Series of PCA for Covid-19 study

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1 Summary

I reran all EFAs using the reduced sample (N=1361). The factor structures were the same, however, there were some minor differences in the item loadings.
1. PCA on Coping, adaptability, resilience, personality, and others.
Same 6 factors with minor differences in item loadings
- PC2 distraction (+) and acceptance (+) also load
- PC3 acceptance (+) also loads
- PC4 coping_denial (+) also loads
- PC5 emotionsupp (+) also loads
- PC6 cope_religion (-) loads instead of cope_reframing (+)
2. PCA on coping
- PC4 distraction (+) also loads
3. Reason
- PC1 item 2 (-) also loads
- PC3 item 1 (+) also loads

Also, there were a few minor differences and potential issues:
4. For the coping variables, I had to use PCA not FA using PAF (poor fit).
5. For the opinion variables, should items 5, 6, or 10 be reverse coded? When I calculate Cronbach's Alpha it says these items are negatively correlated with the total scale.

Table 1
Correlations between variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1. cope_distraction																											
2. cope_active	.23**																										
3. cope_denial	.12**	.03																									
4. cope_substance	.10**	.01	.24**																								
5. cope_emotsupp	.20**	.27**	.14**	.18**																							
6. cope_instrsupp	.30**	.27**	.18**	.14**	.74**																						
7. cope_disengage	.08**	-.11**	.39**	.32**	.15**	.21**																					
8. cope_venting	.23**	.10**	.30**	.24**	.43**	.48**	.37**																				
9. cope_reframing	.23**	.42**	.07**	.01	.24**	.22**	-.06*	.11**																			
10. cope_planning	.29**	.52**	.07*	.06*	.36**	.40**	.04	.29**	.39**																		
11. cope_humor	.15**	.05	.09**	.18**	.13**	.11**	.11**	.22**	.23**	.10**																	
12. cope_acceptance	.17**	.29**	-.23**	-.07**	.12**	.05	-.21**	-.06*	.29**	.26**	.11**																
13. cope_religion	.05	.21**	.11**	-.05	.14**	.22**	.04	.14**	.24**	.18**	-.03	.02															
14. cope_selfblame	.17**	-.02	.32**	.29**	.27**	.32**	.50**	.49**	.05	.25**	.17**	-.14**	.06*														
15. extraversion	.07**	.15**	.06*	.13**	.19**	.15**	-.02	.07**	.16**	.08**	.05	.02	.07*	-.04													
16. agreeableness	.18**	.15**	-.05	-.01	.25**	.21**	-.10**	.07*	.16**	.11**	-.06*	.11**	.04	-.01	.37**												
17. conscientious	-.03	.18**	-.10**	-.15**	-.06*	-.09**	-.27**	-.20**	.13**	.05	-.16**	.12**	.08**	-.23**	.02	.09**											
18. neuroticism	.17**	-.10**	.16**	.16**	.20**	.20**	.32**	.34**	-.06*	.06*	.01	-.11**	-.02	.40**	-.09**	.05	-.24**										
19. intellect	.10**	.12**	-.11**	-.02	.12**	.09**	-.08**	.07**	.11**	.16**	.06*	.14**	.02	.01	.13**	.23**	-.02	.01									
20. resilience	.01	.29**	-.08**	-.10**	-.02	-.06*	-.36**	-.21**	.28**	.14**	.06*	.24**	.06*	-.32**	.26**	.12**	.31**	-.51**	.14**								
21. adaptability_crisis	-.06*	.22**	-.09**	-.03	-.03	-.06*	-.20**	-.17**	.15**	.12**	.01	.20**	.05	-.22**	.22**	.06*	.23**	-.34**	.11**	.60**							
22. adaptability_uncertainty	-.06*	.21**	-.15**	-.06*	-.05	-.09**	-.28**	-.21**	.16**	.09**	.01	.22**	.00	-.28**	.26**	.16**	.18**	-.44**	.20**	.64**	.68**						
23. conservatism	-.02	.11**	.10**	-.08**	-.09**	-.10**	-.08**	-.13**	.10**	.00	-.05	-.01	.13**	-.15**	.10**	-.07*	.14**	-.13**	-.16**	.19**	.14**	.05					
24. reactance	-.03	-.06*	.18**	.18**	.00	-.01	.24**	.19**	-.01	.02	.14**	-.11**	-.02	.17**	.02	-.21**	-.23**	.16**	.02	-.07*	-.01	-.07**	.02				
25. gov_trust	-.07*	.03	-.02	-.07*	-.05	-.06*	-.14**	-.16**	.09**	-.04	-.07*	.04	.07**	-.14**	.08**	.00	.15**	-.10**	-.07*	.14**	.05	.08**	.29**	-.14**			
26. cultural_tightloose	.08**	.03	-.01	-.04	-.01	-.01	-.04	-.05	.07**	-.01	.01	.10**	-.02	-.04	-.03	.03	.06*	-.02	-.04	.06*	.05	.00	.13**	.00	.07**		
27. RWA	.03	.09**	.17**	-.08**	-.07*	-.03	.02	-.05	.11**	.00	-.10**	-.04	.14**	-.08**	.07*	-.09**	.16**	-.03	-.23**	.09**	.06*	-.03	.52**	-.02	.22**	.18**	
28. PoliticalOrient	.08**	-.07*	-.01	.11**	.14**	.15**	.10**	.13**	-.04	.02	.06*	.00	-.12**	.14**	-.01	.15**	-.13**	.12**	.16**	-.13**	-.12**	-.05	-.47**	.00	-.28**	-.06*	-.39**

2 Coping, adaptability, reslience, and personality

2.1 Correlations between variables

2.2 KMO and Bartlett's test of spherecity

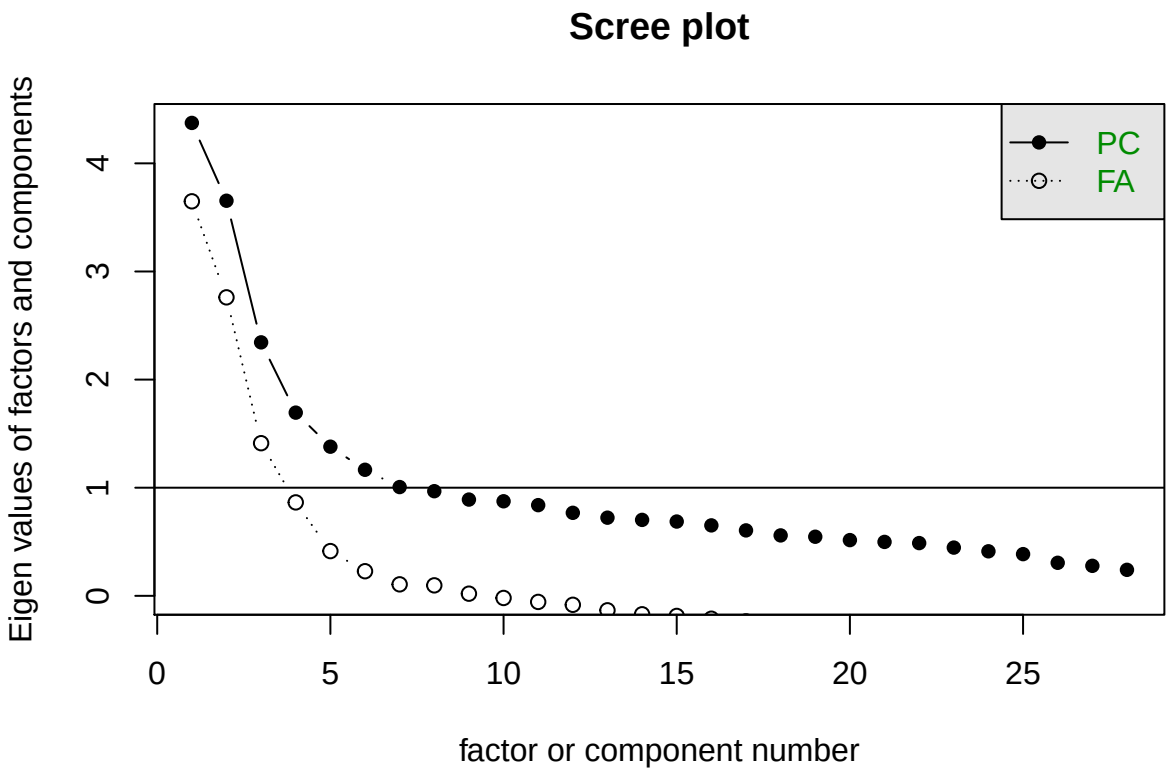
Table 2
KMO: Measure of sampling adequacy

KMO
0.82

Table 3
Bartletts test of spherecity

chisq	p.value	df
9949	0	378

2.3 Scree plot



The scree plot suggests a 6 or 7 component solution. SK extracted 6 components from the full dataset so I will do the same.

