

**RESEARCH ARTICLE**

## Factors associated with knowledge, attitudes, and practices of the general Lebanese population toward the coronavirus disease-19

### Supplementary File

**Table S1. Principal component analysis of the knowledge scale**

Factor	Item	Promax rotated matrix of knowledge								H2 communalities
		C1	C2	C3	C4	C5	C6	C7	C8	
What are the steps to take to protect yourself? Wash your hands with soap and water for at least 20 s	4 (Answer 2)	0.741								0.608
For how long should you wash your hands	17	0.703								0.512
What are the steps to take to protect yourself? Wear a facemask and stay home if you have any respiratory symptom	4 (Answer 4)	0.640								0.595
What are the steps to take to protect yourself? Avoid close contact; put distance between yourself and other people (1.5-2 meters)	4 (Answer 3)	0.623								0.545
Which of the following is true about COVID-19? Most common signs and symptoms include fever, diarrhea, and dyspnea.	1 (Answer 3)	0.545								0.415
Mode of transmission of coronavirus. Close contact with people who have the virus.	15 (Answer 2)		0.862							0.754
Mode of transmission of coronavirus. Contact with contaminated surfaces.	15 (Answer 3)		0.779							0.677
For how long should a person be isolated in case of COVID-19 infection suspicion (mild symptoms or contact with an infected persons)?	2		0.499							0.598
Which of the following is true about COVID-19? Person to person transmission can occur by droplets	1 (Answer 1)			0.787						0.638
Mode of transmission of coronavirus. Air droplets (from patient sneezing/coughing)	15 (Answer 1)			0.737						0.655

(Cont'd...)

**Table S1. (Continued)**

Factor	Item	Promax rotated matrix of knowledge								H2 communalities
		C1	C2	C3	C4	C5	C6	C7	C8	
Who are the people most vulnerable to COVID-19? Elderly	10 (Answer 1)			0.457						0.626
Is coronavirus the same as the common flu?	13				0.712					0.604
Who are the people most vulnerable to COVID-19? People with underlying illness and co-morbidities	10 (Answer 2)				0.674					0.538
Which of the following is true about COVID-19? Transmission can be airborne	1 (Answer 2)					0.737				0.598
Can a person infected with coronavirus get infected a second time?	18					-0.618				0.571
Which of the diseases below are due to coronavirus? Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)	12 (Answer 2)					0.497				0.435
Which of the diseases below are due to coronavirus? Severe acute respiratory syndrome (SARS)	12 (Answer 4)						0.727			0.645
Do you think you should avoid contact with pets or other animals if you are sick with COVID-19?	9						-0.661			0.596
Can someone who has been quarantined for COVID-19 spread the illness to others?	3						0.491			0.508
What are the most common symptoms related to COVID-19?	11							0.821		0.637
Is hand washing important?	16							0.627		0.582
Can a person test negative and later test positive for COVID-19?	5								0.818	0.637
Percentage variance explained		15.891%	7.979%	6.754%	6.169%	6.064%	5.411%	5.146%	5.006%	
Cronbach alpha=0.626; Total variance explained: 58.38%										
Kaiser–Meyer–Olkin (KMO) = 0.678										
Bartlett’s test of sphericity $P < 0.001$										

Component 1: Preventive measure, Component 2 and Component 3: Mode of virus transmission, Component 4, Component 5 and Component 6: General knowledge, Component 7 and Component 8: Knowledge regarding symptoms and preventive measure.

**Table S2. Component correlation matrix of the knowledge scale**

Component	1	2	3	4	5	6	7	8
1	1.000	0.117	0.305	0.254	0.018	0.100	0.280	-0.088
2	0.117	1.000	0.107	0.130	0.084	-0.061	0.006	-0.043
3	0.305	0.107	1.000	0.056	0.067	-0.008	0.118	0.115
4	0.254	0.130	0.056	1.000	-0.004	0.065	0.006	0.053
5	0.018	0.084	0.067	-0.004	1.000	0.043	-0.047	0.059
6	0.100	-0.061	-0.008	0.065	0.043	1.000	-0.028	-0.067
7	0.280	0.006	0.118	0.006	-0.047	-0.028	1.000	-0.131
8	-0.088	-0.043	0.115	0.053	0.059	-0.067	-0.131	1.000

Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization

**Table S3. Principal component analysis of the attitude scale**

Promax rotated matrix of attitude				
Components	Item	Component 1	Component 2	H2 communalities
Do you think social distancing/self-isolation is an effective measure to reduce the spread of COVID-19?	1	0.776		0.603
Keeping up with the information regarding the government's call for COVID-19 preventive efforts is important for the community	4	0.746		0.567
People with COVID-19 who isolate themselves show that they have a responsibility in preventing the transmission of COVID-19	6	0.676		0.515
Do you think that regular hand washing, maintaining social distancing and use of masks can protect you from coronavirus?	2	0.587		0.419
Do you think lockdown will be helpful in controlling the coronavirus disease?	3		0.521	0.603
People with COVID-19 should not be stigmatized in society	5		0.803	0.686
Percentage variance explained		39.18%	17.37%	
Cronbach alpha=0.615; Total variance explained: 56.55%				
Kaiser-Meyer-Olkin (KMO) = 0.719				
Bartlett's test of sphericity P<0.001				

