40.7%
BUREAUCRATIC RESPONSE	.190	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 16:01:52
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 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	00:00:00.56
	Elapsed Time	00:00:00.57

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

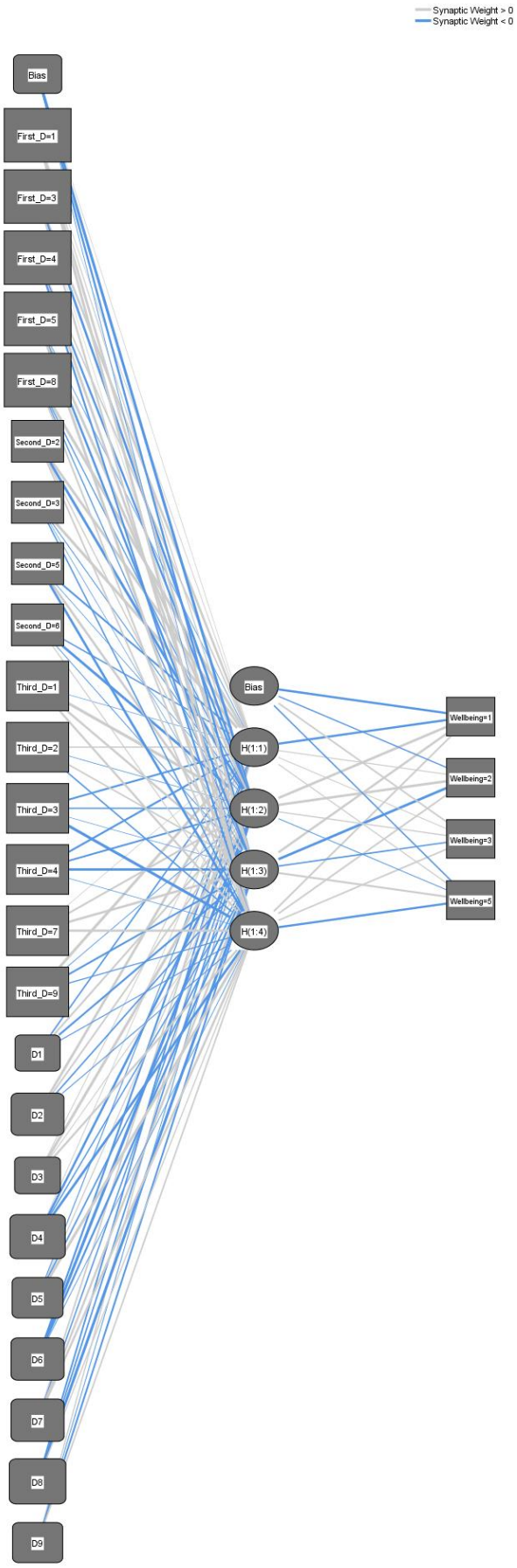
		N	Percent
Sample	Training	7	77.8%
	Testing	2	22.2%
Valid		9	100.0%
Excluded		95	
Total		104	

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]		24
	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	6.601
	Percent Incorrect Predictions	28.6%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.04
Testing	Cross Entropy Error	1.474
	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)	.035	-.860	-.516	-.065				
	[First_D=1]	.069	.141	.687	.818				
	[First_D=3]	.617	-.644	.007	.505				
	[First_D=4]	.284	-.514	.692	-.485				
	[First_D=5]	-.069	.800	-.570	.835				
	[First_D=8]	1.141	-.153	-.142	.391				
	[Second_D=2]	.771	-.811	.169	.341				
	[Second_D=3]	.962	-.113	-.021	-.232				
	[Second_D=5]	-.447	-.061	.647	-.695				
	[Second_D=6]	-.189	-.786	-.089	.131				
	[Third_D=1]	-.012	1.209	.617	.541				
	[Third_D=2]	.231	-.059	.324	-.271				
	[Third_D=3]	-.465	-.184	-.025	-.986				
	[Third_D=4]	-.502	-.391	-.703	-.038				
	[Third_D=7]	.056	.494	.665	.644				
	[Third_D=9]	.973	-.084	-.422	-.145				
	D1	-.280	.456	-.499	-.128				
	D2	.751	.363	-.283	-.116				
	D3	.104	.895	.108	.557				
	D4	.080	-.623	-.179	-.739				

	D5	-.121	.135	-.298	.827				
	D6	-.469	-1.166	-.508	-.076				
	D7	.323	-.229	.517	.577				
	D8	-.357	-.302	-.890	.156				
	D9	.157	-.086	-.395	.317				
Hidden Layer 1	(Bias)					-.585	-.165	.381	-.236
	H(1:1)					-.574	.131	.108	.146
	H(1:2)					.760	.709	.156	-.101
	H(1:3)					.638	-.769	-.269	.504
	H(1:4)					.408	.384	.336	-.558

Classification

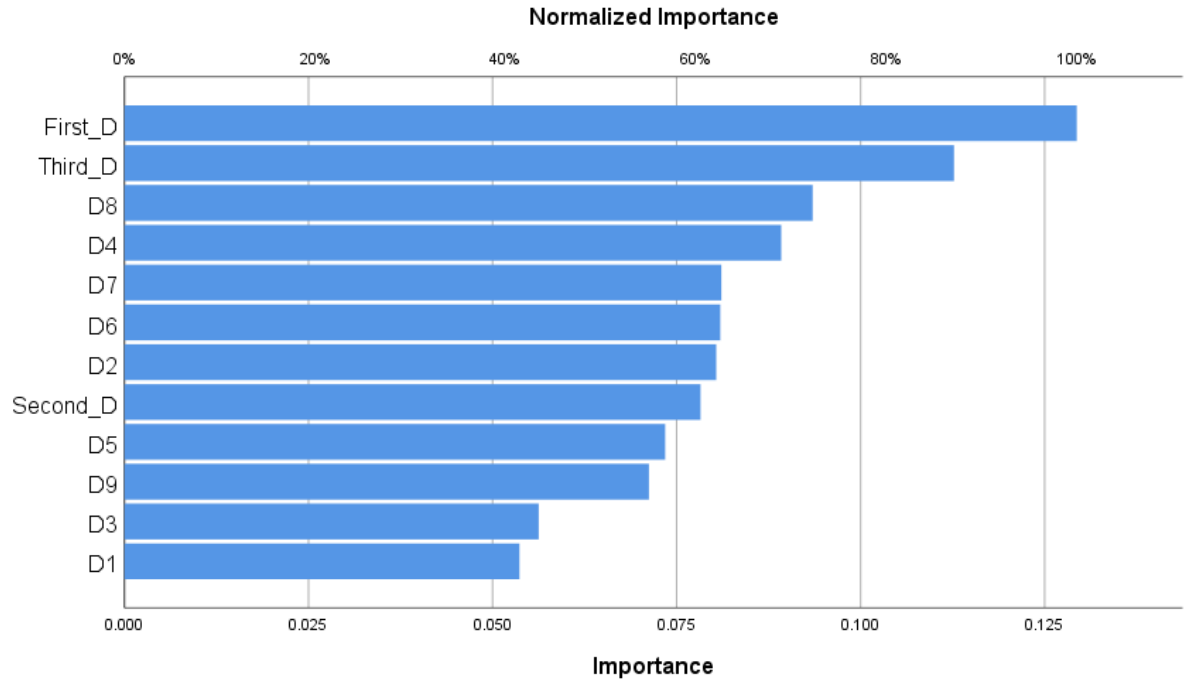
Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	1	0	0	0	100.0%
	slightly worse	0	1	1	0	50.0%
	hasn't changed	0	0	2	1	66.7%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	14.3%	14.3%	42.9%	28.6%	71.4%
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	.129	100.0%
Second discourse in text	.078	60.5%
Third discourse in text	.113	87.1%
CONTACT RESTRICTION	.054	41.5%
SANITATION AND HYGIENE	.080	62.1%