2.4 PCA: 6 components

Table 4
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	4.37	0.11	0.11	3.1
2	3.65	0.11	0.22	3.1
3	2.34	0.11	0.33	2.96
4	1.69	0.09	0.42	2.49
5	1.38	0.06	0.48	1.67
6	1.17	0.05	0.52	1.29
7	1.01			
8	0.97			
9	0.89			
10	0.87			
11	0.84			
12	0.77			
13	0.72			
14	0.70			
15	0.69			
16	0.65			
17	0.61			
18	0.56			
19	0.55			
20	0.52			
21	0.50			
22	0.49			
23	0.45			
24	0.41			
25	0.39			
26	0.31			
27	0.28			
28	0.24			

Table 5
Pattern Matrix

var	PC1	PC2	PC3	PC4	PC5	PC6	h2
adaptability_uncertainty	0.87						0.73
adaptability_crisis	0.84						0.64
resilience	0.8						0.73
extraversion	0.44				0.71		0.62
neuroticism	-0.6						0.50
cope_planning		0.8					0.60
cope_active		0.71					0.55
cope_instrsupp		0.6					0.65
cope_reframing		0.6					0.49
cope_emotsupp		0.54			0.33		0.61
cope_religion		0.52				-0.4	0.42
cope_acceptance		0.4	-0.34			0.45	0.53
cope_venting		0.39	0.49				0.57
cope_distraction		0.35				0.44	0.43
cope_disengage			0.68				0.55
cope_denial			0.65	0.31			0.47
reactance			0.65				0.42
cope_substance			0.62				0.39
cope_selfblame			0.54				0.54
cope_humor			0.42			0.44	0.44
conscientious			-0.41				0.33
RWA				0.82			0.61
conservatism				0.8			0.62
gov_trust				0.5			0.31
cultural_tightloose				0.37		0.63	0.42
PoliticalOrient				-0.67			0.49
intellect				-0.39			0.29
agreeableness					0.8		0.67

Table 6
Correlations between components

	RC1	RC2	RC4	RC3	RC5	RC6
RC1	1.00	-0.01	-0.35	0.15	-0.11	0.19
RC2	-0.01	1.00	0.15	-0.03	0.32	0.11
RC4	-0.35	0.15	1.00	-0.20	0.15	0.00
RC3	0.15	-0.03	-0.20	1.00	-0.09	-0.19
RC5	-0.11	0.32	0.15	-0.09	1.00	-0.04
RC6	0.19	0.11	0.00	-0.19	-0.04	1.00

3 Biz statements

3.1 Correlations between variables

Table 7
Correlations between variables

	1	2	3
1. WFH_Biz_Statements_1			
2. WFH_Biz_Statements_2	.44**		
3. WFH_Biz_Statements_3	.24*	.31**	
4. WFH_Biz_Statements_4	.33**	.53**	.64**

3.2 Reliability

Table 8
Cronbach's Alpha

a
0.72

3.3 KMO and Bartlett's test of spherecity

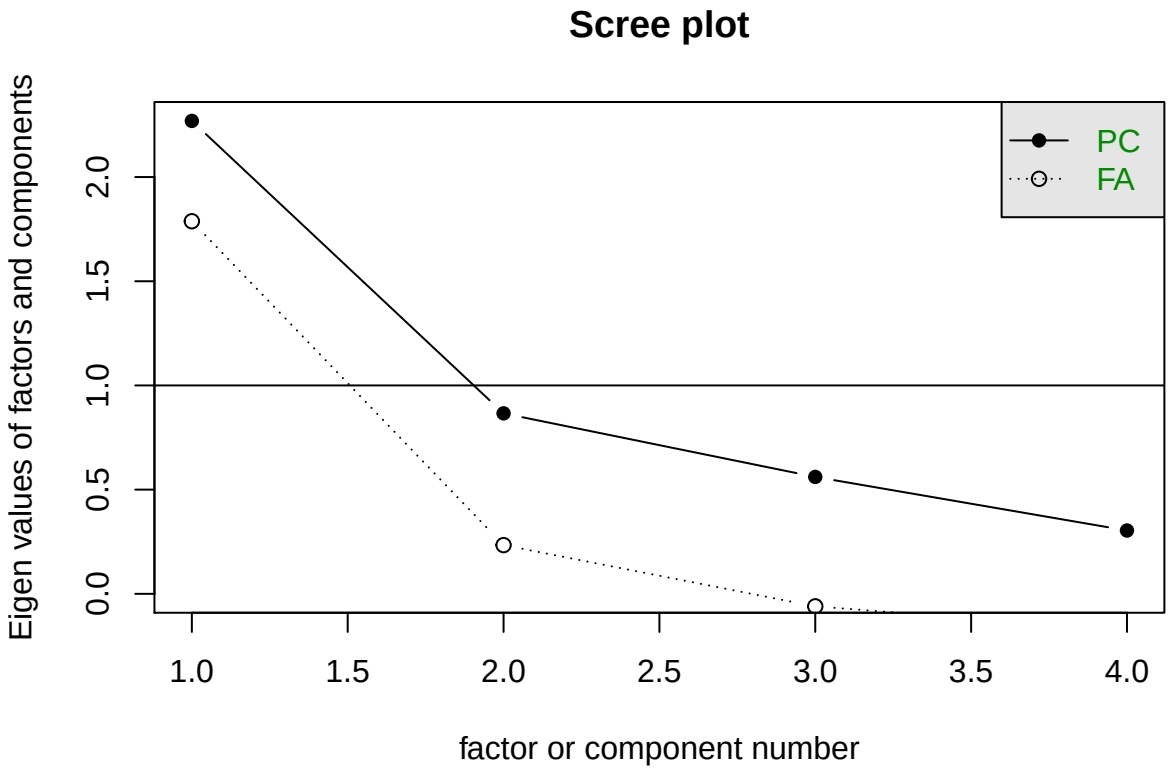
Table 9
KMO: Measure of sampling adequacy

KMO
0.65

Table 10
Bartletts test of spherecity

chisq	p.value	df
88	0	6

3.4 Scree plot



The scree plot suggests a 1 component solution. This is consistent with the components extracted by SK from the full dataset.

3.5 PCA: 1 component

Table 11
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.27	0.57	0.57	2.27
2	0.87			
3	0.56			
4	0.30			

Table 12
Pattern Matrix

var	PC1	h2
WFH_Biz_Statements_4	0.86	0.74
WFH_Biz_Statements_2	0.76	0.58
WFH_Biz_Statements_3	0.74	0.55
WFH_Biz_Statements_1	0.63	0.40

4 Compliance

4.1 Correlations between variables

Table 13
Correlations between variables

	1	2	3	4	5	6	7	8	9	10	11
1. BehaviourComply_1_1											
2. BehaviourComply_1_2	.25**										
3. BehaviourComply_1_3	.47**	.35**									
4. BehaviourComply_1_4	.09**	.20**	.29**								
5. BehaviourComply_1_5	.06*	.13**	.20**	.38**							
6. BehaviourComply_1_6	.18**	.29**	.38**	.25**	.28**						
7. BehaviourComply_2_1	.42**	.28**	.50**	.27**	.18**	.34**					
8. BehaviourComply_2_2	.40**	.42**	.50**	.21**	.13**	.41**	.46**				
9. BehaviourComply_2_3	.22**	.29**	.28**	.23**	.20**	.31**	.39**	.43**			
10. BehaviourComply_2_4	.13**	.19**	.22**	.28**	.21**	.20**	.29**	.18**	.21**		
11. BehaviourComply_2_5	.08**	.07*	.17**	.25**	.21**	.10**	.17**	.08**	.14**	.42**	
12. BehaviourComply_2_6	.27**	.19**	.31**	.25**	.20**	.26**	.34**	.21**	.22**	.56**	.39**

