## Appendix

Constructs	Measurement Items	Literature
Perceived Infection Risk	PIR1: How worried are you about your daughter being exposed	
(PIR)	to HPV at present?	van der Linden, S. (1,2); Sarah Dryhurst, et al. (3);
	PIR2: How likely do you think your daughter is to be affected by	
	HPV in the future?	Ran Wei et al. (4)
	PIR3: How seriously do you think that your daughter might	Rafi wel et al. (4)
	become sick from HPV?	
Perceived Vaccine Effectiveness	PVE1: I believe that the HPV vaccine is effective in preventing	
(PVE)	genital HPV infection.	
	PVE2: I believe that the HPV vaccine works to prevent genital	Loretta Brabin, et al. (5); Xiaoli Nan and Kelly Madden (6)
	HPV infection.	
	PVE3: I believe that if my daughter gets the HPV vaccine, she	
	will be less likely to get genital HPV infection.	_
Perceived Vaccine Side-Effects	PVSE1: I worry about the short-term side-effects of the HPV	

Table 1. Seven-point Likert scales for 11 constructs were showed as below.

(PVSE)	vaccine.	-
	PVSE2: I worry that the HPV vaccine might negatively affect my	
	daughter's health.	
	PVSE3: I worry that the HPV vaccine might have unknown	
	long-term side-effects.	
Attitude toward Vaccination	AV1: For my daughter, getting HPV vaccination at 13–15 years	
(AV)	of age is beneficial.	
	AV2: For my daughter, getting HPV vaccination at 13-15 years	$\mathbf{L}_{\mathbf{r}} = \mathbf{L}_{\mathbf{r}} \mathbf{A}_{\mathbf{r}}^{\dagger} = \mathbf{A}_{\mathbf{r}}^{\dagger} \mathbf{A}_{\mathbf{r}}^{\dagger}$
	of age is necessary.	Icek Ajzen (7); Abhyankar, Connor, and Lawton (8); Vinita Agarwal (9)
	AV3: For my daughter, getting HPV vaccination at 13–15 years	
	of age is wise.	
	AV4: For my daughter, getting HPV vaccination at 13–15 years	
	of age is important.	
Anticipated Regret (AR)	If I don't get my daughter vaccinated against HPV at 13–15 years	
	of age,	$C_{1} = (1, (10))$
	AR1: I will feel regret.	Conner et al. (10)
	AR2: I will be troubled.	

	AR3: I will feel guilty.	
	AR4: I will feel disappointed.	
Anticipated Pride (AP)	If I get my daughter vaccinated against HPV at 13-15 years of	
	age,	
	AP1: I will be proud.	
	AP2: I will be happy.	
	AP3: I will be satisfied.	
Descriptive Norms (DN)	DN1: Most parents on the Internet have vaccinated their	
	13-15-year-old daughters against HPV.	
	DN2: Most girls aged 13–15 years on the Internet are vaccinated	
	against HPV.	
	DN3: Most of my friends have vaccinated their 13-15-year-old	Icek Ajzen (7);
	daughters against HPV.	Mark Conner and Paul Norman (11)
	DN4: Most of my friends' daughters were vaccinated against	
	HPV at 13–15 years of age.	
	DN5: The parents of most of my daughter's classmates have	
	vaccinated their daughters against HPV.	

	DN6: Most of my daughter's classmates are vaccinated against	
	HPV.	
Injunctive Norms on the Internet	INI1: People online think that I should vaccinate my	-
(INI)	13–15-year-old daughter.	
	INI2: People online approve of me vaccinating my	
	13-15-year-old daughter against HPV.	
	INI3: People online hope that I vaccinate my 13–15-year-old	
	daughter against HPV.	
Perceived Moral Obligation (PMO)	PMO1: It is my responsibility to get my daughter vaccinated	
	against HPV at 13-15 years of age.	
	PMO2: It is moral to have my daughter vaccinated against HPV	
	at 13–15 years of age.	E. Dubé et al. (12);
	PMO3: It is in my values to have my daughter vaccinated against	Chu and Chiu (13)
	HPV at 13–15 years of age.	
	PMO4: I would feel incompetent if I didn't get my daughter	
	vaccinated against HPV at 13-15 years of age.	

Self-Efficacy for Vaccination	SEV1: I'm confident that I can take my daughter to get	
(SEV)	vaccinated against HPV.	Mark Conner and Paul Noman (11);
	SEV2: It is very easy for my daughter to get the HPV vaccine.	Z. Janet Yang (14)
	SEV3: I can afford to get my daughter vaccinated against HPV.	
Vaccination Intention (VI)	VI1: How likely would you be to accept vaccination of your	
	daughter with the HPV vaccine sometime soon?	
	VI2: If you were faced with the decision of getting your daughter	Xiaoli Nan and Kelly Madden (6);
	vaccinated against HPV today, how likely is it that you would	Rothman et al. (15)
	choose to accept the vaccine?	
	VI3: How likely would you be to accept your daughter's	
	vaccination against HPV in the future?	

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