

**LARGE ONLINE PRODUCT CATALOG SPACE INDICATES HIGH STORE PRICE:
UNDERSTANDING CUSTOMERS' OVERGENERALIZATION AND ILLOGICAL INFERENCE**

Online Appendix

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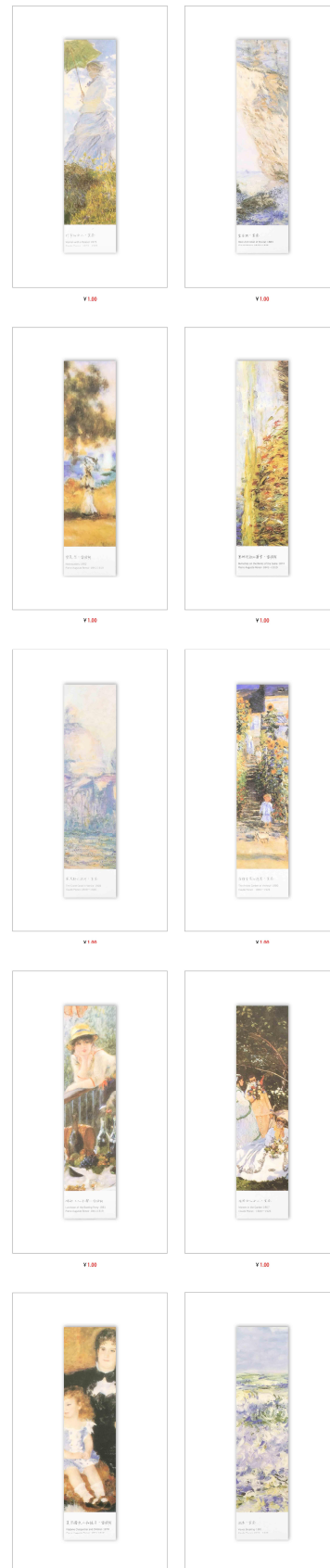
shunpinghan@nju.edu.cn

Appendix A. Stimulus Materials Used
 Appendix A1. Stimulus Materials Used in Study 1

Small space condition



Large space condition (the upper half)

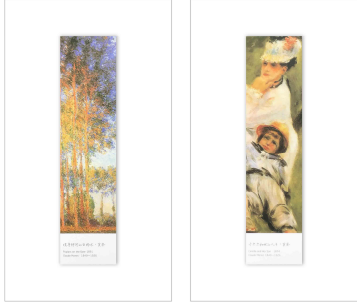


Large space condition (the lower half)



V100

V100



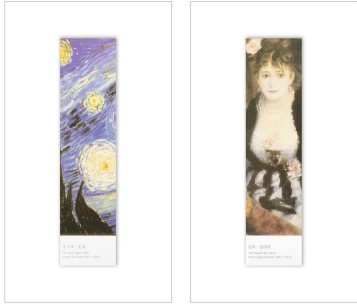
V100

V100



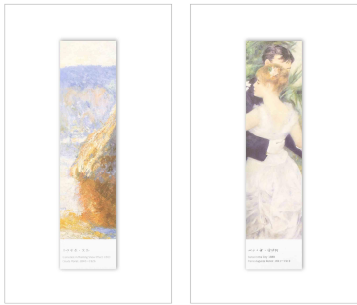
V100

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V100

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V100

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Appendix A2. Stimulus Materials Used in Study 2









Small space condition

Large space condition (the upper half)