4.2 Reliability

Table 14
Cronbach's Alpha

a
0.79

4.3 KMO and Bartlett's test of spherecity

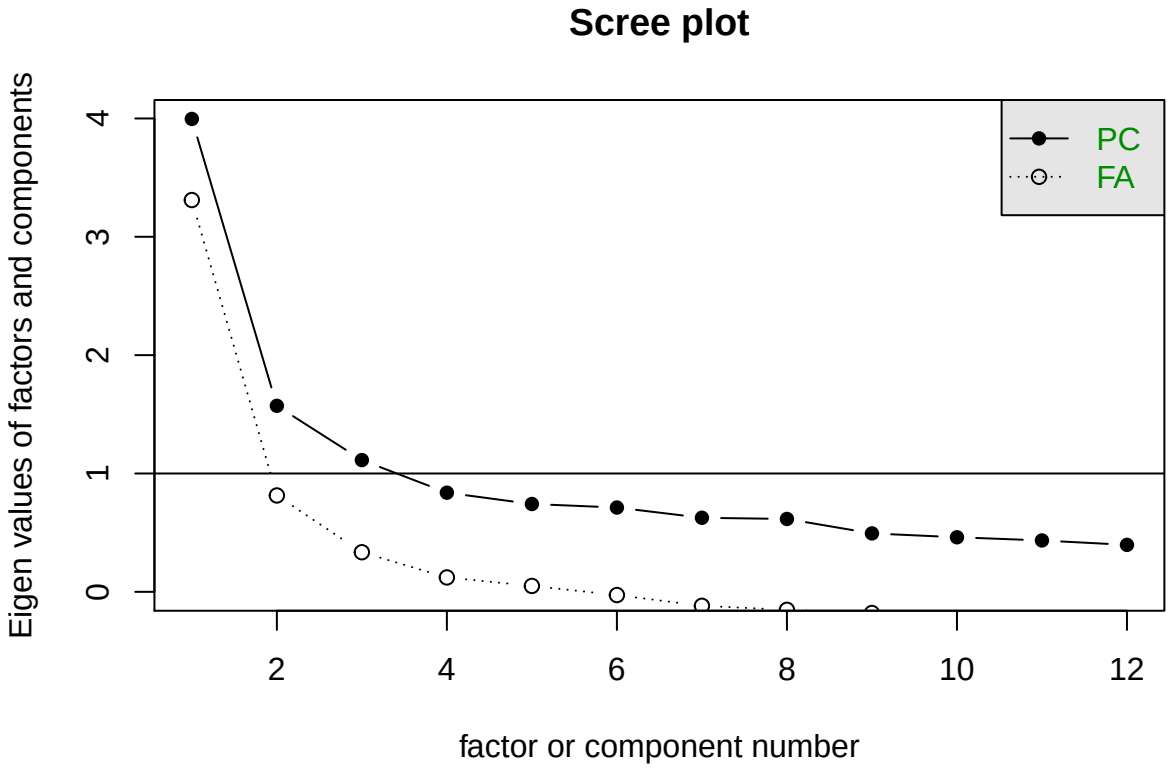
Table 15
KMO: Measure of sampling adequacy

KMO
0.85

Table 16
Bartletts test of spherecity

chisq	p.value	df
4086	0	66

4.4 Scree plot



The scree plot suggests a 3 component solution. This is consistent with the components extracted by SK from the full dataset.

4.5 PCA: 3 component

Table 17
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	4.00	0.26	0.26	3.12
2	1.57	0.16	0.42	1.93
3	1.11	0.14	0.56	1.63
4	0.84			
5	0.74			
6	0.71			
7	0.63			
8	0.62			
9	0.49			
10	0.46			
11	0.43			
12	0.40			

Table 18
Pattern Matrix

var	PC1	PC2	PC3	h2
BehaviourComply_2_2	0.82			0.64
BehaviourComply_1_1	0.79		-0.42	0.59
BehaviourComply_1_3	0.73			0.58
BehaviourComply_2_1	0.69			0.55
BehaviourComply_1_2	0.58			0.37
BehaviourComply_2_3	0.49			0.39
BehaviourComply_1_6	0.42		0.43	0.47
BehaviourComply_2_4		0.77		0.66
BehaviourComply_2_5		0.76		0.58
BehaviourComply_2_6		0.76		0.68
BehaviourComply_1_5			0.83	0.63
BehaviourComply_1_4			0.69	0.55

Table 19
Correlations between components

	RC1	RC2	RC3
RC1	1.0	0.30	0.40
RC2	0.3	1.00	0.27
RC3	0.4	0.27	1.00

5 Coping

5.1 Correlations between variables

Table 20
Correlations between variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. cope_distraction													
2. cope_active	.23**												
3. cope_denial	.12**	.03											
4. cope_substance	.10**	.01	.24**										
5. cope_emotsupp	.29**	.27**	.14**	.18**									
6. cope_instrsupp	.30**	.27**	.18**	.14**	.74**								
7. cope_disengage	.08**	-.11**	.39**	.32**	.15**	.21**							
8. cope_venting	.23**	.10**	.30**	.24**	.43**	.48**	.37**						
9. cope_reframing	.23**	.42**	.07**	.01	.24**	.22**	-.06*	.11**					
10. cope_planning	.29**	.52**	.07*	.06*	.36**	.40**	.04	.29**	.39**				
11. cope_humor	.15**	.05	.09**	.18**	.13**	.11**	.11**	.22**	.23**	.10**			
12. cope_acceptance	.17**	.29**	-.23**	-.07**	.12**	.05	-.21**	-.06*	.29**	.26**	.11**		
13. cope_religion	.05	.21**	.11**	-.05	.14**	.22**	.04	.14**	.24**	.18**	-.03	.02	
14. cope_selfblame	.17**	-.02	.32**	.29**	.27**	.32**	.50**	.49**	.05	.25**	.17**	-.14**	.06*

5.2 Reliability

Table 21
Cronbach's Alpha

a
0.75

5.3 KMO and Bartlett's test of spherecity

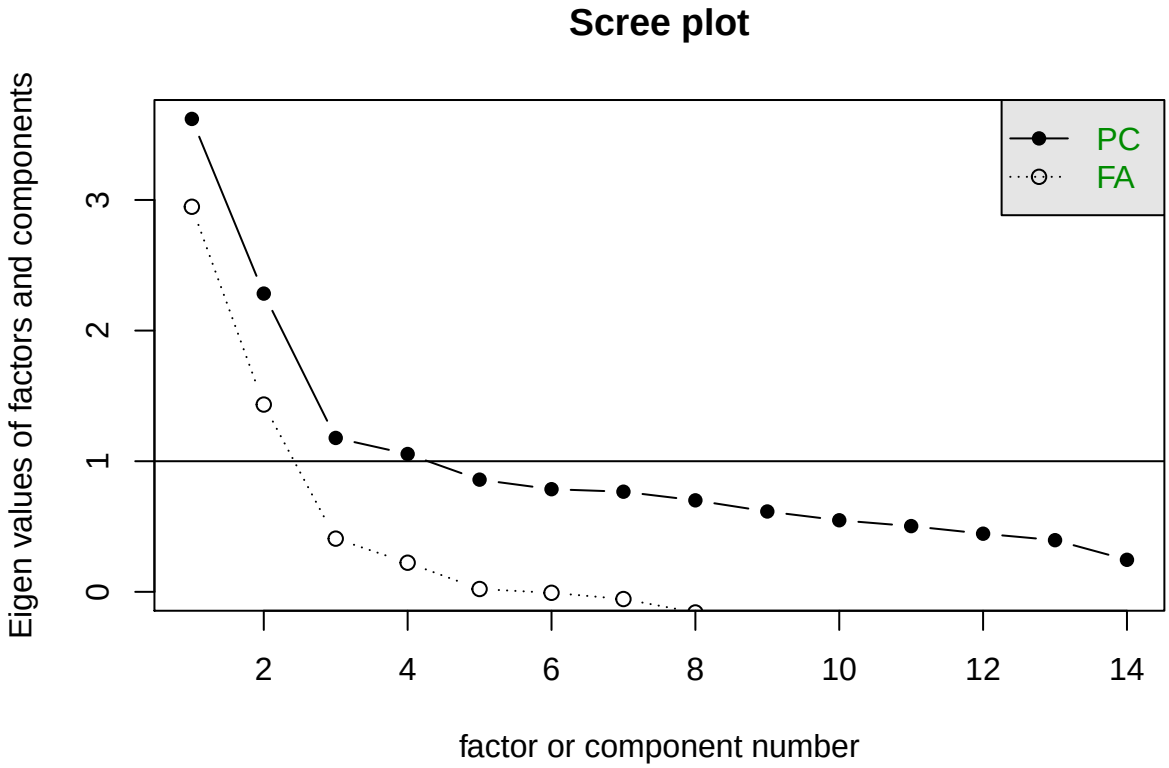
Table 22
KMO: Measure of sampling adequacy

KMO
0.79

Table 23
Bartletts test of spherecity

chisq	p.value	df
4644	0	91

5.4 Scree plot



The scree plot suggests either a 2 factor (FA) solution or a 4 component (PCA) solution. SK extracted 4 factors using PAF from the full dataset. I will conduct a 4 component PCA.