ISOLATION OF INFECTED	.056	43.5%
TOTAL ISOLATION	.089	69.0%
HEALTH CARE	.073	56.8%
VIRUS DISSEMINATION	.081	62.6%
LIFESTYLE CHANGES	.081	62.7%
RIGHTS AND FREEDOMS INFRINGEMENT	.093	72.3%
BUREAUCRATIC RESPONSE	.071	55.1%




```
*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 16:01:59
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 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	00:00:00.59
	Elapsed Time	00:00:00.58

Case Processing Summary

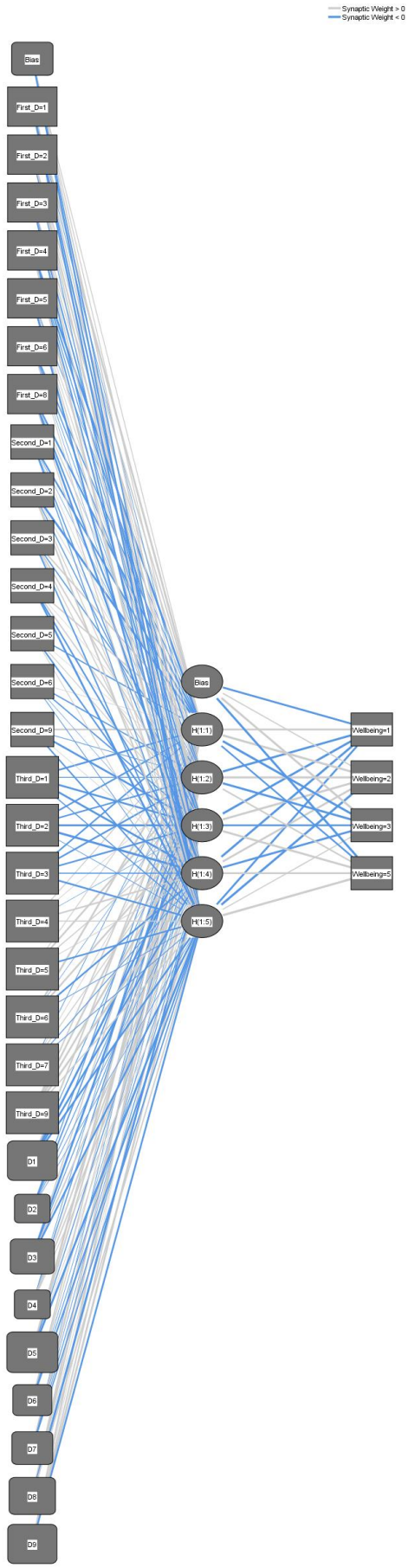
		N	Percent
Sample	Training	14	93.3%
	Testing	1	6.7%
Valid		15	100.0%
Excluded		89	
Total		104	

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]		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	.522
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	.001
	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)	.213	.228	.400	-.396	-.659				
	[First_D=1]	1.342	-.068	.403	-.524	-.792				
	[First_D=2]	.473	.137	.635	.485	-.177				
	[First_D=3]	.374	.277	-.498	.413	-.518				
	[First_D=4]	-1.079	-.521	-.213	-.513	.958				
	[First_D=5]	-.109	.102	.131	.286	-.796				
	[First_D=6]	-.322	-.282	-.067	-.003	.168				
	[First_D=8]	-.699	.240	-.574	-.943	.260				
	[Second_D=1]	-.669	-.029	.037	-.303	-.252				
	[Second_D=2]	-1.408	.055	-.260	.215	.657				
	[Second_D=3]	.486	-.351	.485	.272	-.475				
	[Second_D=4]	.469	.020	.399	-.577	-1.011				
	[Second_D=5]	-.391	.010	.206	-.579	.134				

	[Second_D=6]	.021	-.388	-.412	-.004	-.129				
	[Second_D=9]	.697	-.127	-.970	.039	-.524				
	[Third_D=1]	-.747	-.203	-.870	-1.023	-.285				
	[Third_D=2]	-.623	-.586	-1.072	-1.636	-.093				
	[Third_D=3]	-.589	-.685	-.664	-.323	-.742				
	[Third_D=4]	.249	.047	-.021	.618	.277				
	[Third_D=5]	.147	.778	.283	.097	-.664				
	[Third_D=6]	.914	-.031	.794	-.734	-.114				
	[Third_D=7]	-.102	.083	.253	-.202	-.162				
	[Third_D=9]	.445	.808	.923	1.093	.382				
	D1	.611	-.147	-1.089	-.857	-.932				
	D2	-.218	-.436	-.162	-.095	-.058				
	D3	.341	-1.305	-.163	.523	-.893				
	D4	-.058	-.281	.561	.448	.158				
	D5	1.617	.633	-.230	.052	-1.143				
	D6	.565	.260	-.040	-.151	-.602				
	D7	-.075	1.038	-.053	-.194	-.379				
	D8	.723	.715	.052	-1.420	.434				
	D9	.784	.033	.501	1.022	-.788				
Hidden Layer 1	(Bias)						-1.012	.385	1.532	-1.630
	H(1:1)						.853	1.871	-2.128	-.687
	H(1:2)						-1.541	1.482	-1.528	.623
	H(1:3)						-2.150	1.532	-.838	1.446
	H(1:4)						-1.816	1.034	-1.338	1.005
	H(1:5)						-1.024	-2.624	.295	2.905

Classification

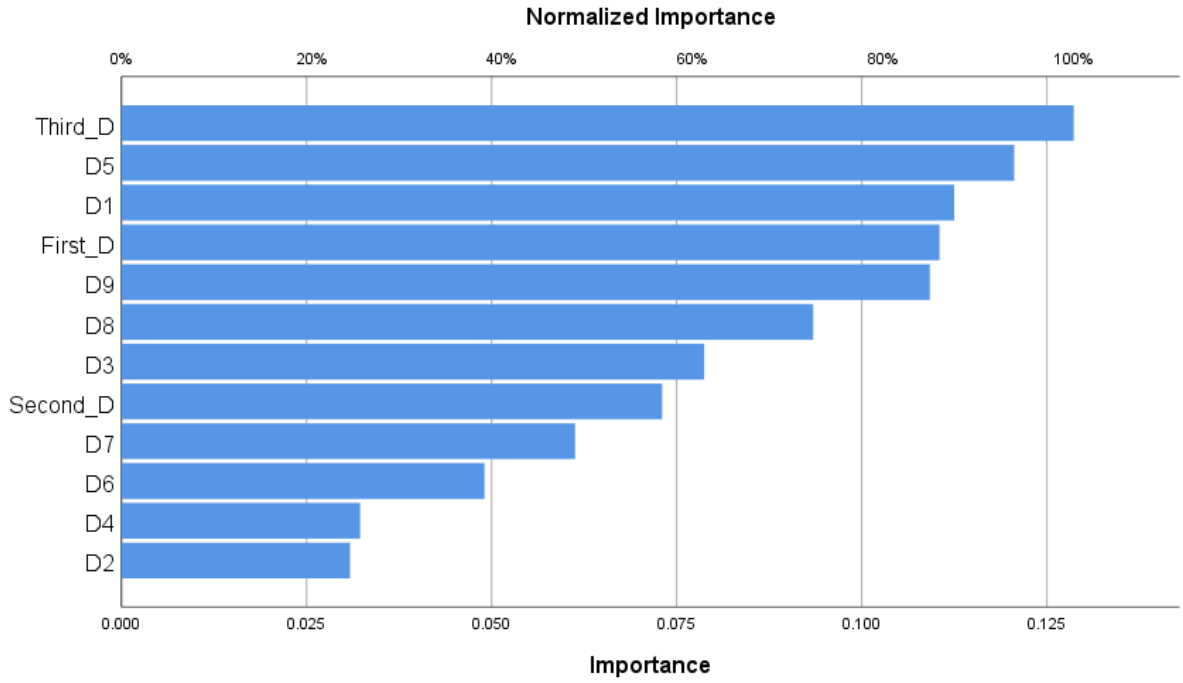
Sample	Observed	Predicted worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	2	0	0	0	100.0%
	slightly worse	0	5	0	0	100.0%
	hasn't changed	0	0	6	0	100.0%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	14.3%	35.7%	42.9%	7.1%	100.0%
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	.111	85.9%
Second discourse in text	.073	56.8%
Third discourse in text	.129	100.0%
CONTACT RESTRICTION	.112	87.4%
SANITATION AND HYGIENE	.031	24.0%
ISOLATION OF INFECTED	.079	61.2%
TOTAL ISOLATION	.032	25.1%
HEALTH CARE	.121	93.7%
VIRUS DISSEMINATION	.049	38.1%
LIFESTYLE CHANGES	.061	47.6%
RIGHTS AND FREEDOMS INFRINGEMENT	.093	72.6%
BUREAUCRATIC RESPONSE	.109	84.9%




