

Supplementary Material File S3.

Exploratory Factor Analyses

Table SA. Parallel analysis HPV test attitudes and beliefs items

Factor	Eigenvalues from dataset n=512	Randomly generated Eigenvalues
1	7.939	1.674
2	5.185	1.594
3	2.170	1.540
4	1.795	1.491
5	1.578	1.453
6	1.393	1.413
7	1.322	1.377
8	1.244	1.347
9	1.155	1.317
10	1.050	1.287
11	1.034	1.261

Obs: To randomly generate 95 percentile Eigenvalues in parallel analysis we used following specifications: 500 datasets; 512 cases; 44 variables; and principal component analysis. In boldface are Eigenvalues from the dataset that are higher than randomly generated Eigenvalues using parallel analysis suggesting a maximum 5-factor solution.

Table SB. Exploratory Factor Analysis (EFA) for HPV test attitudes and beliefs (44 items) (n=512)

Statement	F1	F2	F3	F4
I feel that ...				
1. ... I would be embarrassed to show my genitals to a healthcare professional during the HPV test	.686	-.019	-.018	-.023
5. ... I have other priorities more important than having the HPV test	.638	-.079	-.135	-.090
7. ... I would be uncomfortable with a male health care professional doing my HPV test	.581	-.081	.044	-.095
8. ... the HPV test would be painful	.573	-.007	.043	.032
19. ... I would be embarrassed to get tested for HPV because it is a sexually transmitted infection	.564	.198	-.025	.074
12. ... I would not need to have the HPV test because I do not have symptoms	.549	.113	-.134	-.096
2. ... going to see a healthcare professional to have the HPV test would take too much time	.536	.028	-.169	.100
11. ... I would not need to have the HPV test because I only have one sexual partner	.498	.072	-.097	-.046
3. ... healthcare professionals doing the HPV test would be rude to me	.451	.188	-.263	.120
20. ... if the HPV test showed I have HPV, I would be ashamed	.418	.171	-.019	.180
33. ... I do not have enough information to make a decision about getting screened with the HPV test	.417	.122	.075	-.002
4. ... that I would not remember to have the HPV test regularly	.413	-.051	.072	.052
21. ... I would not trust the HPV test as much as the Pap test for my routine cervical cancer screening*	.365	.015	-.226	.166
24. ... if the HPV test showed I have HPV, I would suspect my partner of being unfaithful	.227	.116	.035	.123
41. ... my family's opinion about getting the HPV test would be important to me	.101	.687	-.020	-.067

40. ... my friends' opinion about getting the HPV test would be important to me	.122	.686	-.077	-.097
44. ... opinions I see on social media (for example, on Facebook, Twitter, Instagram, etc.) about getting the HPV test would be important to me	-.040	.685	-.146	.056
42. ... my partner's opinion about getting the HPV test would be important to me	.143	.581	.104	-.051
22. ... if the HPV test showed I have HPV, I would be worried about my ability to have children	.042	.409	-.008	.204
6. ... if the HPV test showed I have HPV, it would mean I have cancer*	.233	.306	-.031	.125
9. ... I would need the HPV test because I am at risk of developing cervical cancer*	-.157	.275	.111	.274
10. ... having the HPV test would prevent me from getting cervical cancer*	-.132	.206	.147	.047
26. ... if the HPV test showed I have HPV, it is important to follow up on it	-.065	-.179	.758	.005
34. ... if I learn that I have an HPV infection, I feel that I would need more information to help me deal with the results	.077	-.059	.701	.081
16. ... having the HPV test would be a good way to identify problems before they become cancer	-.199	-.073	.675	.055
17. ... the HPV test would be a good way to detect early abnormal changes in the cervix	-.128	-.026	.580	.041
18. ... the HPV test would be safe	-.253	-.088	.554	.023
43. ... my healthcare professional's opinion about getting the HPV test would be important to me	-.134	.181	.538	.031
35. ... it would be important to get a reminder to go for my cervical cancer screening (for example, with a mailed reminder letter)	-.139	.011	.483	.254
30. ... getting more information about the HPV test would reduce my fear about this test	.073	.230	.482	.040
14. ... having the HPV test would be entirely up to me	.154	-.118	.475	-.102
31. ... getting more information about the HPV test may reduce my fear about increasing time between screenings to more than 3 years	-.017	.224	.466	.057
39. ... if the HPV test showed I have HPV, it would be serious	.110	.157	.442	.043
15. ... I do not want to have the HPV test because it would affect my sex life*	.276	.364	-.422	.139
45. ... public health agencies' opinions about getting the HPV test would be important to me	-.088	.232	.387	.079
36. ... if the HPV test showed I have HPV, I would be comfortable sharing this information with my partner	-.070	-.099	.360	-.034
25. ... if the HPV test showed I have HPV, I would not really be worried	.071	.064	-.358	.053
13. ... it would be simple for me to have access to a healthcare professional to receive the HPV test	-.137	.050	.341	-.032
23. ... if the HPV test showed I have HPV, I would worry about giving my partner HPV*	.035	.041	.261	.195
27. ... if the HPV test showed I have HPV, this result should not be delivered over the phone*	.111	.138	.182	.024
37. ... I would be worried about starting screening for cervical cancer with the HPV test at 25 years old instead of 21 years old	.032	-.086	-.096	.792
38. ... I would be worried about starting screening for cervical cancer with the HPV test at 30 years old instead of 21 years old	.034	-.137	-.036	.743