5.5 PCA: 4 components

Table 24
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	3.62	0.17	0.17	2.37
2	2.28	0.17	0.34	2.33
3	1.18	0.15	0.49	2.12
4	1.05	0.09	0.58	1.32
5	0.86			
6	0.79			
7	0.77			
8	0.70			
9	0.61			
10	0.55			
11	0.50			
12	0.45			
13	0.40			
14	0.25			

Table 25
Pattern Matrix

var	PC1	PC2	PC3	PC4	h2
cope_instrsupp	0.93				0.79
cope_emotsupp	0.92				0.75
cope_venting	0.53	0.42			0.59
cope_planning	0.36		0.52		0.56
cope_distraction	0.33				0.34
cope_denial		0.76			0.55
cope_disengage		0.73			0.59
cope_selfblame		0.6			0.56
cope_substance		0.46		0.47	0.42
cope_acceptance		-0.51	0.33	0.35	0.55
cope_reframing			0.81		0.64
cope_active			0.69		0.58
cope_religion			0.66	-0.51	0.64
cope_humor				0.77	0.57

Table 26
Correlations between components

	RC1	RC2	RC4	RC3
RC1	1.00	0.25	0.40	0.38
RC2	0.25	1.00	-0.05	0.04
RC4	0.40	-0.05	1.00	0.16
RC3	0.38	0.04	0.16	1.00

6 DASS

6.1 Correlations between variables

Table 27
Correlations between variables

	1	2
1. DASS_stress		
2. DASS_anxiety	.79**	
3. DASS_depression	.71**	.68**

6.2 Reliability

Table 28
Cronbach's Alpha

a
0.88

6.3 KMO and Bartlett's test of spherecity

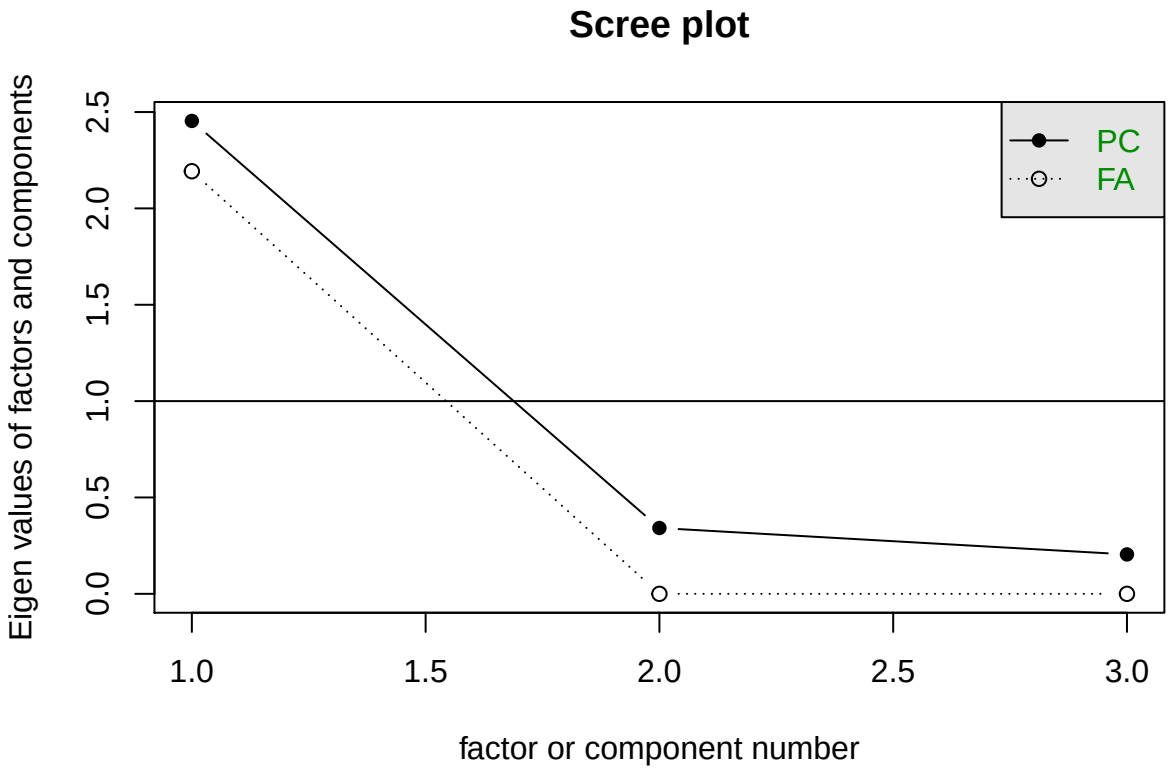
Table 29
KMO: Measure of sampling adequacy

KMO
0.73

Table 30
Bartletts test of spherecity

chisq	p.value	df
286	0	3

6.4 Scree plot



6.5 PCA

The scree plot suggests a 1 component solution. This is consistent with the components extracted by SK from the full dataset.

6.6 PCA: 1 component

Table 31
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.45	0.82	0.82	2.45
2	0.34			
3	0.20			

Table 32
Pattern Matrix

var	PC1	h2
DASS_stress	0.92	0.85
DASS_anxiety	0.91	0.83
DASS_depression	0.88	0.77

7 Follow

7.1 Correlations between variables

Table 33
Correlations between variables

	1	2	3
1. follow_self			
2. follow_family	.68**		
3. follow_atrisk	.60**	.73**	
4. follow_people	.66**	.69**	.78**

7.2 Reliability

Table 34
Cronbach's Alpha

a
0.9

7.3 KMO and Bartlett's test of spherecity

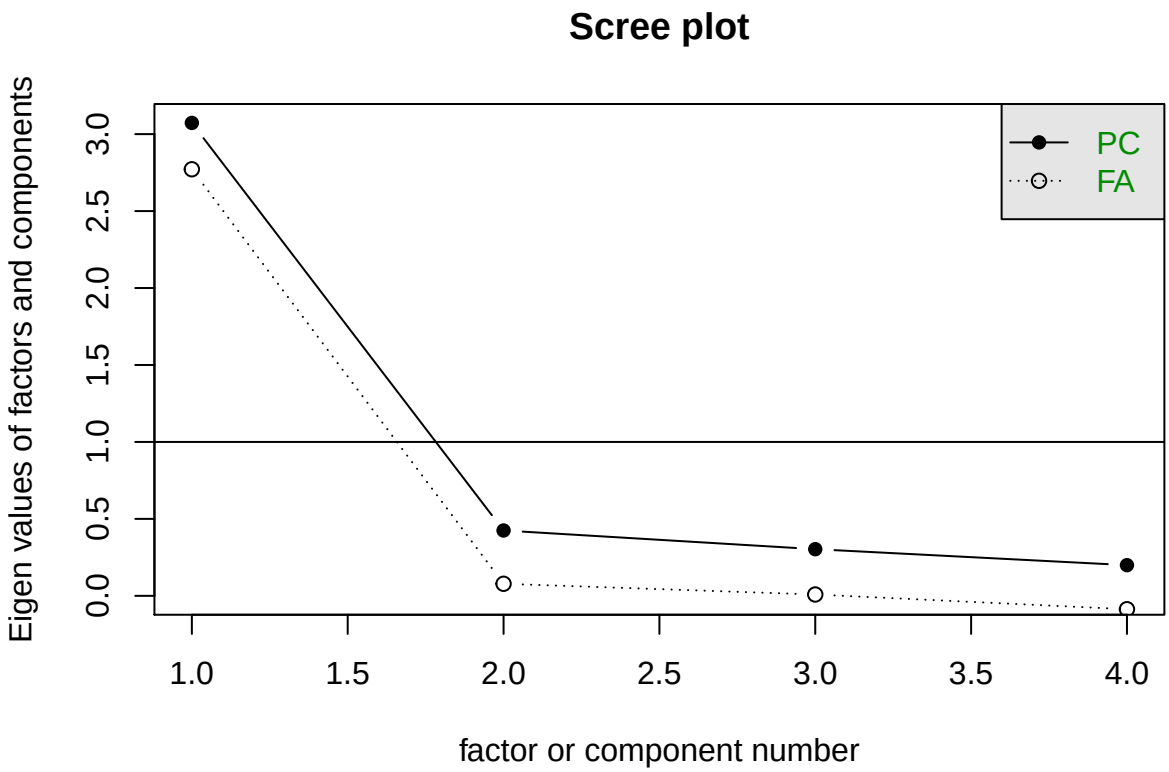
Table 35
KMO: Measure of sampling adequacy

KMO
0.81

Table 36
Bartletts test of spherecity

chisq	p.value	df
3360	0	6

7.4 Scree plot



7.5 PCA

The scree plot suggests a 1 component solution. This is consistent with the components extracted by SK from the full dataset.