```
*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 16:02:13
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 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	00:00:00.56
	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

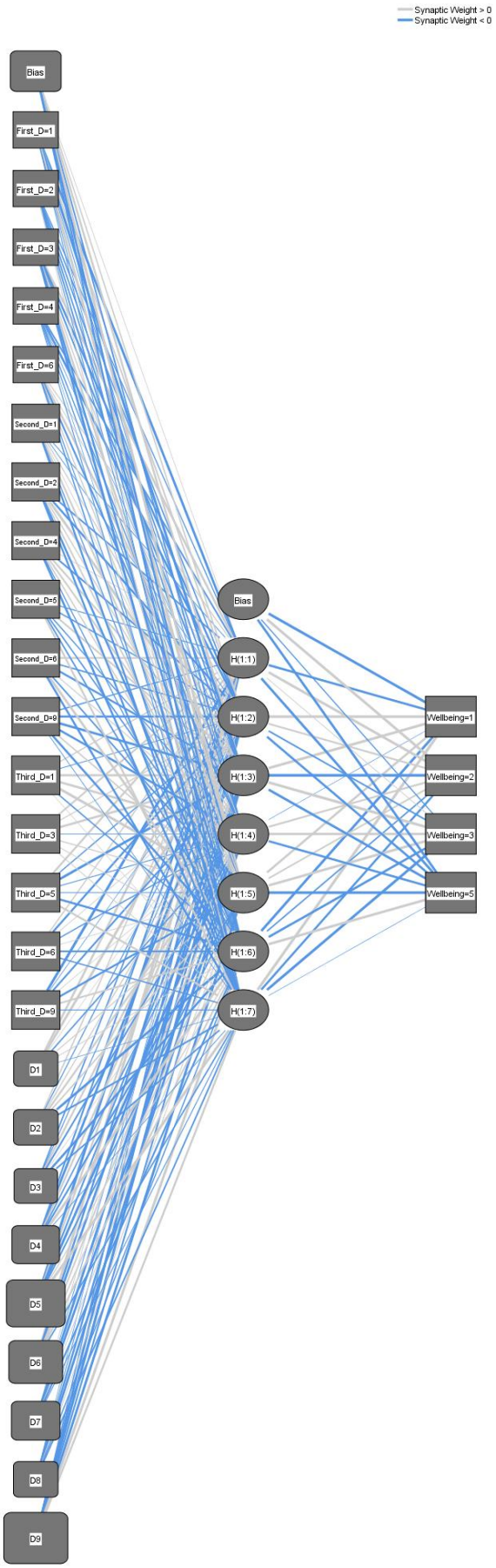
		N	Percent
Sample	Training	10	90.9%
	Testing	1	9.1%
Valid		11	100.0%
Excluded		93	
Total		104	