All About Saving Money

All About Saving Money

 <p>DEAL OF THE DAY \$329.96 List: \$359.96 (8% off) Save \$25 on Fire HD 10 Productivity Bundle This is a Great Deal</p>	 <p>DEAL OF THE DAY \$19.99 List: \$39.99 (50% off) Epson LW-300 Labeler This is a Great Deal</p>	 <p>DEAL OF THE DAY \$24.88 List: \$69.99 (64% off) Totes Women's Troy Snow Boot This is a Great Deal</p>
 <p>DEAL OF THE DAY \$59.97 List: \$119.99 (50% off) Trek Light Gear Double Hammock with Rope Kit This is a Great Deal</p>	 <p>DEAL OF THE DAY \$11.85 List: \$21.25 (44% off) PURELL Hand Sanitizing Wipes - Clean Refreshing Scent - 20 Count This is a Great Deal</p>	 <p>DEAL OF THE DAY \$29.73 List: \$61.25 (42% off) GP Pro 26610 SoftPull Paper Towel Roll, White (Pack of 6) This is a Great Deal</p>
 <p>DEAL OF THE DAY \$24.09 List: \$41.49 (42% off) Rubbermaid Commercial FG9S3100GRAY Brute Tote with... This is a Great Deal</p>	 <p>DEAL OF THE DAY \$13.49 List: \$16.99 (16% off) AmazonBasics Microfiber Cleaning Cloth - 24 Pack This is a Great Deal</p>	 <p>DEAL OF THE DAY \$8.99 List: \$9.99 (10% off) AmazonBasics 4.0 Amp Dual USB Car Charger for Apple and Android... This is a Great Deal</p>
 <p>DEAL OF THE DAY \$59.99 List: \$79.99 (25% off) Westinghouse Counter Top Microwave Oven This is a Great Deal</p>	 <p>DEAL OF THE DAY \$61.59 List: \$399.00 (85% off) Save on Kattee 3-Way Women's Genuine Leather Shoulder Tote Bag This is a Great Deal</p>	 <p>DEAL OF THE DAY \$9.35 List: \$42.99 (28% off) Soft Despicable Me Minion Hat This is a Great Deal</p>
 <p>DEAL OF THE DAY \$19.97 List: \$49.97 (60% off) Gary Majdell Spot Leather Belt This is a Great Deal</p>	 <p>DEAL OF THE DAY \$74.99 List: \$149.99 (50% off) BRAVEN 770 Wireless Bluetooth Speaker This is a Great Deal</p>	 <p>DEAL OF THE DAY \$177.97 List: \$487.97 (5% off) Save \$10 on Fire HD 8 Essentials Bundle This is a Great Deal</p>

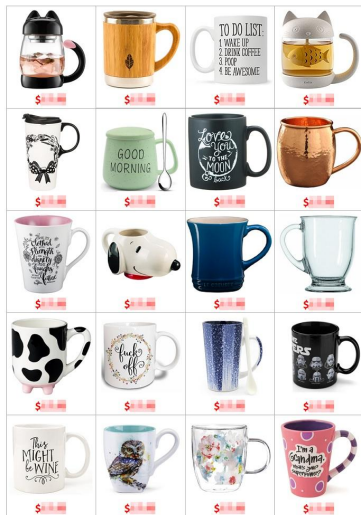
 <p>DEAL OF THE DAY \$24.09 List: \$41.49 (42% off) Rubbermaid Commercial FG9S3100GRAY Brute Tote with... This is a Great Deal</p>	 <p>DEAL OF THE DAY \$11.85 List: \$21.25 (44% off) PURELL Hand Sanitizing Wipes - Clean Refreshing Scent - 20 Count This is a Great Deal</p>
 <p>DEAL OF THE DAY \$8.99 List: \$9.99 (10% off) AmazonBasics 4.0 Amp Dual USB Car Charger for Apple and Android... This is a Great Deal</p>	 <p>DEAL OF THE DAY \$24.88 List: \$69.99 (64% off) Totes Women's Troy Snow Boot This is a Great Deal</p>
 <p>DEAL OF THE DAY \$59.99 List: \$79.99 (25% off) Westinghouse Counter Top Microwave Oven This is a Great Deal</p>	 <p>DEAL OF THE DAY \$29.73 List: \$61.25 (42% off) GP Pro 26610 SoftPull Paper Towel Roll, White (Pack of 6) This is a Great Deal</p>
 <p>DEAL OF THE DAY \$59.97 List: \$119.99 (50% off) Trek Light Gear Double Hammock with Rope Kit This is a Great Deal</p>	 <p>DEAL OF THE DAY \$9.35 List: \$42.99 (28% off) Soft Despicable Me Minion Hat This is a Great Deal</p>