7.6 PCA: 1 component

Table 37
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	3.07	0.77	0.77	3.07
2	0.42			
3	0.30			
4	0.20			

Table 38
Pattern Matrix

var	PC1	h2
follow_people	0.90	0.80
follow_family	0.89	0.78
follow_atrisk	0.89	0.79
follow_self	0.83	0.69

8 Government

8.1 Correlations between variables

Table 39
Correlations between variables

	1	2
1. Govt_Satisfaction		
2. Govt_Extreme	-.58**	
3. Govt_Truth	.62**	-.35**

8.2 Reliability

Table 40
Cronbach's Alpha

a
0.76

8.3 KMO and Bartlett's test of spherecity

Table 41
KMO: Measure of sampling adequacy

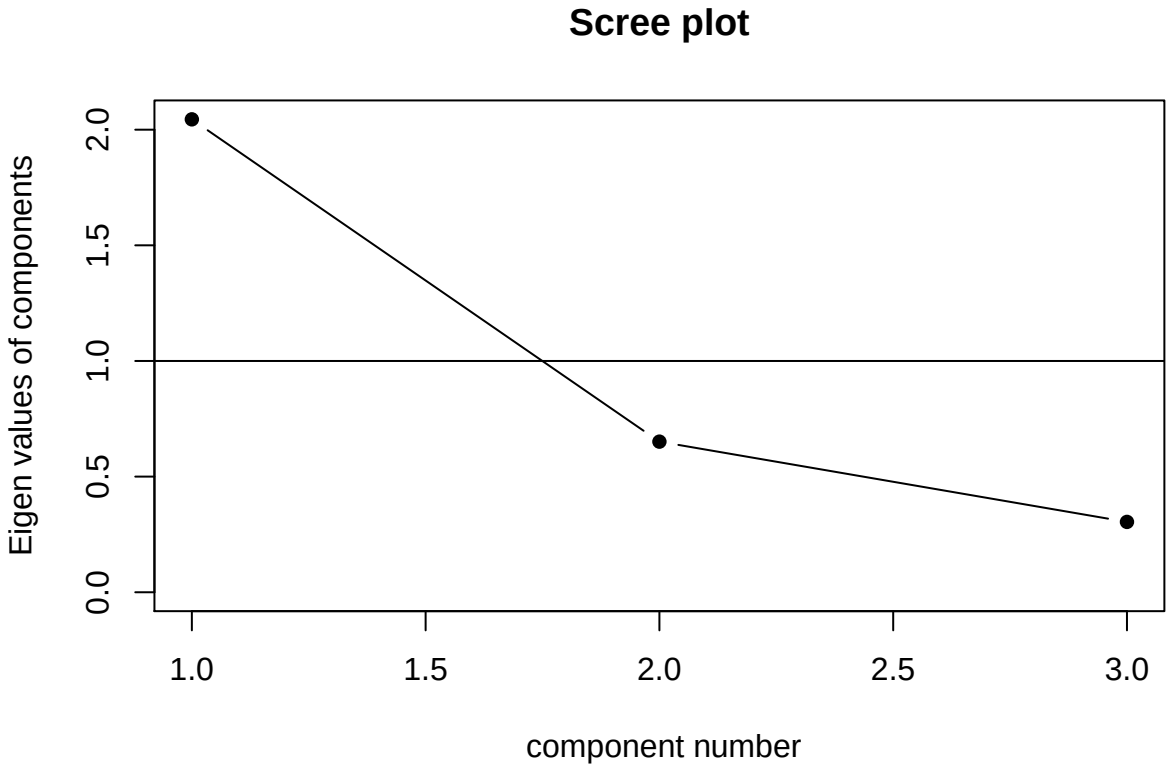
KMO
0.61

Table 42
Bartletts test of spherecity

chisq	p.value	df
1192	0	3

8.4 Scree plot

An ultra-Heywood case was detected for FA so I only plotted eigen values using PCA here. This issue did not occur for PCA.



The scree plot suggests a 1 component solution. This is consistent with the components extracted by SK from the full dataset.

8.5 PCA: 1 component

Table 43
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.04	0.68	0.68	2.04
2	0.65			
3	0.30			

Table 44
Pattern Matrix

var	PC1	h2
Govt_Satisfaction	0.90	0.82
Govt_Truth	0.79	0.63
Govt_Extreme	-0.77	0.60

9 Intelligence

9.1 Correlations between variables

Table 45
Correlations between variables

	1	2
1. CRT_acc		
2. belief_acc	.51**	
3. EAT_acc	.53**	.58**

9.2 Reliability

Table 46
Cronbach's Alpha

a
0.76

9.3 KMO and Bartlett's test of spherecity

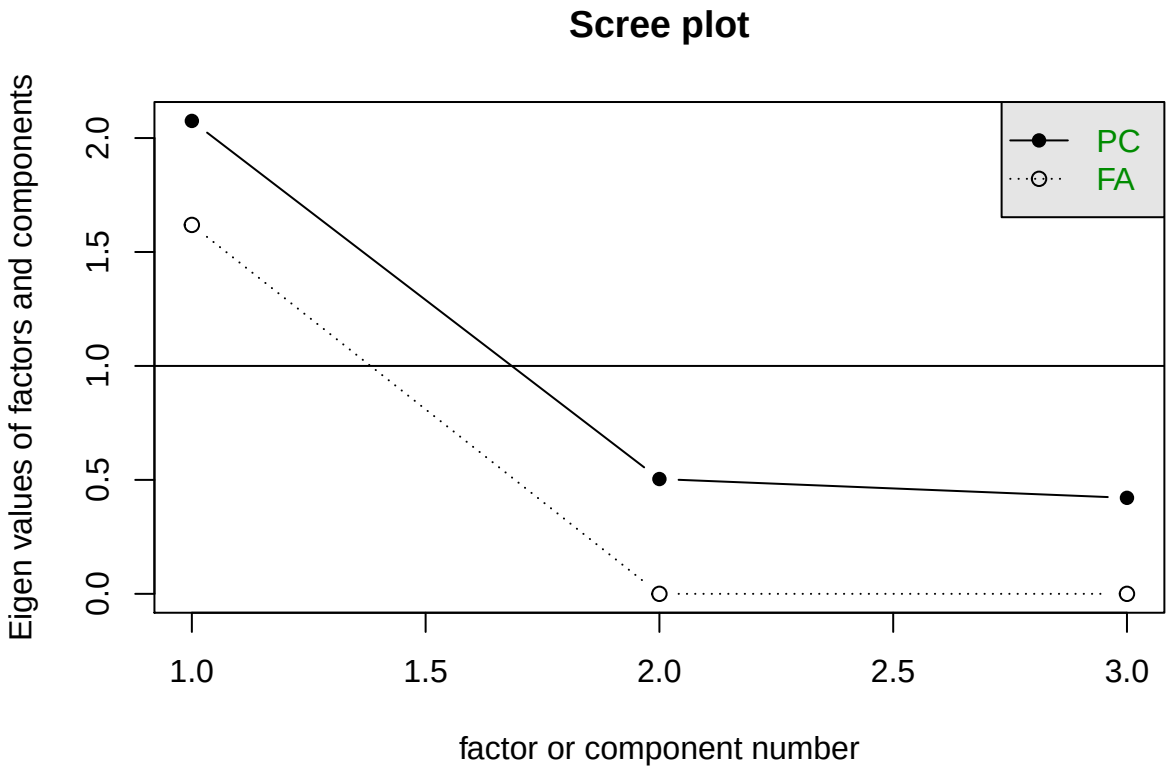
Table 47
KMO: Measure of sampling adequacy

KMO
0.7

Table 48
Bartletts test of spherecity

chisq	p.value	df
375	0	3

9.4 Scree plot



9.5 PCA

The scree plot suggests a 1 component solution. This is consistent with the components extracted by SK from the full dataset.

9.6 PCA: 1 component

Table 49
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.08	0.69	0.69	2.08
2	0.50			
3	0.42			

Table 50
Pattern Matrix

var	PC1	h2
EAT_acc	0.85	0.72
belief_acc	0.84	0.70
CRT_acc	0.81	0.66

10 News sources

10.1 Correlations between variables

Table 51
Correlations between variables

	1	2	3	4	5	6
1. NS_FriendsFam						
2. NS_OffGovt	.09**					
3. NS_OffHealth	.07*	.59**				
4. NS_Science	.02	.35**	.50**			
5. NS_WordMouth	.54**	.03	.00	-.02		
6. NS_News	.15**	.13**	.00	.04	.20**	
7. NS_SocialMedia	.31**	.08**	.07*	.05	.38**	.23**