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]		25
	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	.755
	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	.080
	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)	.042	.227	.452	-.267	.666	-.463	-.360				
	[First_D=1]	-.658	.295	-.762	-.101	.747	-.068	-.113				
	[First_D=2]	-.173	-.223	-.237	-.247	-.255	-.114	.136				
	[First_D=3]	.501	-.424	-.283	.160	.470	-.437	-.631				
	[First_D=4]	-.282	-.523	-.040	-.194	-.183	-.001	-.125				
	[First_D=6]	.144	.070	.442	-.353	.191	-.135	-.220				
	[Second_D=1]	-.106	-.058	.174	.048	.323	-.155	-.404				
	[Second_D=2]	-.303	-.471	.729	.189	.257	-.456	-.399				
	[Second_D=4]	.052	-.339	.343	.320	.215	-.168	-.503				
	[Second_D=5]	-.133	-.217	.329	-.195	-.235	-.256	.387				
	[Second_D=6]	.368	-.255	-.402	.129	-.277	.654	-.458				
	[Second_D=9]	-.199	-.511	-.645	-.495	.251	-.518	-.066				
	[Third_D=1]	.210	-.100	.612	.538	1.170	-.233	.036				

	[Third_D=3]	.360	.159	.546	-.078	.179	.100	.096				
	[Third_D=5]	.414	-.200	-.723	-.121	-.108	-.477	.422				
	[Third_D=6]	.205	-.427	.059	-.201	.049	-.328	-.225				
	[Third_D=9]	-.896	-.043	-.356	.042	-.412	.336	-.118				
	D1	.526	.818	.023	-.245	.141	.099	-.026				
	D2	.231	-.153	.185	.405	.257	-.660	-.330				
	D3	-.242	-.119	.396	-.308	.016	-.536	-.297				
	D4	-.306	-.576	.395	-.225	-.358	.869	-.077				
	D5	-.990	.396	-.304	-.675	-.273	.138	.931				
	D6	.975	-.412	-.605	.274	.227	.329	-.249				
	D7	.054	-.067	-.668	-.561	.101	-.336	-.110				
	D8	-.040	-.107	-.401	-.613	.094	-.191	-.278				
	D9	-.203	-.700	-1.265	-.322	-.661	.777	.433				
Hidden Layer 1	(Bias)								-.962	1.154	-.188	-.688
	H(1:1)								-.576	.934	.083	-.708
	H(1:2)								1.344	.355	-.299	-.563
	H(1:3)								1.239	-2.949	1.377	-.696
	H(1:4)								-.018	.394	.695	-.526
	H(1:5)								.565	.300	.779	-1.583
	H(1:6)								-.802	-.251	-.607	.867
	H(1:7)								2.181	-.523	-1.125	-.012

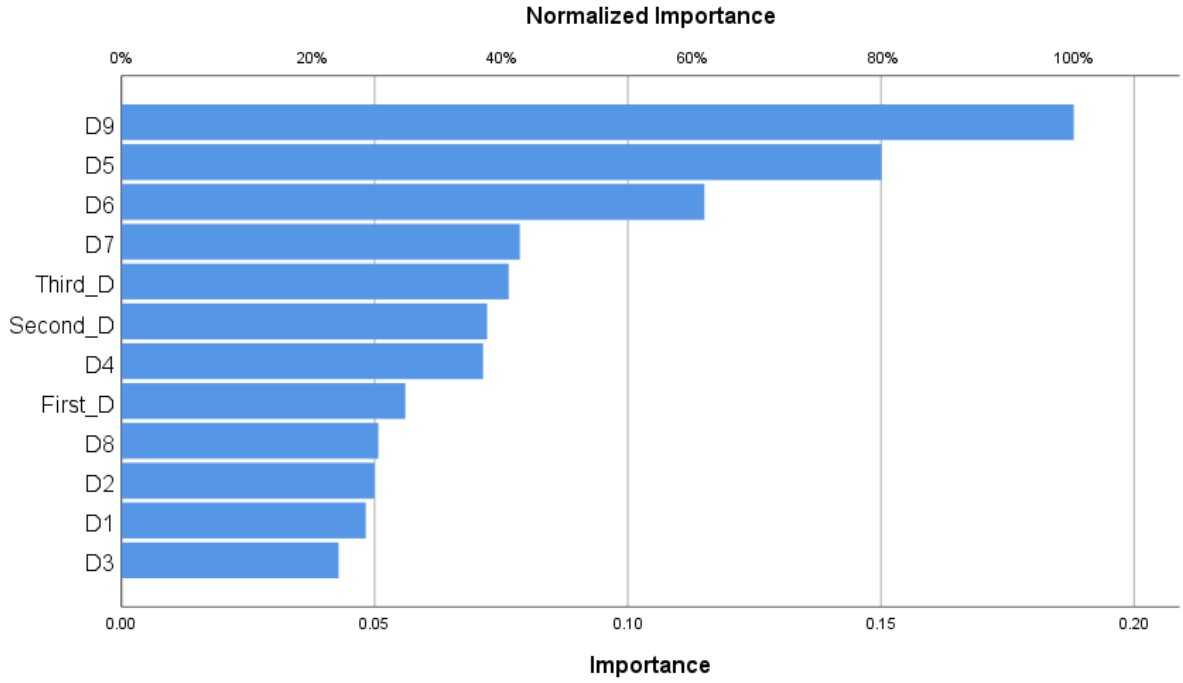
Classification

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	4	0	0	100.0%
	hasn't changed	0	0	4	0	100.0%
	improved significantly	0	0	0	1	100.0%
	Overall Percent	10.0%	40.0%	40.0%	10.0%	100.0%
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	.056	29.8%
Second discourse in text	.072	38.4%
Third discourse in text	.076	40.7%
CONTACT RESTRICTION	.048	25.7%
SANITATION AND HYGIENE	.050	26.6%
ISOLATION OF INFECTED	.043	22.8%
TOTAL ISOLATION	.071	38.0%
HEALTH CARE	.150	79.8%
VIRUS DISSEMINATION	.115	61.2%
LIFESTYLE CHANGES	.079	41.8%
RIGHTS AND FREEDOMS INFRINGEMENT	.051	27.0%
BUREAUCRATIC RESPONSE	.188	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 16:02:21
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 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	00:00:00.49