Large space condition (the lower half)

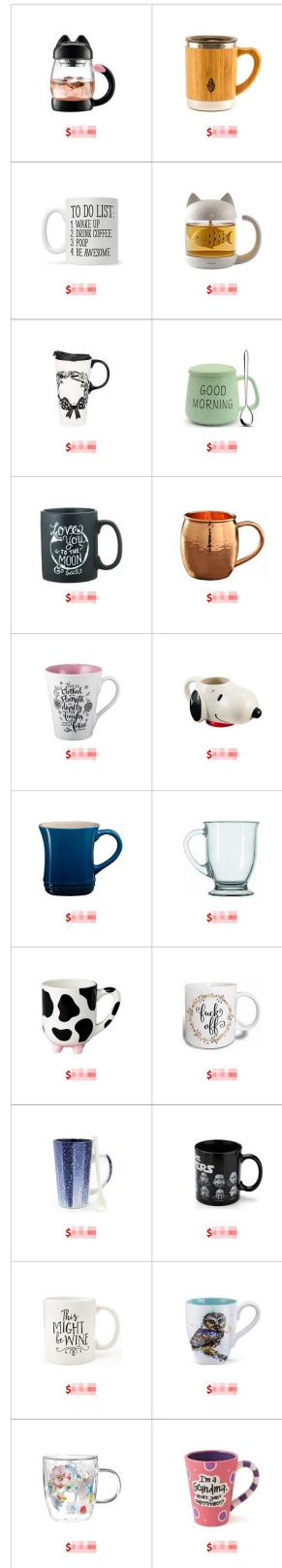
 <p>DEAL OF THE DAY \$177.97 List: \$187.97 (5% off) Save \$10 on Fire HD 8 Essentials Bundle</p> <p>This is a Great Deal</p>	 <p>DEAL OF THE DAY \$61.50 List: \$399.00 (85% off) Save on Kattee 3-Way Women's Genuine Leather Shoulder Tote Bag</p> <p>This is a Great Deal</p>
 <p>DEAL OF THE DAY \$329.96 List: \$369.96 (8% off) Save \$25 on Fire HD 10 Productivity Bundle</p> <p>This is a Great Deal</p>	 <p>DEAL OF THE DAY \$13.49 List: \$16.99 (16% off) AmazonBasics Microfiber Cleaning Cloth - 24 Pack</p> <p>This is a Great Deal</p>
 <p>DEAL OF THE DAY \$19.99 List: \$39.99 (50% off) Epson LW-300 Labeler</p> <p>This is a Great Deal</p>	 <p>DEAL OF THE DAY \$74.99 List: \$149.99 (50% off) BRAVEN 770 Wireless Bluetooth Speaker</p> <p>This is a Great Deal</p>
 <p>DEAL OF THE DAY \$19.97 List: \$49.97 (60% off) Gary Majdell Sport Leather Belt</p> <p>This is a Great Deal</p>	

Appendix A3. Stimulus Materials Used in Studies 3 and 4

Small space condition



Large space condition



Note. The prices of mugs were masked to ensure participants did not choose their favorite mug rather than making choice simply based on the price.

Appendix A4. Pictures for Measuring the “Offline Large Space = High Price” Belief in Study 4

We used two pairs of pictures from Sevilla and Townsend (2016)’s online supplemental material (http://journals.ama.org/doi/suppl/10.1509/jmr.13.0601/suppl_file/jmr.13.0601-web-appendix.pdf).

Pair 1 is adopted from the space-to-product ratio manipulation for the silver stud earrings in Sevilla and Townsend (2016)’s Study 4 (please see the bottom panel on Page 7 (web appendix D) of their online supplemental material).
















Pair 2 is adopted from the space-to-product ratio manipulation for the moisturizing hand cream in Sevilla and Townsend (2016)’s Study 2 (please see the bottom panel on Page 5 (web appendix C) of their online supplemental material).