10.2 Reliability

Table 52
Cronbach's Alpha

a
0.61

10.3 KMO and Bartlett's test of spherecity

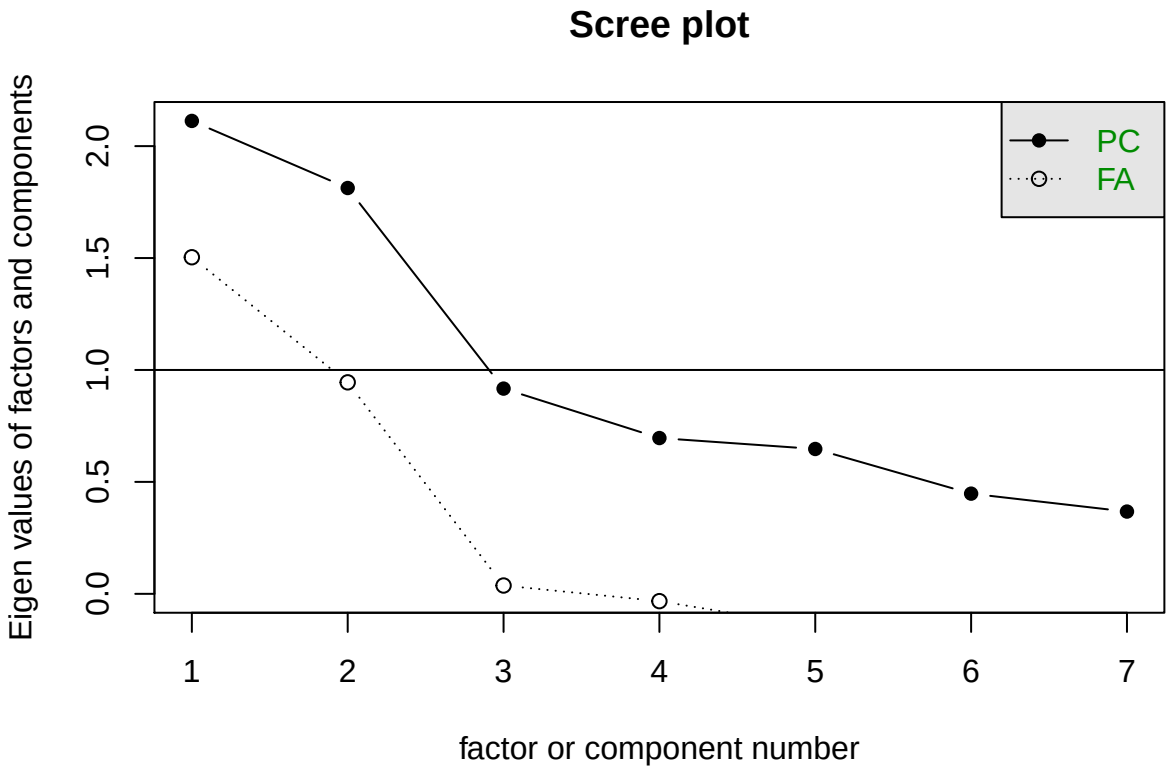
Table 53
KMO: Measure of sampling adequacy

KMO
0.64

Table 54
Bartletts test of spherecity

chisq	p.value	df
1828	0	21

10.4 Scree plot



The scree plot suggests a 2 component solution. This is consistent with the components extracted by SK from the full dataset.

10.5 PCA: 2 component

Table 55
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.11	0.28	0.28	1.97
2	1.81	0.28	0.56	1.95
3	0.92			
4	0.70			
5	0.65			
6	0.45			
7	0.37			

Table 56
Pattern Matrix

var	PC1	PC2	h2
NS_OffHealth	0.88		0.76
NS_OffGovt	0.8		0.65
NS_Science	0.75		0.56
NS_WordMouth		0.82	0.67
NS_FriendsFam		0.77	0.59
NS_SocialMedia		0.69	0.48
NS_News		0.46	0.22

Table 57
Correlations between components

	RC1	RC2
RC1	1.0	0.1
RC2	0.1	1.0

11 Opinion

11.1 Correlations between variables

Table 58
Correlations between variables

	1	2	3	4	5	6	7	8	9
1. opinion_1									
2. opinion_2	.47**								
3. opinion_3	.41**	.48**							
4. opinion_4	.38**	.22**	.21**						
5. opinion_5	-.10**	-.04	-.04	-.09**					
6. opinion_6	-.36**	-.21**	-.19**	-.27**	.19**				
7. opinion_7	.50**	.33**	.35**	.54**	-.12**	-.34**			
8. opinion_8	.29**	.10**	.19**	.40**	-.06*	-.14**	.46**		
9. opinion_9	.31**	.35**	.34**	.28**	-.05	-.17**	.41**	.27**	
10. opinion_10	-.20**	-.18**	-.12**	-.16**	.20**	.33**	-.26**	-.11**	-.17**

11.2 Reliability

```
## Warning in psych::alpha(x): Some items were negatively correlated with the total scale and probably
## should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option
```

```
## Some items ( opinion_5 opinion_6 opinion_10 ) were negatively correlated with the total scale and
## probably should be reversed.
## To do this, run the function again with the 'check.keys=TRUE' option
```

Table 59
Cronbach's Alpha

a
0.5

11.3 KMO and Bartlett's test of spherecity

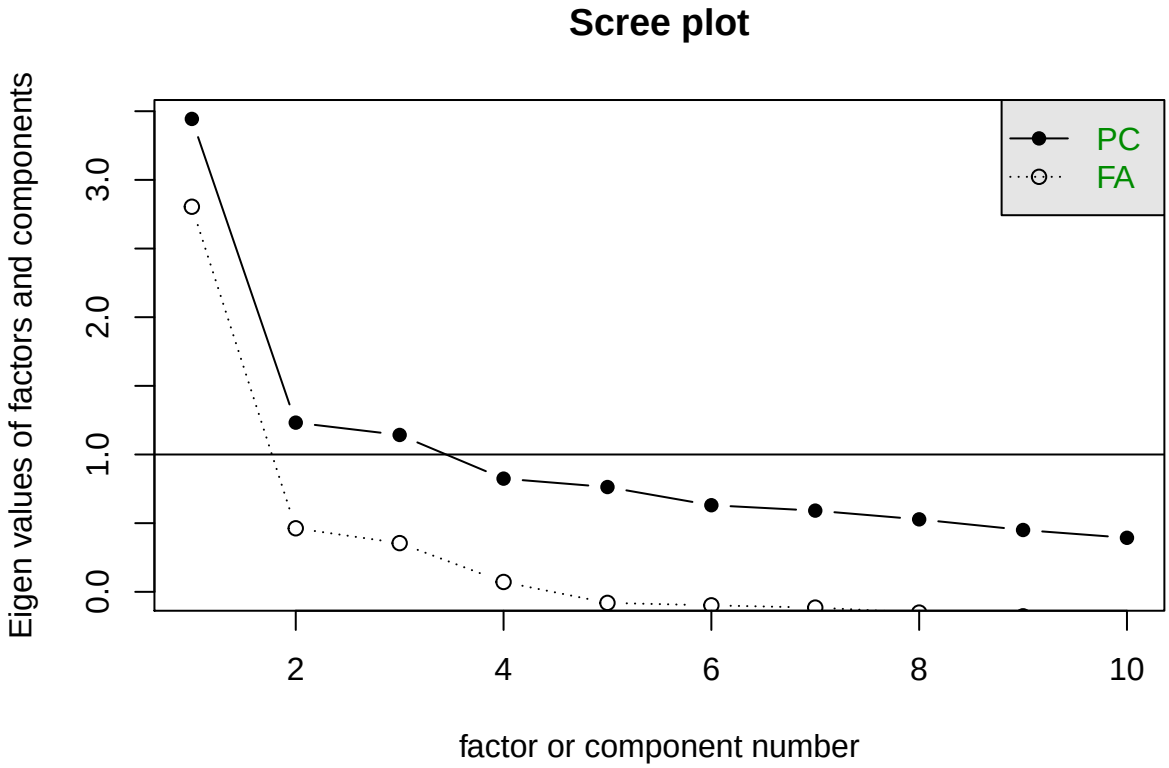
Table 60
KMO: Measure of sampling adequacy

KMO
0.83

Table 61
Bartletts test of spherecity

chisq	p.value	df
2890	0	45

11.4 Scree plot



The scree plot suggests a 3 component solution. This is consistent with the components extracted by SK from the full dataset.

11.5 PCA: 3 component

Table 62
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	3.44	0.22	0.22	2.17
2	1.23	0.21	0.43	2.11
3	1.14	0.15	0.58	1.54
4	0.82			
5	0.76			
6	0.63			
7	0.59			
8	0.53			
9	0.45			
10	0.39			

Table 63
Pattern Matrix

var	PC1	PC2	PC3	h2
opinion_2	0.93			0.71
opinion_3	0.85			0.62
opinion_1	0.54			0.57
opinion_9	0.48			0.42
opinion_8		0.95		0.67
opinion_4		0.82		0.62
opinion_7		0.68		0.69
opinion_5			0.74	0.49
opinion_10			0.73	0.53
opinion_6			0.64	0.52

Table 64
Correlations between components

	RC1	RC3	RC2
RC1	1.00	0.53	-0.32
RC3	0.53	1.00	-0.34
RC2	-0.32	-0.34	1.00

12 Org statements

12.1 Correlations between variables

Table 65
Correlations between variables

	1	2	3
1. WFH_OrgStatements_1			
2. WFH_OrgStatements_2	.43**		
3. WFH_OrgStatements_3	.15**	.34**	
4. WFH_OrgStatements_4	.22**	.46**	.66**