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

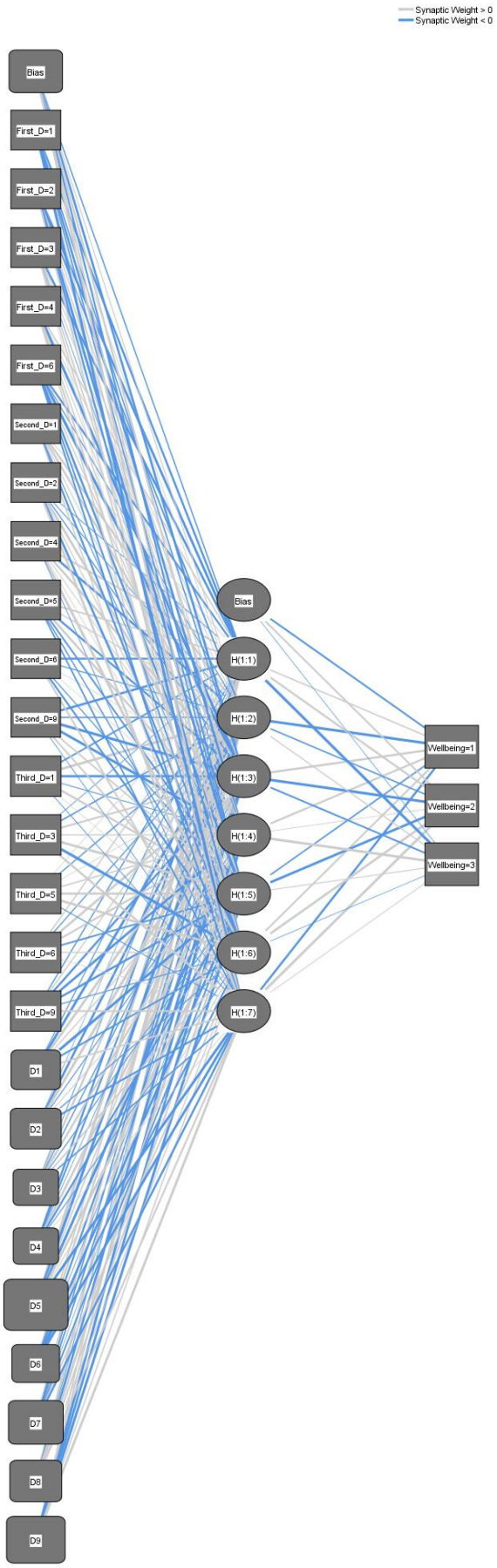
		N	Percent
Sample	Training	7	70.0%
	Testing	3	30.0%
Valid		10	100.0%
Excluded		94	
Total		104	

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	HEALTH CARE
		6	VIRUS DISSEMINATIO N
		7	LIFESTYLE CHANGES
		8	RIGHTS AND FREEDOMS INFRINGEMENT

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		25
	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		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	2.362
	Percent Incorrect Predictions	0.0%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.03
Testing	Cross Entropy Error	1.049
	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]
Input Layer	(Bias)	-.198	.132	-.499	.382	-.324	.247	.491			
	[First_D=1]	-.419	.051	-.203	-.509	-.234	.122	-.831			
	[First_D=2]	-.640	-.261	.176	.221	-.645	-.350	.310			
	[First_D=3]	-.510	.060	.139	-.056	.237	.241	.045			
	[First_D=4]	.224	.057	-.889	.063	.199	.331	.236			
	[First_D=6]	-.359	-.151	-1.016	.189	-.465	-.275	-.280			
	[Second_D=1]	.055	.441	.404	.112	-.119	-.368	.202			
	[Second_D=2]	-.113	-.114	-.172	.582	.158	-.492	.456			
	[Second_D=4]	.350	-.528	.500	.085	.046	.750	-.063			
	[Second_D=5]	.291	.189	-.395	.449	-.300	-.198	-.261			
	[Second_D=6]	-.358	-.159	.013	.007	-.161	-.347	.331			
	[Second_D=9]	-.539	-.214	-1.008	-.741	.257	.313	-.055			
	[Third_D=1]	-.275	.771	-.590	-.118	.442	.004	-.070			

	[Third_D=3]	-.063	-.235	.354	.189	.712	-1.047	.477			
	[Third_D=5]	.035	-.191	.022	.231	.562	.601	-.128			
	[Third_D=6]	.201	-.171	.545	.368	-.280	.175	.043			
	[Third_D=9]	-.193	.195	-.440	-.615	-.444	-.146	.306			
	D1	-.156	-.734	.708	.184	-.938	-.314	.277			
	D2	-.002	-.518	.768	-.143	.106	-.167	-.342			
	D3	-.090	.417	-.184	.425	-.156	.260	-.256			
	D4	-.387	-.302	-.050	.516	-.356	-.125	.029			
	D5	1.199	-1.017	.205	-.823	.711	.118	-.798			
	D6	.239	.357	-.343	-.054	-.605	-.343	-.685			
	D7	.714	-.225	-.259	-.012	-.272	.256	-.422			
	D8	.685	-.095	-.521	.633	.314	.150	.337			
	D9	.259	.282	-.837	-.639	-.748	.199	.679			
Hidden Layer	(Bias)								-.328	.333	-.033
1	H(1:1)								.226	.398	-1.094
	H(1:2)								-.930	-.231	.175
	H(1:3)								.473	-.935	-.322
	H(1:4)								.392	.051	.785
	H(1:5)								-.249	-.731	.131
	H(1:6)								.346	.531	-.041
	H(1:7)								-.481	.765	.080

