

Table A. Key studies on irradiation perspective (A), Benefit-based images (B), and cosmopolitanism (C)

Study	Independent variable	Exploratory mechanism Moderator	Mediator	Dependent variable	Study context Participants	Products/brands	Key findings related to our study
<i>A. Key materials of irradiation perspective</i>							
Diamantopoulos, Schlegelmilch, and Paliawadana (2011)	Country-of-origin image	n/a	Product category image associated with the country	Purchase Intentions	British consumers	US and Chinese brands	Brand image fully mediated the relationship between country-of-origin image and purchase intention.
Josiassen, Lukas, Whitwell, and Assaf (2013)	Basic origin image	n/a	Brand image Product origin image Category origin image Product evaluations	Purchase intentions	Australian consumers	Electronic consumer goods	The halo model of origin images fits better than alternative models (e.g., higher-order reflective model, alternative halo model.)
Lee, Lockshin, and Greenacre (2016)	Product Beliefs	Country familiarity Product-Country congruence	n/a	Country image	Chinese consumers	Australian products.	Product beliefs can shape a country's image but diminish with greater familiarity and only persist when the product aligns with the country.
Eng, Ozdemir, and Michelson (2016)	Country of production Consumer motivation Brand origin and country of production congruency Brand image/loyalty Price consciousness	n/a	n/a	Brand evaluation Consumer choice Purchase decision	British consumers Chinese consumers	Sony products made in a developed/developing country	In developed countries, brand origin and country of production significantly influence consumer evaluations, while in developing nations, perceived brand image and price are crucial factors.
Diamantopoulos <i>et al.</i> (2019)	Ethnocentrism (Model A, C, D) Perceived brand globalness (Model B, C)	Ethnocentrism (Model B, D)	Perceived brand globalness (Model A, D)	Brand quality Purchase intentions	n/a (meta-analysis)	n/a (meta-analysis)	Consumer dispositions affect responses to global brands through diverse theoretical mechanisms, and their overall effect sizes are relatively minimal.
Bautista Jr., Osaki, and Jeong (2020)	COO	n/a	Sense of pride Self-expression Self-satisfaction Brand image Product quality	Purchase intention	Japanese or Filipino college students	Uniqlo, a Japanese apparel brand	COO does not directly influence purchase intent but can impact the purchase intent of Filipino and Japanese consumers when mediated by product quality.
Samiee and Chabowski (2021)	Customer orientation (e.g., cultural orientation)	Consumer disposition	Product evaluation (e.g., brand origin)	Consumer outcomes (e.g., brand attitude) Brand performance (e.g., brand equity)	n/a (meta-analysis)	n/a (meta-analysis)	Co-citation analysis proposes a theoretical connection between customer orientation, consumer disposition, product evaluation, and outcomes.

Alonso-Dos-Santos <i>et al.</i> (2022)	Family firm identity	Country-of-origin (national/ foreign)	n/a	Brand trust Purchase intention	Consumers in Chile and Spain	Rice (utilitarian) Wine (hedonic)	Highlighting the firm's family-oriented nature and the product's local/ national origins boosted consumer trust in the brand and purchase intention.
Wang <i>et al.</i> (2022)	COO stereotypes (competence vs. warmth)	Brand positioning (competence vs. warmth)	n/a	Purchase intention	Chinese	Pen Bluetooth speaker, headset Electric toothbrush	COO stereotypes aligning with brand positioning influence consumer purchases, highlight a boundary effect in this congruence, and emphasize the importance of the competence dimension.
<i>B. Key materials of Benefit-based images</i>							
Trivedi, Patel, and Savalia (2015)	Environmental locus of control	n/a	Pro environmental behaviour	Willingness to pay	Indian working professionals	Environmentally friendly products	Willingness to pay for green products is primarily predicted by pro-environmental behaviours and environmental locus of control.
Gallarza <i>et al.</i> (2017)	Intrinsic values (e.g., escapism) Extrinsic values (e.g., status)	n/a	Satisfaction	Loyalty	Domestic and international tourists	Four- and five-star hotels in a Mediterranean country	The closest interrelation appears between social values of status and esteem, as esteem is most strongly linked to status, and vice versa.
He and Zhang (2018)	Institutional image (a part of country image) Institutional distance	Inward internationalization experience Overseas subsidiary as the acquirer	n/a	Foreign acquisition completion	Emerging MNCs from ten major emerging economies (e.g., BRICS)	n/a	Emerging MNCs' overseas acquisitions are less likely to succeed if their home country has a poor institutional image.
Topaloglu and Gokalp (2018)	Severe recall announcements	Brand concept (functional/luxury)	n/a	Data on car sales from Automotive News	n/a	All cars sold in the US	Functional concept models exhibit lower sales performance than luxury concept models during severe product recalls.
Chen <i>et al.</i> (2020)	System justification thinking Self-discrepancy	Heuristics/herding behavior Mental simulation	Country of reference Etic conformity	Transmitted preference	n/a (conceptual paper)	n/a (conceptual paper)	A positive country of reference image arises when domestic consumers, feeling inadequate, admire foreign consumers and emulate their product choices.
Thøgersen and Pedersen (2021)	General country image Environmental country image	n/a	Product country image Product category country image	Evaluation/choice of environmentally differentiated imported product	Consumers in Denmark, France, and Germany	Products from Germany/Denmark Food products from Germany/Denmark	Consumers' evaluation of an environmentally differentiated product is influenced by the country's environmental image.
Revilla-Camacho <i>et al.</i> (2022)	Cognitive image Reputation	n/a	Affective image Identity	Country brand	Spanish consumers	n/a	Identity and reputation bolster the country brand. Although the cognitive image positively correlates with both identity and the affective image, the affective image does not impact identity.