Component 1: behavioral attitude, Component 2: community attitude

**Table S4: Component Correlation Matrix of the attitude scale**

Component	1	2
1	1.000	0.009
2	0.009	1.000

Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization

**Table S5. Principal component analysis of the practice scale**

Promax rotated matrix of practice scale						
Factor	Item	C 1	C 2	C3	C4	H2 communalities
Do you stay at home when it is requested by the government	15	0.869				0.638
Do you avoid shaking hands	14	0.857				0.716
Do you obey all government rules related to the COVID?	10	0.853				0.696
Do you maintain social distance (or home quarantine)?	8	0.769				0.662
Do you avoid touching face and eyes?	7	0.742				0.685
Do you avoid groups	13	0.711				0.720
Do you avoid contact with people at risk	12	0.608				0.614
Do you Clean/disinfect mobile phone	11	0.465				0.549
Do you use tissues or cover your mouth during coughing/ sneezing?	5		0.884			0.624
In the last few days, have you worn a mask when you were in a crowded place?	1		0.793			0.742
In the last few days, have you washed your hands with soap after going to a crowded place?	4		0.711			0.661
In the last few days, have you implemented physical distancing when you were in the crowd?	2		0.685			0.641
Do you replace the face mask after a single use	6		0.649			0.536
In the last few days, have you used hand sanitizer when you were in crowded places?	3		0.596			0.677
Do you stay at home with symptoms	16		0.552			0.689
A person with COVID-19 should not be allowed to work with other people	22			0.827		0.700
Families of people living with COVID-19 should be isolated	23			0.732		0.570
People with COVID-19 should be isolated and cannot actively participate in the social events in this community	21			0.729		0.542
It is reasonable for an employer to exclude/isolate a person with COVID-19.	24			0.647		0.394
Even if you only had to speak to a person with COVID-19, you would wear a mask to prevent infection	18			0.469		0.399
You are not against serving persons with COVID-19, but would try your best not to get too close to them	20				0.806	0.596
For reasons of general safety, you think you should not get near a person with COVID-19.	19				0.746	0.660
If a friend or relative of yours were to have frequent contact with people with COVID-19, you prefer not to meet him/her	17				0.491	0.385
Percentage variance explained		37.0768%	12.531%	6.058%	4.926%	
Cronbach alpha=0.899; total variance explained: 61.28%						
Kaiser–Meyer–Olkin (KMO) = 0.915						
Bartlett’s test of sphericity P<0.001						

Component 1: protective measures, Component 2: preventive measure, Component 3: Safety measure, Component 4: avoiding measure

Table S6. Component correlation matrix

Component	1	2	3	4
1	1.000	0.666	0.162	0.042
2	0.666	1.000	0.140	0.104
3	0.162	0.140	1.000	0.304
4	0.042	0.104	0.304	1.000

Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization

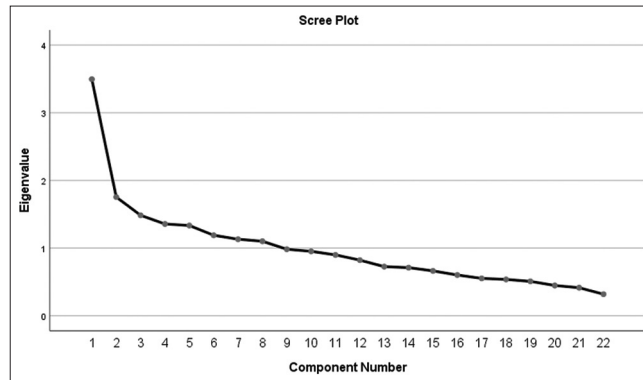


Figure S1. Scree plot of the knowledge scale

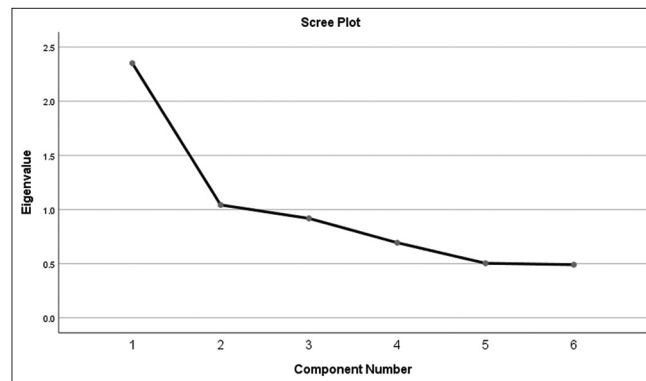


Figure S2. Scree plot of the attitude scale

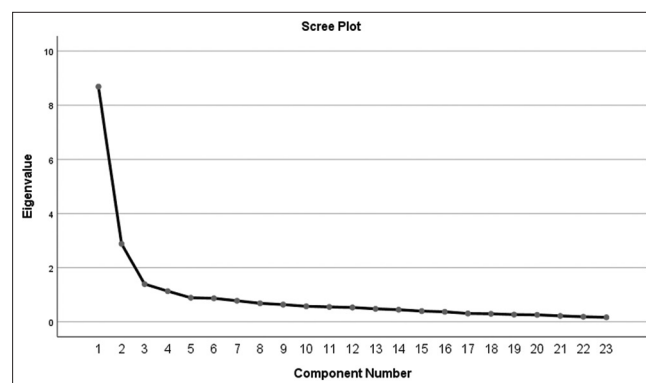


Figure S3. Scree plot of the practice scale