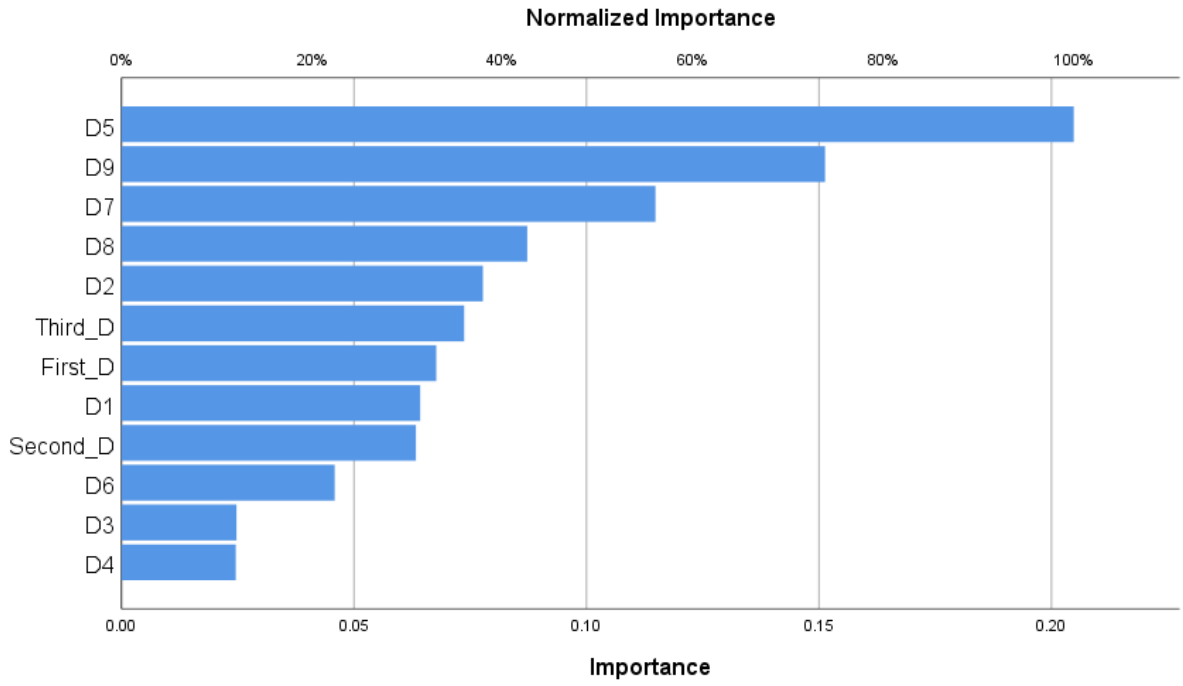
Classification

		Predicted			
Sample	Observed	worsened significantly	slightly worse	hasn't changed	Percent Correct
Training	worsened significantly	1	0	0	100.0%
	slightly worse	0	3	0	100.0%
	hasn't changed	0	0	3	100.0%
	Overall Percent	14.3%	42.9%	42.9%	100.0%
Testing	worsened significantly	0	0	0	0.0%
	slightly worse	0	2	0	100.0%
	hasn't changed	0	0	1	100.0%
	Overall Percent	0.0%	66.7%	33.3%	100.0%