C. Key materials of Cosmopolitanism							
Grinstein and Riefler (2015)	Message frame (local/global) Environmental concern Local identity	Cosmopolitanism	n/a	Willingness to pay for an environmentally friendly car	Consumers in Israel	Automobile	The global framing approach proved more effective than the local framing approach for high-cosmopolitan consumers.
Han and Won (2018)	Cultural antecedents (e.g., individualism) Economic antecedents (e.g., unemployment rates)	n/a	n/a	Consumer cosmopolitanism Consumer ethnocentrism	Consumers from 21 countries	n/a	Cosmopolitanism is elevated in countries that are more individualistic, less masculine, have high uncertainty avoidance, and are developing.
Srivastava <i>et al.</i> (2018)	Cosmopolitanism Need for uniqueness Materialism	n/a	Attitude	Purchase intention	Indian shoppers	Global brands from developed and emerging markets	Cosmopolitanism positively impacts attitudes towards global brands from developed markets among emerging market consumers.
Han, Wang, and Nam (2020)	Individualism Age	n/a	Animosity Cosmopolitanism	Brand attitudes Purchase intent	Chinese consumers	Japanese brands	Individualistic consumers favour Japanese brands due to low animosity and high cosmopolitanism.
Han, Nam, and Swanepoel (2023)	Perceived brand localness	Cosmopolitanism Animosity Category cultural grounding Product involvement	Brand trust	Purchase intentions	Consumers in Southeast Asia (the Philippines, Vietnam and Myanmar) Indian consumers	Foreign brands in developing countries in Asia	Perceived brand localness promotes brand trust and active ownership. These effects remain consistent across consumers with varying degrees of cosmopolitanism.
Srivastava <i>et al.</i> (2023)	Cosmopolitanism	n/a	Perceived brand quality Perceived brand prestige Perceived brand relative price	Purchase intention	Indian consumers	Foreign vs. local brands from five product categories	Cosmopolitanism boosts foreign brand purchases while lowering local brand purchases, mediated by perceived brand quality.
Abdul-Latif <i>et al.</i> (2024)	Cosmopolitanism Ethnocentrism Internationalism	n/a	n/a	Willingness to buy	Malaysian consumers	Chinese electronics products	Malaysians' willingness to buy Chinese products is negatively impacted by ethnocentrism, while cosmopolitanism show conflicting effects.
Gil <i>et al.</i> (2024)	Cosmopolitanism	n/a	Attitude towards purchasing sustainable apparel Perceived norm	Apparel sustainability knowledge Sustainable apparel purchase intention	US consumers	Sustainable apparel	Cosmopolitanism positively affects sustainability knowledge, attitudes, norms, and purchase intentions in the context of sustainable apparel.
Jin, Shin, Yang, Jeong, and Chung (2024)	Religiosity	n/a	Ethnocentrism Cosmopolitanism	Global brand preference Purchase intention	Indonesian female consumers	Korean cosmetics	Cosmopolitanism increased both global brand preference and purchase intention towards Korean cosmetics.