32. ... I would be worried about getting tested with the HPV test less often than every 3 years	-.029	.163	-.008	.428
29. ... if the government increases the time between screenings to more than 3 years, this would be done solely to reduce costs*	.041	-.046	.179	.239

Note: Item 28 was not included in EFA because it was an attention check item. In the columns are displayed factor loadings (F1-F4) from EFA. We used maximum likelihood extraction with oblimin rotation for a 4-factor solution on the first random sample n= 512 observations.* denotes items for which factor cross loadings is > 0.6.

Table SC. Parallel analysis HPV self-sampling items

Factor	Eigenvalues from dataset n=512	Randomly generated Eigenvalues
1	4.091	1.334
2	2.700	1.251
3	1.062	1.192

Obs: To randomly generate 95 percentile Eigenvalues in parallel analysis we used following specifications: 500 datasets; 512 cases; 13 variables; and principal components. In boldface are Eigenvalues from the dataset that are higher than randomly generated Eigenvalues using parallel analysis suggesting a maximum 2-factor solution.

Table SD. Exploratory Factor Analysis (EFA) for HPV self-sampling (13 items) on the first sample (n=512)

Statement	F1	F2
I feel that ...		
3. ... if I did HPV self-sampling, I could harm myself	.796	-.015
4. ... if I did HPV self-sampling, I could get an infection	.793	.149
7. ... I would feel embarrassed doing HPV self-sampling	.710	.057
6. ... if I did HPV self-sampling, I would miss my regular gynecological exam	.542	.255
9. ... HPV self-sampling would be easy to do*	-.531	.370
2. ... if I did HPV self-sampling, I would worry that I am not doing it right	.503	-.264
14. ... if I did HPV self-sampling, I would be concerned about being followed-up properly	.502	-.083
5. ... HPV self-sampling is just a way for the government to save money	.373	-.035
10. ... I would be more comfortable doing the swab by myself using HPV self-sampling than having an HPV test done by a healthcare professional	-.145	.825
12. ... I would prefer doing HPV self-sampling at home because it would save me travelling to see a healthcare professional	-.283	.701
13. ... if I did HPV self-sampling, I would be more in control of my body	-.175	.636
1. ... I would prefer doing HPV self-sampling because it would avoid my family knowing that I am being screened for cervical cancer	.282	.568
8. ... I would be willing to pay to do HPV self-sampling over getting the HPV test for free at the doctor's office	.141	.528

Note: Item 11 was not included in EFA because it was an attention check item. In columns are displayed factor loadings EFA from using maximum likelihood extraction with oblimin rotation for a 2-factor solution on the first random sample n= 512 observations. * denotes items for which factor cross loadings is > 0.6.