Dependent Variable: Dynamics of well-being

Independent Variable Importance

	Importance	Normalized Importance
First discourse in text	.068	33.0%
Second discourse in text	.063	30.9%
Third discourse in text	.074	36.0%
CONTACT RESTRICTION	.064	31.4%
SANITATION AND HYGIENE	.078	38.0%
ISOLATION OF INFECTED	.025	12.1%
TOTAL ISOLATION	.025	12.0%
HEALTH CARE	.205	100.0%
VIRUS DISSEMINATION	.046	22.4%
LIFESTYLE CHANGES	.115	56.1%
RIGHTS AND FREEDOMS INFRINGEMENT	.087	42.6%
BUREAUCRATIC RESPONSE	.151	73.9%




```
*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 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 16:03:06
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 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	00:00:00.42

Case Processing Summary

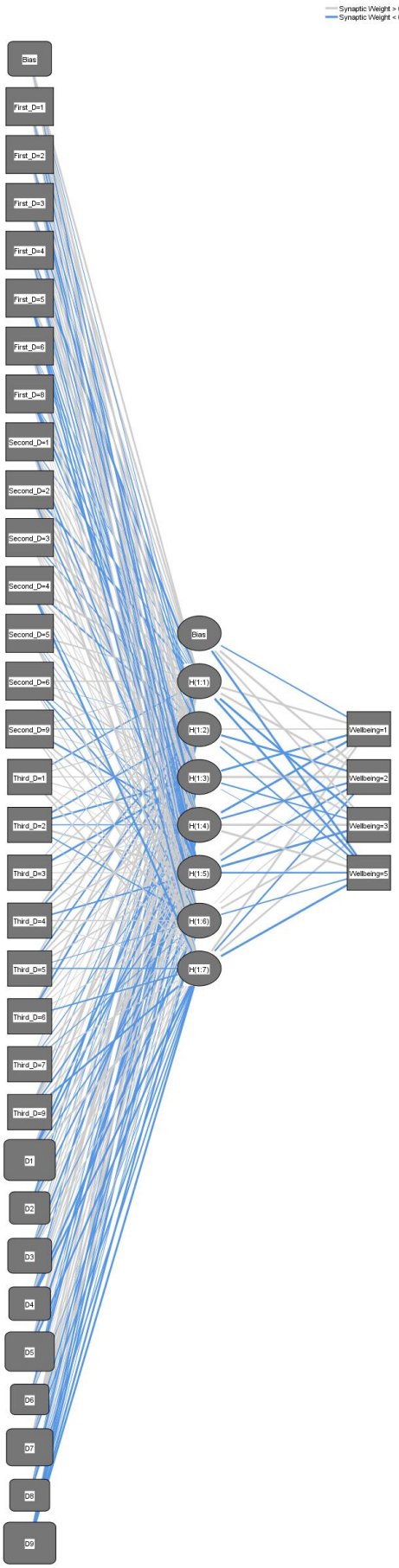
		N	Percent
Sample	Training	13	86.7%
	Testing	2	13.3%
Valid		15	100.0%
Excluded		89	
Total		104	

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	1.580
	Percent Incorrect Predictions	7.7%
	Stopping Rule Used	1 consecutive step(s) with no decrease in error[a]
	Training Time	0:00:00.01
Testing	Cross Entropy Error	.107
	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)	.603	-.085	1.051	.259	-.328	.427	.069				
	[First_D=1]	.744	-.287	.366	-.328	.061	-.100	.301				
	[First_D=2]	.327	-.225	.206	-.554	-.476	.461	.093				
	[First_D=3]	.324	-.400	.278	.284	-.346	-.061	.462				
	[First_D=4]	-1.046	.525	.424	.775	-.348	-.213	.127				
	[First_D=5]	.439	.087	.146	-.290	-.471	-.333	-.493				
	[First_D=6]	-.029	-.019	-.027	.207	-.477	.337	.540				
	[First_D=8]	-.121	-.279	-.698	-.220	.065	.028	.042				
	[Second_D=1]	-.142	.156	.316	.363	-.493	-.059	.611				
	[Second_D=2]	-.713	.404	.826	1.230	-.420	.207	.691				
	[Second_D=3]	.487	-.230	.619	.067	.193	.089	.100				
	[Second_D=4]	.995	-.472	.679	.005	.116	-.183	-.845				
	[Second_D=5]	.431	.288	.227	.182	-.061	.377	.473				

	[Second_D=6]	.344	-.008	.542	-.121	-.440	-.075	.185				
	[Second_D=9]	.248	-.109	.088	-.651	.589	.209	.311				
	[Third_D=1]	-.411	.221	.182	.198	.019	.604	.516				
	[Third_D=2]	.140	-.508	-.623	-.220	.834	-.290	.035				
	[Third_D=3]	-.011	.232	-.760	.094	.109	.056	.029				
	[Third_D=4]	.551	-.484	.525	.436	-.443	.328	.119				
	[Third_D=5]	.502	-.452	.563	.338	.415	-.100	-.300				
	[Third_D=6]	.567	-.676	.193	.343	.056	.157	-.380				
	[Third_D=7]	-.004	.034	.018	-.180	.353	-.142	.212				
	[Third_D=9]	.349	-.135	1.065	.195	-.362	.194	-.715				
	D1	.753	.116	-.763	-.595	.967	-.304	.884				
	D2	-.300	-.112	-.061	.310	-.426	.143	.131				
	D3	-.078	.154	.223	-.596	.624	-.139	.192				
	D4	-.296	-.042	1.286	.171	-.004	-.748	-.741				
	D5	1.089	.269	.026	-.841	.130	.058	-.654				
	D6	-.114	-.336	-.606	.110	.018	.071	-.075				
	D7	.585	.182	.548	.824	-.355	.514	-.357				
	D8	-.021	-.179	-.502	.230	-.069	-.103	-.361				
	D9	.595	-.603	-.327	-1.031	-.070	-.728	-.756				
Hidden Layer 1	(Bias)								-.354	1.250	.618	-1.200
	H(1:1)								.728	1.377	-1.863	-1.421
	H(1:2)								.275	-.776	.841	-.465
	H(1:3)								-.903	1.125	-.373	-.027
	H(1:4)								-2.365	-.640	2.663	1.006
	H(1:5)								2.282	-.660	-1.271	-.473
	H(1:6)								.017	.172	.703	-.329
	H(1:7)								.881	-.504	.698	-1.237

Classification

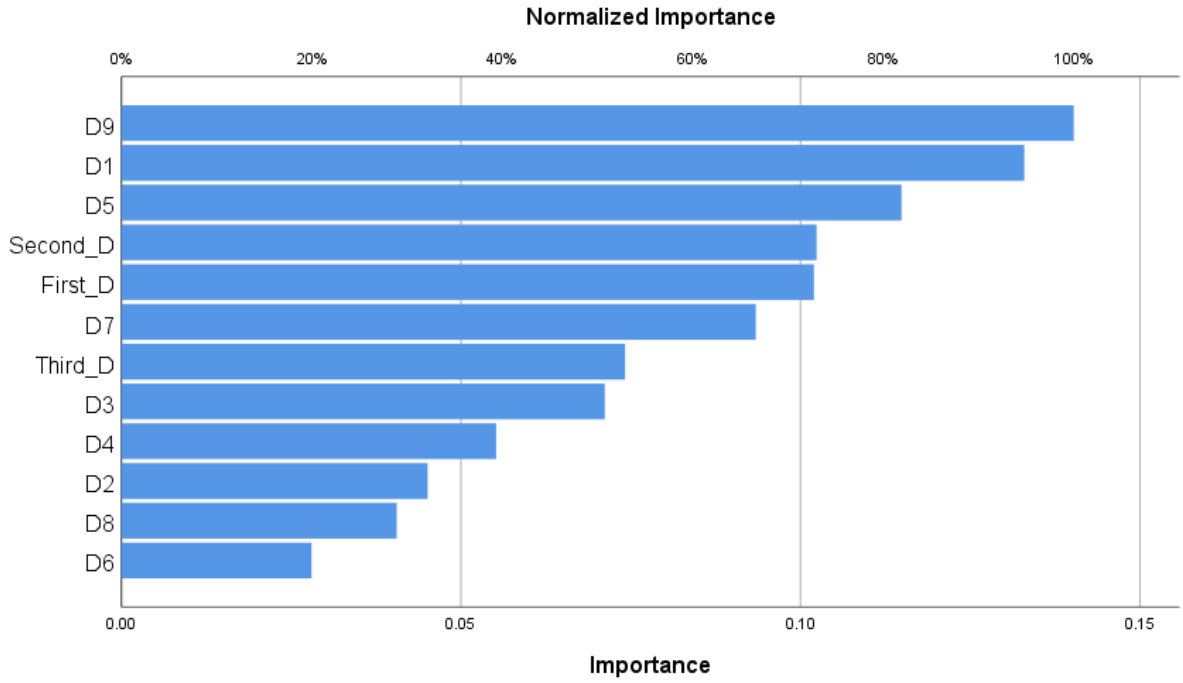
		Predicted				
Sample	Observed	worsened significantly	slightly worse	hasn't changed	improved significantly	Percent Correct
Training	worsened significantly	2	0	0	0	100.0%
	slightly worse	0	5	0	0	100.0%
	hasn't changed	0	0	5	0	100.0%
	improved significantly	0	0	1	0	0.0%