Appendix A5. An Example of the Stimulus Materials Used in Study 5

Small space condition

 \$34.99 (41% OFF MSRP \$59.00)	 \$64.99 (35% OFF MSRP \$99.95)	 \$29.99 (57% OFF MSRP \$69.00)	 \$64.99 (38% OFF MSRP \$104.95)
 \$32.99 (33% OFF MSRP \$49.00)	 \$49.99 (55% OFF MSRP \$110.00)	 \$79.99 (45% OFF MSRP \$145.00)	 \$25.99 (43% OFF MSRP \$45.95)
 \$52.99 (44% OFF MSRP \$95.00)	 \$52.99 (59% OFF MSRP \$130.00)	 \$59.99 (33% OFF MSRP \$89.95)	 \$27.99 (49% OFF MSRP \$55.00)
 \$54.99 (56% OFF MSRP \$110.00)	 \$97.75 (30% OFF MSRP \$140.00)	 \$94.99 (21% OFF MSRP \$120.00)	 \$54.99 (42% OFF MSRP \$95.00)

Large space condition

 \$52.99 (44% OFF MSRP \$95.00)	 \$52.99 (59% OFF MSRP \$130.00)
 \$59.99 (33% OFF MSRP \$89.95)	 \$27.99 (49% OFF MSRP \$55.00)
 \$54.99 (56% OFF MSRP \$110.00)	 \$97.75 (30% OFF MSRP \$140.00)
 \$94.99 (21% OFF MSRP \$120.00)	 \$54.99 (42% OFF MSRP \$95.00)
 \$34.99 (41% OFF MSRP \$59.00)	 \$64.99 (35% OFF MSRP \$99.95)
 \$29.99 (57% OFF MSRP \$69.00)	 \$64.99 (38% OFF MSRP \$104.95)
 \$32.99 (33% OFF MSRP \$49.00)	 \$49.99 (55% OFF MSRP \$110.00)
 \$79.99 (45% OFF MSRP \$145.00)	 \$25.99 (43% OFF MSRP \$45.95)

Appendix B. The Effect of Treatments on Control Variables

As shown in the Appendix Tables B1 to B3 below, the experimental manipulations did not affect the control variables.

Appendix B1. The Effect of Space on Control Variables (Study 1)

Control variables	Large space	Small space	F(1,119)	p
Helpfulness	3.83 (1.19)	3.77 (0.98)	0.08	0.777
Attractiveness	3.31 (1.41)	3.50 (1.42)	0.57	0.450
Attention to the design features	3.44 (1.50)	3.50 (1.50)	0.05	0.828
Assortment of products	2.37 (1.20)	2.45 (0.97)	0.16	0.692

Appendix B2. The Effect of Space and Reminder on Control Variables (Study 2)

Control variables		Large space	Small space	F (1, 439)	p	Interaction
Quality	Without reminder	4.21 (1.79)	4.20 (1.28)	0.00	0.953	$F = .02$
	With reminder	4.31 (0.95)	4.34 (1.17)	0.03	0.874	$p = .877$
Cost	Without reminder	3.42 (1.32)	3.49 (1.31)	0.15	0.698	$F = .21$
	With reminder	3.35 (1.36)	3.53 (1.21)	1.00	0.318	$p = .648$

Appendix B3. The Effect of Space and Design Knowledge on Control Variables (Study 3)

Control variables		Coef.	Std. Err.	t	p	[95% Conf. Interval]	
Positioning	Gender	-0.010	0.006	-1.85	0.065	-0.021	0.001
	Age	-0.123	0.069	-1.78	0.075	-0.258	0.013
	Space	-0.008	0.066	-0.12	0.901	-0.138	0.121
	Knowledge	0.056	0.048	1.16	0.247	-0.039	0.150
	Space*knowledge	-0.055	0.048	-1.15	0.252	-0.148	0.039
	_Cons	4.323	0.069	63.1	0.000	4.188	4.458
Design	Gender	-0.009	0.006	-1.41	0.159	-0.021	0.004
	Age	-0.195	0.078	-2.5	0.013	-0.348	-0.042
	Space	-0.006	0.075	-0.09	0.931	-0.153	0.140
	Knowledge	0.125	0.054	2.3	0.022	0.018	0.231
	Space*knowledge	-0.065	0.054	-1.21	0.227	-0.171	0.041
	_Cons	4.365	0.078	56.25	0.000	4.213	4.518
Cost	Gender	-0.007	0.005	-1.24	0.217	-0.017	0.004
	Age	0.049	0.066	0.73	0.464	-0.082	0.179
	Space	0.003	0.064	0.05	0.962	-0.122	0.128
	Knowledge	0.069	0.046	1.49	0.137	-0.022	0.160
	Space*knowledge	-0.017	0.046	-0.37	0.714	-0.107	0.074
	_Cons	3.486	0.066	52.68	0.000	3.356	3.616