12.2 Reliability

Table 66
Cronbach's Alpha

a
0.71

12.3 KMO and Bartlett's test of spherecity

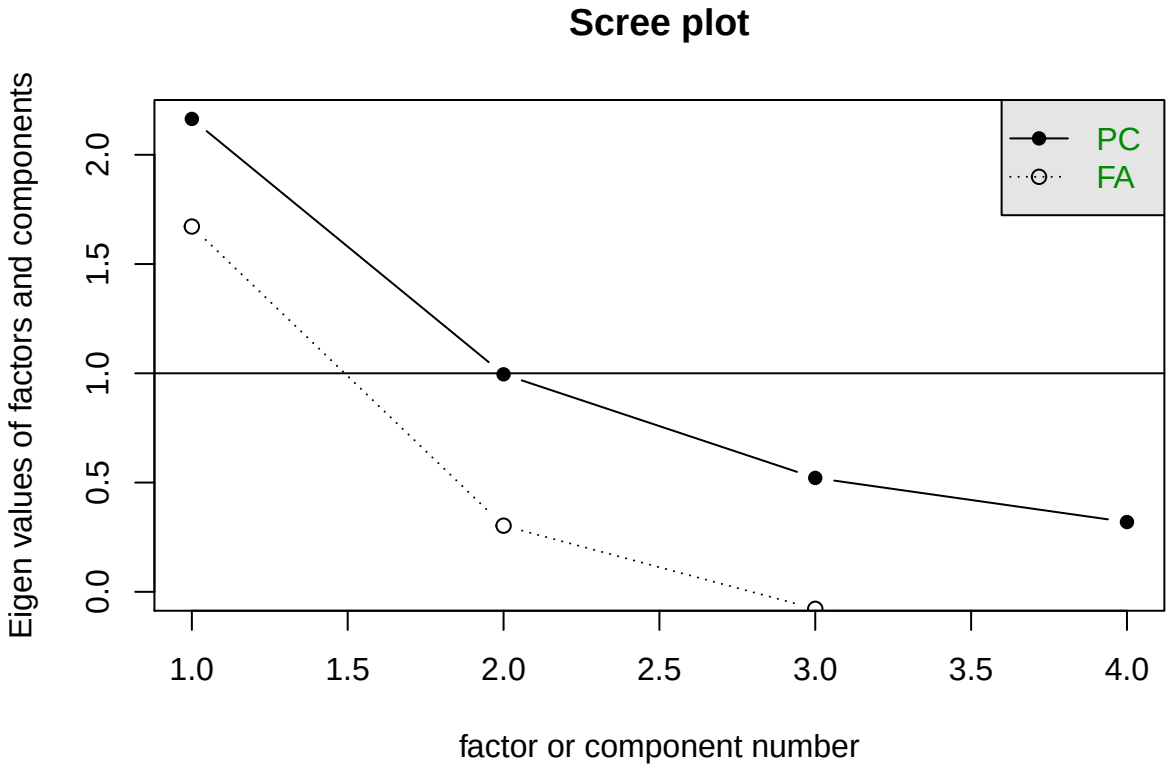
Table 67
KMO: Measure of sampling adequacy

KMO
0.63

Table 68
Bartletts test of spherecity

chisq	p.value	df
407	0	6

12.4 Scree plot



The scree plot suggests a 1 or 2 component solution. SK extracted 1 component using the full dataset so I will do the same.

12.5 PCA: 1 component

Table 69
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.16	0.54	0.54	2.16
2	1.00			
3	0.52			
4	0.32			

Table 70
Pattern Matrix

var	PC1	h2
WFH_OrgStatements_4	0.84	0.71
WFH_OrgStatements_3	0.77	0.60
WFH_OrgStatements_2	0.76	0.57
WFH_OrgStatements_1	0.53	0.29

13 Reasons to leave

13.1 Correlations between variables

Table 71
Correlations between variables

	1	2	3	4	5	6	7	8	9	10
1. ReasonsLeaveHome_1										
2. ReasonsLeaveHome_2	.03									
3. ReasonsLeaveHome_3	.05	.10**								
4. ReasonsLeaveHome_4	.06	.11**	.23**							
5. ReasonsLeaveHome_5	.01	.09*	.12**	.28**						
6. ReasonsLeaveHome_6	-.02	.04	-.02	-.04	.20**					
7. ReasonsLeaveHome_7	.08*	.00	.09**	.15**	.20**	.15**				
8. ReasonsLeaveHome_8	.14**	.08*	.13**	.22**	.09*	.04	.12**			
9. ReasonsLeaveHome_9	.06	.04	.07	.13**	.18**	.23**	.19**	.29**		
10. ReasonsLeaveHome_10	.02	-.01	.26**	.20**	.12**	.04	.17**	.22**	.12**	
11. ReasonsLeaveHome_11	.04	.00	.27**	.21**	.14**	.03	.15**	.26**	.21**	.56**

13.2 Reliability

Table 72
Cronbach's Alpha

a
0.56

13.3 KMO and Bartlett's test of spherecity

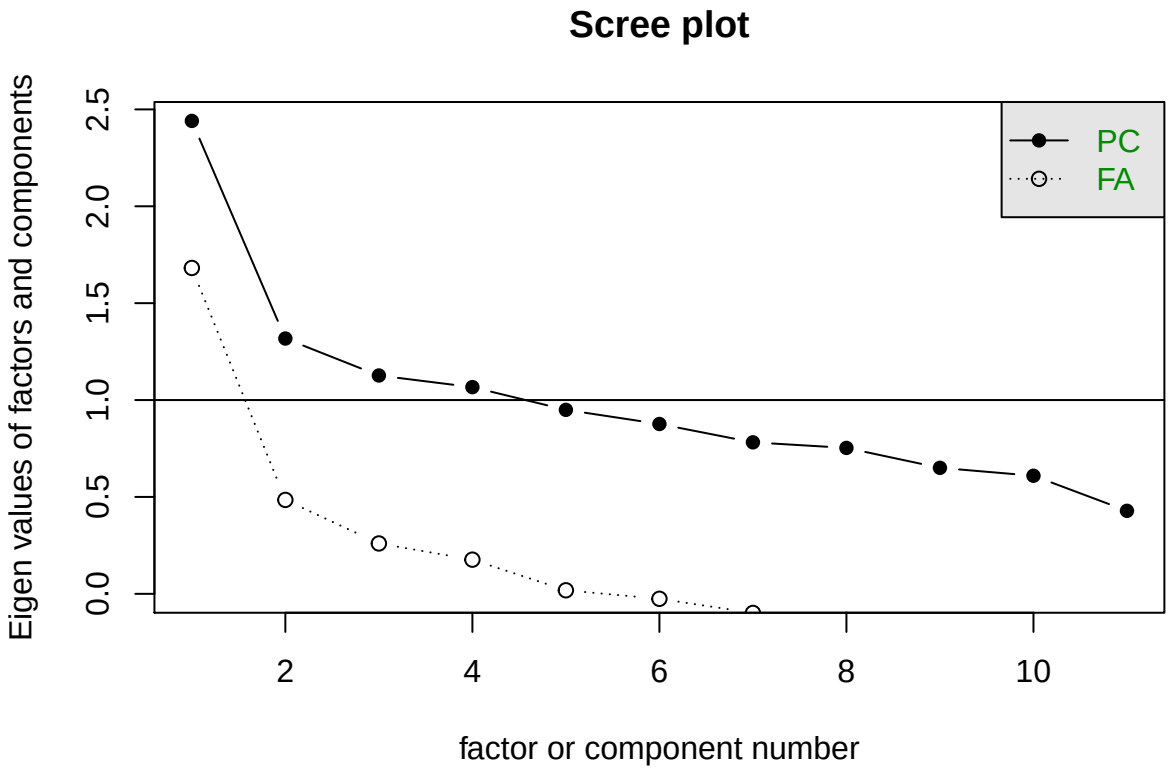
Table 73
KMO: Measure of sampling adequacy

KMO
0.69

Table 74
Bartletts test of spherecity

chisq	p.value	df
905	0	55

13.4 Scree plot



The scree plot suggests a 3 or 4 component solution. SK extracted 3 componentsusing the full dataset so I will do the same.

13.5 PCA: 3 component

Table 75
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.44	0.18	0.18	1.96
2	1.32	0.14	0.32	1.54
3	1.13	0.13	0.44	1.38
4	1.07			
5	0.95			
6	0.88			
7	0.78			
8	0.75			
9	0.65			
10	0.61			
11	0.43			

Table 76
Pattern Matrix

var	PC1	PC2	PC3	h2
ReasonsLeaveHome_10	0.89			0.68
ReasonsLeaveHome_11	0.89			0.69
ReasonsLeaveHome_3	0.42		0.36	0.40
ReasonsLeaveHome_8	0.33			0.30
ReasonsLeaveHome_2	-0.39		0.79	0.49
ReasonsLeaveHome_6		0.8		0.57
ReasonsLeaveHome_9		0.62		0.45
ReasonsLeaveHome_7		0.49		0.31
ReasonsLeaveHome_5		0.47	0.37	0.41
ReasonsLeaveHome_4			0.61	0.47
ReasonsLeaveHome_1			0.37	0.11