	Overall Percent	15.4%	38.5%	46.2%	0.0%	92.3%

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	.102	72.7%
Second discourse in text	.102	73.0%
Third discourse in text	.074	52.9%
CONTACT RESTRICTION	.133	94.8%
SANITATION AND HYGIENE	.045	32.1%
ISOLATION OF INFECTED	.071	50.7%
TOTAL ISOLATION	.055	39.3%
HEALTH CARE	.115	81.9%
VIRUS DISSEMINATION	.028	20.0%
LIFESTYLE CHANGES	.093	66.6%
RIGHTS AND FREEDOMS INFRINGEMENT	.041	28.9%
BUREAUCRATIC RESPONSE	.140	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 16:03:20
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 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	00:00:00.50

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

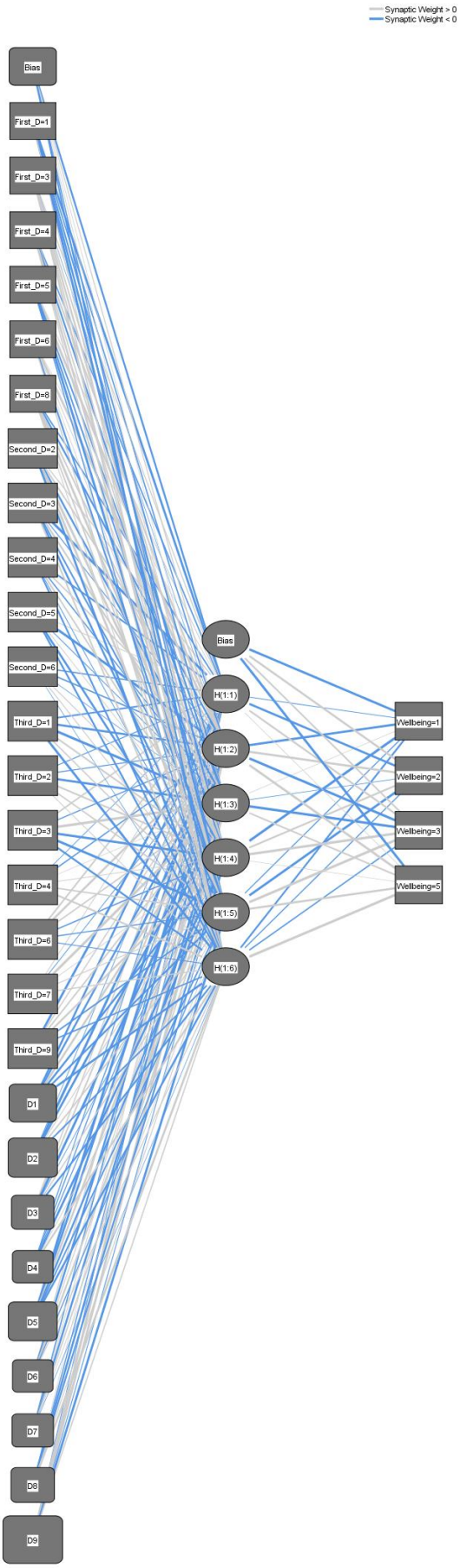
		N	Percent
Sample	Training	10	83.3%
	Testing	2	16.7%
Valid		12	100.0%
Excluded		92	
Total		104	

Network Information

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

		9	BUREAUCRATIC RESPONSE
	Number of Units[a]		27
	Rescaling Method for Covariates		Standardized
Hidden Layer(s)	Number of Hidden Layers		1
	Number of Units in Hidden Layer 1[a]		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	3.091
	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	.616
	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)	-.447	.157	.009	.021	-.198	-.349				
	[First_D=1]	-.599	-.236	-.328	-.478	-.708	.136				
	[First_D=3]	.159	-.008	.271	.470	.265	.486				
	[First_D=4]	-.254	.363	-.390	.254	.508	.208				
	[First_D=5]	.115	.740	-.300	-.296	-.657	-.191				
	[First_D=6]	.029	.644	.074	.032	-.403	.209				
	[First_D=8]	-.265	-.422	.334	.673	.292	.131				
	[Second_D=2]	.158	.312	-.454	.731	.632	-.546				
	[Second_D=3]	-.846	-.132	.363	-.344	-.474	.337				
	[Second_D=4]	-.356	.263	-.214	.303	-.091	-.367				
	[Second_D=5]	.086	-.838	-.117	.073	-.514	-.424				
	[Second_D=6]	-.230	-.261	-.029	.137	.144	-.018				
	[Third_D=1]	-.346	-.504	-.925	.355	.240	-.679				
	[Third_D=2]	-.148	-.154	-.634	.368	.286	.106				
	[Third_D=3]	.304	-.193	.991	-.703	-.804	-.457				
	[Third_D=4]	-.074	-.236	.004	.085	.287	.384				
	[Third_D=6]	.351	.525	.272	-.221	-.186	-.131				
	[Third_D=7]	.102	-.102	1.182	.048	.135	.194				
	[Third_D=9]	-.654	.203	.292	.469	-.294	-.261				

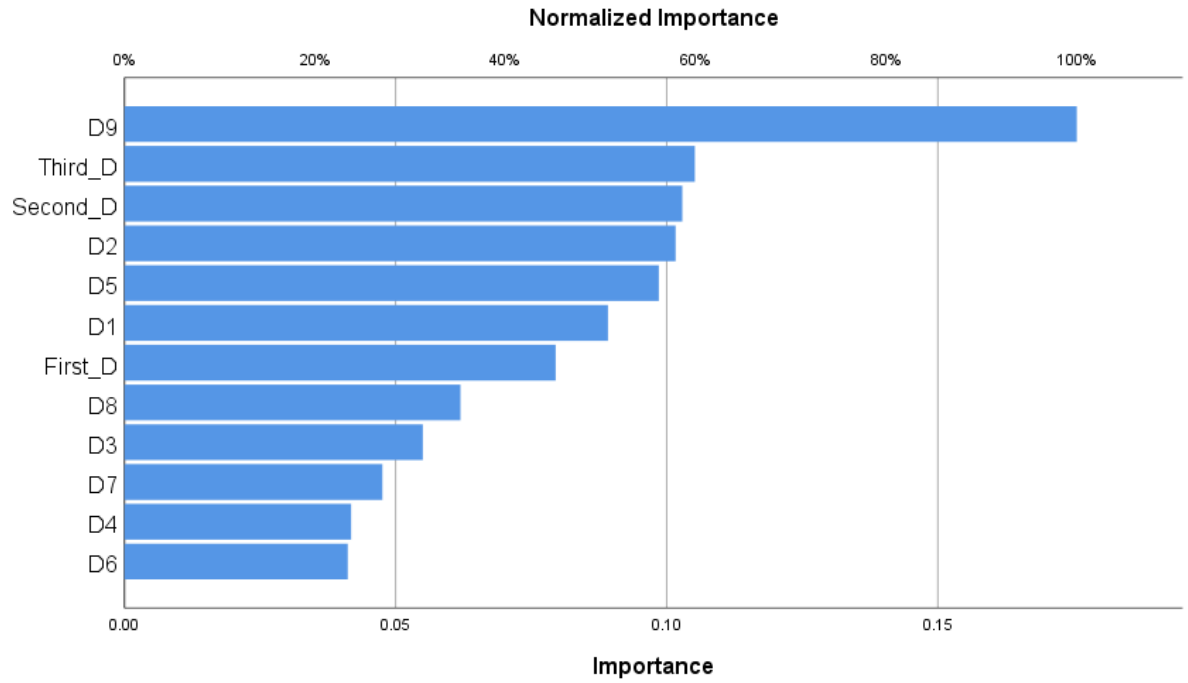
	D1	-.499	-.478	.521	-.488	-.440	-.565				
	D2	-.068	-.770	-.603	.117	.290	-.328				
	D3	.200	.330	-.714	-.059	.196	-.407				
	D4	-.139	-.164	-.146	-.569	.059	.452				
	D5	-.896	-.575	.493	-.424	-.284	-.472				
	D6	.189	-.478	.128	.403	-.169	.157				
	D7	-.231	.081	-.499	.262	.057	-.011				
	D8	.013	-.193	-.498	-.371	.131	.545				
	D9	-.120	1.194	.761	-.126	-.642	.217				
Hidden Layer 1	(Bias)							-.704	.519	.355	-.779
	H(1:1)							-.089	-.573	.429	.021
	H(1:2)							-.642	.587	-1.018	.680
	H(1:3)							.009	-.024	-1.067	.345
	H(1:4)							-.987	.426	1.139	.002
	H(1:5)							-.182	-.730	1.430	.521
	H(1:6)							-.417	-.190	-.261	1.262

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	0	0	100.0%
	hasn't changed	0	0	5	0	100.0%
	improved significantly	0	1	0	0	0.0%
	Overall Percent	10.0%	40.0%	50.0%	0.0%	90.0%
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	.080	45.3%
Second discourse in text	.103	58.6%
Third discourse in text	.105	59.9%
CONTACT RESTRICTION	.089	50.8%
SANITATION AND HYGIENE	.102	57.9%
ISOLATION OF INFECTED	.055	31.3%
TOTAL ISOLATION	.042	23.8%
HEALTH CARE	.099	56.1%
VIRUS DISSEMINATION	.041	23.4%
LIFESTYLE CHANGES	.048	27.1%
RIGHTS AND FREEDOMS INFRINGEMENT	.062	35.3%
BUREAUCRATIC RESPONSE	.176	100.0%