Appendix C. Tests for Distributional Assumption for Parametric Tests

As shown in the Appendix Tables C1 & C2 below, the values for skewness and kurtosis are all between -2 and +2, which are considered acceptable for parametric tests (Field, 2009; Trochim & Donnelly, 2001).

Appendix C1. Skewness and Kurtosis for Studies 1 and 2

			Large space		Small space	
			Skewness	Kurtosis	Skewness	Kurtosis
Study 1		Price	0.65	-0.15	0.56	-0.44
		Crowdedness	0.14	-0.49	0.11	-0.27
		Helpfulness	-0.23	-0.25	-0.06	-0.73
		Attractiveness	0.24	-1.05	0.14	-1.10
		Attention to the design features	-0.01	-0.98	0.47	-0.60
		Assortment	0.71	0.26	0.09	-0.43
Study 2	Without reminder	Price	0.34	0.08	-0.16	0.33
		Quality	-0.29	0.38	-0.51	-0.05
		Cost	0.26	-0.19	0.65	0.42
	With reminder	Price	0.04	-0.34	0.26	0.15
		Quality	-0.05	-0.48	-0.13	0.72
		Cost	0.34	-0.32	0.34	-0.07

Appendix C2. Skewness and Kurtosis for Pretests of Studies 2 to 5

		Large space		Small space	
		Skewness	Kurtosis	Skewness	Kurtosis
Pretest for Study 2	crowdedness	0.19	-0.74	-0.05	-1.16
	helpfulness	0.34	-1.06	-0.75	0.33
	attractiveness	0.69	-0.32	0.00	-0.72
	drawing attention to the design features	0.38	-0.18	0.46	-0.30
	assortment	-0.88	0.61	-0.46	-0.70
Pretest for Study 3 & Study 4	crowdedness	0.05	-0.56	-0.21	-0.97
	helpfulness	-0.24	-0.37	-0.05	0.95
	attractiveness	-0.07	-1.16	-0.36	-0.05
	drawing attention to the design features	0.26	-1.26	-0.38	-0.75
	assortment	-0.42	-0.48	-1.11	0.72
Pretest for Study 5	crowdedness	0.14	-0.66	-0.60	-0.65
	helpfulness	-0.77	1.01	-0.27	-0.43
	attractiveness	0.25	-0.48	1.00	0.52
	drawing attention to the design features	0.41	-0.39	0.88	0.34
	assortment	-0.57	-0.12	-0.16	-0.76

Appendix D. Robustness Tests Using Regressions

Study 1

As shown in Appendix D1.1 and D1.2, using robust t statistics and bootstrapping in the regression again confirmed that participants tended to perceive higher level of price when the online product catalog had more space.

Appendix D1.1. Robust t Statistics for the Regression (Study 1)

Variables	Coef.	Robust Std. Err.	t	p	[95% Conf. Interval]	
Gender	-0.002	0.214	-0.01	0.991	-0.427	0.422
Age	-0.003	0.037	-0.09	0.929	-0.076	0.069
Helpfulness	-0.128	0.114	-1.12	0.266	-0.353	0.098
Attractiveness	0.020	0.090	0.22	0.826	-0.159	0.199
Attention to the design features	0.129	0.094	1.38	0.171	-0.057	0.315
Assortment of products	0.126	0.111	1.13	0.261	-0.095	0.346
Space	0.461	0.211	2.18	0.031	0.043	0.879
_Cons	2.332	0.961	2.43	0.017	0.427	4.236