Lin <i>et al.</i> (2025)	Cosmopolitanism Home ethnocentrism Host ethnocentrism	n/a	Subjective norm Attitude Perceived behavioural control	Purchase implementation intentions	Chinese pre-made dishes	Overseas Chinese in the regional comprehensive economic partnership countries	Home ethnocentrism and cosmopolitanism enhance purchase intentions, while host ethnocentrism diminishes them.
<i>The present study</i>	Country-of-origin image	Cosmopolitanism	Benefit-based images (functional, social, environmental)	Purchase intention	Consumers in developed countries (US, Japan) emerging countries (China, India)	Automobiles from developed countries (US, Japan) emerging countries (China, India)	Cosmopolitanism strengthens the COO image's impact on purchase intention by enhancing social and environmental perceptions. US and Japanese consumers with high cosmopolitanism favourably perceive emerging markets' COO image, increasing purchase intention.

Source: Authors.

Table B. Sample description

		United States		Japan		China		India		Total	
Gender											
	Male	278	42.2%	291	49.9%	360	48.5%	227	42.9%	1156	46.0%
	Female	381	57.8%	292	50.1%	383	51.5%	302	57.1%	1358	54.0%
Age											
	≤34	231	35.1%	190	32.6%	288	38.8%	183	34.6%	892	35.5%
	35–54	269	40.8%	256	43.9%	302	40.6%	239	45.2%	1066	42.4%
	≥55	159	24.1%	137	23.5%	153	20.6%	107	20.2%	556	22.1%
Family income level*											
	1	110	16.7%	86	14.8%	125	16.8%	92	17.4%	413	16.4%
	2	117	17.8%	77	13.2%	302	40.6%	68	12.9%	564	22.4%
	3	96	14.6%	149	25.6%	115	15.5%	62	11.7%	422	16.8%
	4	93	14.1%	100	17.2%	80	10.8%	107	20.2%	380	15.1%
	5	61	9.3%	130	22.3%	42	5.7%	78	14.7%	311	12.4%
	6	45	6.8%	32	5.5%	24	3.2%	46	8.7%	147	5.8%
	7	58	8.8%	9	1.5%	28	3.8%	55	10.4%	150	6.0%
	Prefer not to say	79	12.0%	0	0.0%	27	3.6%	21	4.0%	127	5.1%

* We used the categories of family income level in each country as classified by the research agency.

U.S.: Under 25,000USD (1), 25,000~49,999USD (2), 50,000~74,999 USD (3), 75,000~99,999USD (4), 100,000~124,999USD (5), 125,000~149,999USD (6), and 150,000USD or more (7).

Japan: Under 2,800,000JPY (1), 2,800,000~5,579,999JPY (2), 5,580,000~8,359,999JPY (3), 8,360,000~11,149,999JPY (4), 11,150,000~13,939,999JPY (5), 13,940,000~16,729,999JPY (6), and 16,730,000JPY or more (7).

India: Under 50,000INR (1), 50,000~149,999INR (2), 150,000~199,999INR (3), 200,000~349,999INR (4), 350,000~499,999INR (5), 500,000~699,999INR (6), and 700,000INR or more (7).

China: Under 10,000CNH (1), 10,000~24,999CNH (2), 25,000~39,999CNH (3), 40,000~59,999CNH (4), 60,000~89,999CNH (5), 90,000~149,999CNH (6), and 150,000CNH or more (7).

Source: Authors.

Table C. Convergent validity, internal consistency and construct validity

		Mean	Standard deviation	Factor loadings	Item-to-total
Country-of-origin image (α : .93, CR: .93, AVE: .62): Chan et al. (2010)					
1	[Country] is rich.	4.63	1.75	0.72	0.76
2	The people of [Country] have a refined taste for the beautiful things in life.	4.53	1.65	0.82	0.84
3	[Country] has a highly educated population.	4.73	1.65	0.78	0.82
4	[Country] is an ideal country.	4.22	1.85	0.81	0.83
5	The people of [Country] are trustworthy.	4.49	1.69	0.83	0.85
6	The people of [Country] are very hardworking.	4.97	1.61	0.75	0.78
7	The people of [Country] are very likeable overall.	4.69	1.66	0.81	0.83
8	[Country] is a politically stable country.	4.32	1.82	0.79	0.83
Functional image (α : .94, CR: .94, AVE: .70): Sweeney and Soutar (2001)					
9	The product has consistent quality.	4.58	1.63	0.86	0.88
10	The product is made well.	4.63	1.64	0.86	0.88
11	The product has an acceptable standard of quality.	4.73	1.59	0.82	0.85
12	The product performs consistently.	4.59	1.63	0.88	0.89
13	The product offers value for money.	4.61	1.62	0.85	0.87
14	The product is good for the price.	4.62	1.58	0.85	0.87
15	The product would be economical.	4.65	1.56	0.76	0.80
Social image (α : .92, CR: .92, AVE: .74): Sweeney and Soutar (2001)					
16	The product would help me feel acceptable.	4.28	1.73	0.85	0.89
17	The product would improve the way I am perceived.	4.21	1.76	0.86	0.90
18	The product would make a good impression on other people.	4.37	1.69	0.87	0.90
19	The product would give its owner social approval.	4.28	1.72	0.87	0.90
Environmental image (α : .92, CR: .91, AVE: .72): Balderjahn et al. (2013)					
20	It is made from recycled materials.	4.67	1.63	0.82	0.87
21	It can be disposed of in an environmentally friendly manner.	4.86	1.62	0.84	0.89
22	It is packaged in an environmentally friendly manner.	4.84	1.63	0.88	0.90
23	It is produced in an environmentally manner.	4.84	1.66	0.88	0.90