Table 77
Correlations between components

	RC1	RC2	RC3
RC1	1.00	0.27	0.44
RC2	0.27	1.00	0.26
RC3	0.44	0.26	1.00

14 Social behaviour

14.1 Correlations between variables

Table 78
Correlations between variables

	1	2	3	4	5	6	7
1. BehaviourProsocial_1							
2. BehaviourProsocial_2	.20**						
3. BehaviourProsocial_3	.15**	.22**					
4. BehaviourProsocial_4	.25**	.30**	.33**				
5. BehaviourAntisocial_1	.11**	.08**	.11**	.11**			
6. BehaviourAntisocial_2	.17**	.13**	.13**	.20**	.55**		
7. BehaviourAntisocial_3	.14**	.08**	.14**	.16**	.15**	.21**	
8. BehaviourAntisocial_4	.24**	.17**	.04	.15**	.14**	.21**	.22**

14.2 Reliability

Table 79
Cronbach's Alpha

a
0.63

14.3 KMO and Bartlett's test of spherecity

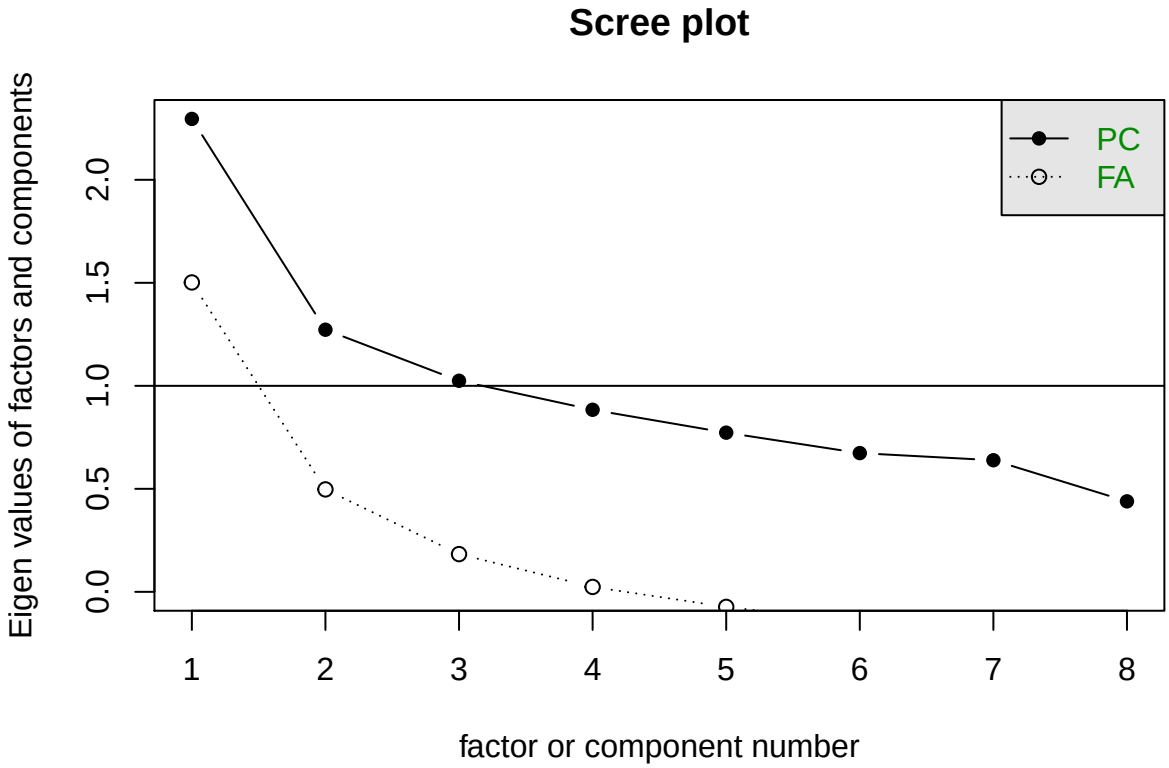
Table 80
KMO: Measure of sampling adequacy

KMO
0.68

Table 81
Bartletts test of spherecity

chisq	p.value	df
1271	0	28

14.4 Scree plot



The scree plot suggests a 3 component solution. This is not consistent with the 2 components extracted by SK from the full dataset. I will extract 2 components only.

14.5 PCA: 2 component

Table 82
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.30	0.23	0.23	1.85
2	1.27	0.21	0.45	1.72
3	1.02			
4	0.88			
5	0.77			
6	0.67			
7	0.64			
8	0.44			

Table 83
Pattern Matrix

var	PC1	PC2	h2
BehaviourProsocial_4	0.75		0.54
BehaviourProsocial_2	0.7		0.44
BehaviourProsocial_3	0.66		0.39
BehaviourProsocial_1	0.53		0.32
BehaviourAntisocial_1		0.88	0.69
BehaviourAntisocial_2		0.86	0.72
BehaviourAntisocial_3		0.36	0.23
BehaviourAntisocial_4		0.32	0.25

Table 84
Correlations between components

	RC1	RC2
RC1	1.00	0.37
RC2	0.37	1.00

15 Covid worry

15.1 Correlations between variables

Table 85
Correlations between variables

	1	2	3	4
1. CovidWorry_1				
2. CovidWorry_2R	.51**			
3. CovidWorry_3	.39**	.24**		
4. CovidWorry_4	.39**	.23**	.47**	
5. CovidWorry_5	.51**	.35**	.46**	.42**

15.2 Reliability

Table 86
Cronbach's Alpha

a
0.77

15.3 KMO and Bartlett's test of spherecity

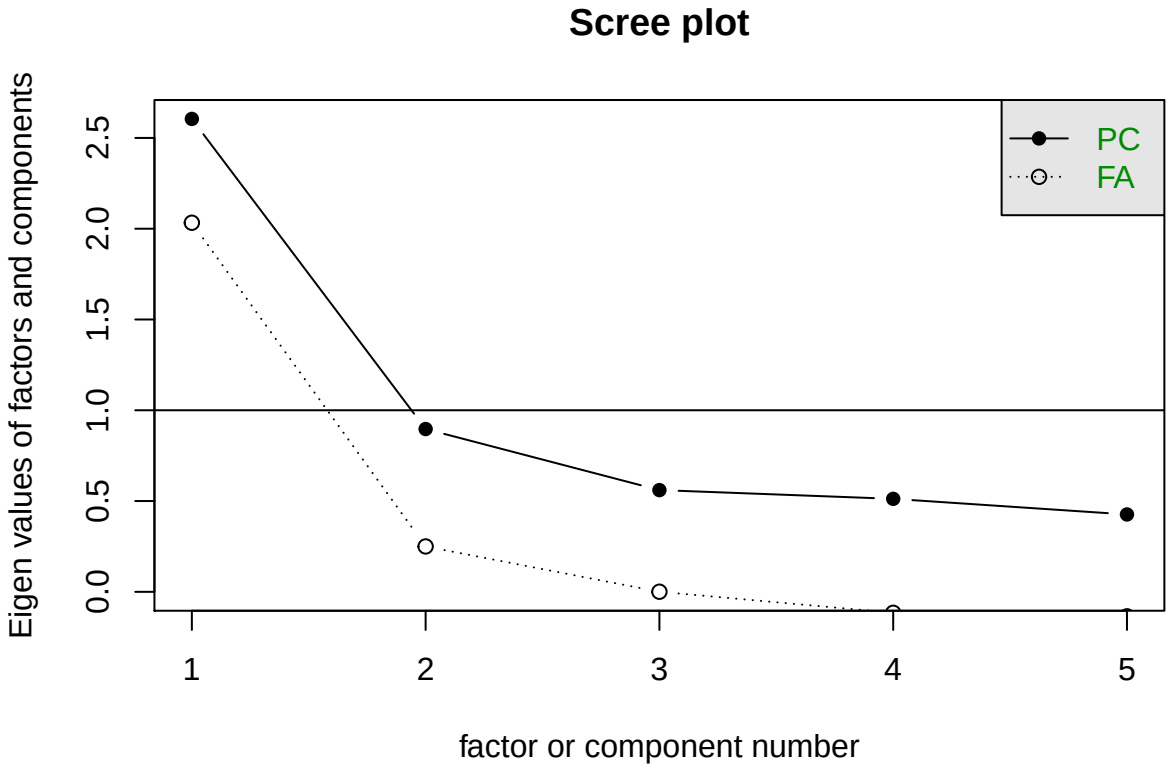
Table 87
KMO: Measure of sampling adequacy

KMO
0.78

Table 88
Bartletts test of spherecity

chisq	p.value	df
1657	0	10

15.4 Scree plot



The scree plot suggests a 1 component solution. This is consistent with the components extracted by SK from the full dataset.

15.5 PCA: 3 component

Table 89
Variance accounted for by components

component	eigen	prop_var	cum_var	rotation_SS_load
1	2.60	0.52	0.52	2.6
2	0.90			
3	0.56			
4	0.51			
5	0.43			

Table 90
Pattern Matrix

var	PC1	h2
CovidWorry_1	0.79	0.63
CovidWorry_5	0.77	0.60
CovidWorry_3	0.71	0.51
CovidWorry_4	0.69	0.48
CovidWorry_2R	0.63	0.39