Appendix D1.2. Bootstrapping for the Regression (Study 1)

Variables	Observed coef.	Bootstrap Std. Err.	z	p	[95% Conf. Interval]	
Gender	-0.002	0.225	-0.01	0.992	-0.444	0.439
Age	-0.003	0.038	-0.09	0.931	-0.078	0.071
Helpfulness	-0.128	0.124	-1.03	0.305	-0.371	0.116
Attractiveness	0.020	0.107	0.19	0.852	-0.189	0.229
Attention to the design features	0.129	0.090	1.43	0.153	-0.048	0.306
Assortment	0.126	0.103	1.22	0.221	-0.075	0.327
Space	0.461	0.211	2.19	0.029	0.048	0.874
_Cons	1.871	0.982	1.91	0.057	-0.053	3.795

Study 2

As shown in Appendix D2.1 and D2.2, using robust t statistics and bootstrapping in the regression again confirmed that the effect of space was moderated by the reminder of offline-online difference.

Appendix D2.1. Robust t Statistics for the Regression (Study 2)

Variables	Coef.	Robust Std. Err.	t	p	[95% Conf. Interval]	
Gender	0.093	0.108	0.87	0.385	-0.118	0.305
Age	0.013	0.004	2.91	0.004	0.004	0.021
Quality	0.336	0.057	5.88	0.000	0.224	0.449
Cost	0.064	0.048	1.34	0.180	-0.030	0.159
Space	0.306	0.143	2.13	0.033	0.024	0.588
Reminder	0.599	0.318	1.88	0.060	-0.026	1.224
Space*reminder	-0.459	0.211	-2.18	0.030	-0.873	-0.045
_Cons	1.251	0.359	3.49	0.001	0.546	1.957

Appendix D2.2. Bootstrapping for the Regression (Study 2)

Variables	Observed coef.	Bootstrap Std. Err.	z	p	[95% Conf. Interval]	
Gender	0.093	0.115	0.81	0.415	-0.131	0.318
Age	0.013	0.004	3.21	0.001	0.005	0.020
Quality	0.336	0.056	6.04	0.000	0.227	0.445
Cost	0.064	0.049	1.30	0.192	-0.032	0.161
Space	0.306	0.125	2.44	0.014	0.061	0.552
Reminder	0.599	0.333	1.80	0.072	-0.055	1.252
Space*reminder	-0.459	0.209	-2.19	0.028	-0.868	-0.049
_Cons	1.251	0.349	3.59	0.000	0.568	1.934

Study 3

As shown in Appendix D3.1 and D3.2, using robust t statistics and bootstrapping in the regression again confirmed that the effect of space was moderated by the web design knowledge.

Appendix D3.1. Robust t Statistics for the Regression (Study 3)

Variables	Coef.	Robust Std. Err.	t	p	[95% Conf. Interval]	
Gender	-0.068	0.049	-1.38	0.167	-0.164	0.028
Age	0.001	0.004	0.29	0.773	-0.007	0.009
Positioning	0.478	0.046	10.32	0.000	0.386	0.569
Design	-0.040	0.039	-1.01	0.311	-0.117	0.037
Cost	0.001	0.044	0.02	0.983	-0.085	0.087
Space	0.075	0.043	1.74	0.083	-0.010	0.160
Knowledge	-0.028	0.035	-0.79	0.427	-0.096	0.041
Space*knowledge	-0.087	0.034	-2.52	0.012	-0.154	-0.019
_Cons	4.267	0.048	89.16	0.000	4.173	4.362

Appendix D3.2. Bootstrapping for the Regression (Study 3)

Variables	Observed coef.	Bootstrap Std. Err.	z	p	[95% Conf. Interval]	
Gender	-0.068	0.049	-1.37	0.171	-0.164	0.029
Age	0.001	0.004	0.30	0.763	-0.006	0.009
Positioning	0.478	0.042	11.50	0.000	0.396	0.559
Design	-0.040	0.043	-0.93	0.353	-0.124	0.044
Cost	0.001	0.043	0.02	0.983	-0.083	0.084
Space	0.075	0.047	1.60	0.111	-0.017	0.167
Knowledge	-0.028	0.033	-0.84	0.402	-0.092	0.037
Space*knowledge	-0.087	0.032	-2.73	0.006	-0.149	-0.025
_Cons	4.267	0.055	78.26	0.000	4.161	4.374

Study 4

As shown in Appendix D4.1 and D4.2, using robust t statistics and bootstrapping in the regression again confirmed that the effect of space was moderated by the belief of “offline large space = high price”.

Appendix D4.1. Robust t Statistics for the Regression (Study 4)

Variables	Coef.	Robust Std. Err.	t	p	[95% Conf. Interval]	
Gender	-0.138	0.052	-2.65	0.008	-0.240	-0.036
Age	-0.002	0.004	-0.42	0.671	-0.010	0.006
Space	0.137	0.049	2.78	0.006	0.040	0.234
Offline belief	0.045	0.043	1.04	0.299	-0.040	0.130
Space*belief	0.098	0.043	2.29	0.023	0.014	0.182
_Cons	4.277	0.052	81.88	0.000	4.174	4.379

Appendix D4.2. Bootstrapping for the Regression (Study 4)

Variables	Observed coef.	Bootstrap Std. Err.	z	p	[95% Conf. Interval]	
Gender	-0.138	0.043	-3.24	0.001	-0.221	-0.054
Age	-0.002	0.004	-0.47	0.642	-0.009	0.006
Space	0.137	0.046	3	0.003	0.047	0.227
Offline belief	0.045	0.043	1.05	0.296	-0.039	0.129
Space*belief	0.098	0.042	2.35	0.019	0.016	0.179
_Cons	4.277	0.048	89.46	0.000	4.183	4.370

Study 5

As shown in Appendix D5.1 and D5.2, using robust t statistics and bootstrapping in the regression again confirmed that the effect of space on store evaluation was moderated by the quality-price weighting, which was further qualified by the web design knowledge.

Appendix D5.1. Robust t Statistics for the Regression (Study 5)

Variables	Coef.	Robust Std. Err.	t	p	[95% Conf. Interval]	
order	-0.006	0.067	-0.08	0.933	-0.138	0.127
gender	-0.088	0.069	-1.27	0.205	-0.224	0.048
age	0.013	0.006	2.02	0.044	0.000	0.026
space	0.103	0.067	1.54	0.124	-0.028	0.234
weighting	0.022	0.036	0.6	0.547	-0.049	0.093
knowledge	0.185	0.051	3.67	0.000	0.086	0.285
space*weighting	-0.092	0.036	-2.55	0.011	-0.163	-0.021
space*knowledge	0.083	0.051	1.64	0.102	-0.017	0.184
weighting*knowledge	0.010	0.027	0.37	0.713	-0.044	0.064
three-way interaction	0.058	0.027	2.11	0.036	0.004	0.112
_cons	3.762	0.068	55.23	0.000	3.628	3.896

Appendix D5.2. Bootstrapping for the Regression (Study 5)

Variables	Observed coef.	Bootstrap Std. Err.	z	p	[95% Conf. Interval]	
order	-0.006	0.067	-0.08	0.932	-0.136	0.125
gender	-0.088	0.079	-1.12	0.264	-0.242	0.066
age	0.013	0.006	2.06	0.039	0.001	0.025
space	0.103	0.071	1.45	0.147	-0.036	0.242
weighting	0.022	0.036	0.6	0.546	-0.049	0.092
knowledge	0.185	0.046	4.05	0.000	0.096	0.275
space*weighting	-0.092	0.042	-2.21	0.027	-0.174	-0.010
space*knowledge	0.083	0.053	1.58	0.115	-0.020	0.187
weighting*knowledge	0.010	0.028	0.35	0.724	-0.046	0.066
three-way interaction	0.058	0.025	2.35	0.019	0.009	0.106
_cons	3.762	0.065	58.23	0.000	3.635	3.888

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