Purchase intention (α : .96, CR: .94, AVE: .64): Dodds et al. (1991)

24	The likelihood of purchasing this product from the country is (7 = very high to 1 = very low).	4.05	2.07	0.92	0.93
25	If I were going to buy this product from the country, I would consider buying this model at the price shown. (7 = strongly agree to 1 = strongly disagree).	4.15	1.96	0.85	0.90
26	At the price shown, I would consider buying from the country. (7 = strongly agree to 1=strongly disagree).	4.19	1.97	0.88	0.92
27	The probability that I would consider buying from the country is (7 = very high to 1 = very low).	4.10	2.04	0.93	0.93
28	My willingness to buy from the country is (7 = very high to 1 = very low).	4.12	2.05	0.92	0.93

Familiarity (α : .90, CR: .90, AVE: .75): Kent and Allen (1994)

29	I am familiar with it.	4.20	1.91	0.90	0.93
30	I have experienced the products and services.	4.34	1.97	0.82	0.90
31	I am knowledgeable with it.	4.14	1.91	0.88	0.91

Consumer cosmopolitanism (α : .93, CR: .93, AVE: .68): Cleveland et al. (2009)

32	I enjoy exchanging ideas with people from other cultures or countries.	4.99	1.76	0.85	0.87
33	I am interested in learning more about people who live in other countries.	5.20	1.59	0.84	0.87
34	I enjoy being with people from other countries to learn about their views and approaches.	5.13	1.58	0.83	0.86
35	I like to observe people of other countries, to see what I can learn from them.	5.15	1.59	0.85	0.87
36	I like to learn about other ways of life.	5.21	1.58	0.81	0.84
37	I find people from other cultures stimulating.	4.87	1.65	0.79	0.84

Consumer ethnocentrism (α : .81, CR: .81, AVE: .68): Lundstrom et al. (1998)

38	I feel guilty if I choose to buy foreign products over domestic products.	3.80	1.87	0.85	0.92
39	Buying foreign products hurts our economy and the people of our country.	3.99	1.89	0.80	0.92

Note. CR: composite reliability; AVE: average variance extracted

Source: Authors.

Table D. Measurement invariance

Model	χ^2	<i>df</i>	χ^2/df	RMSEA	Δ RMSEA	SRMR	Δ SRMR	CFI	Δ CFI
Full configural	6,996.65	2,692	2.60	.025	-	.04	-	.94	-
Full metric	7,244.52	2,785	2.60	.025	.000	.04	.00	.94	Full configural - Full metric .00
Full scalar	9,512.17	2,902	3.28	.030	.005	.04	.00	.91	Full metric - Full scalar .03
Partial scalar	8,383.11	2,773	3.02	.028	.003	.04	.00	.93	Full metric - Partial scalar .01

Note. χ^2 : chi square; *df*: degrees of freedom; RMSEA: root mean square error of approximation; SRMR: standardised root mean residual; CFI: comparative fit index
Source: Authors.

Table E. Mediation analysis estimating the moderating effect of consumer cosmopolitanism

						Standard β	Standard Error	95%CI (Lower)	95%CI (Upper)	p-value
Consumer in emerging country ^ Product from developed market (n = 634)	Low cosmopolitanism	COO	---	---		0.12	0.11	-0.09	0.35	.23
			---	BBI (total)	---	0.33	0.10	0.12	0.52	< .01
			---	Functional	---	0.32	0.15	0.10	0.69	< .01
			---	Social	---	0.00	0.15	-0.31	0.26	.99
			---	Environmental	---	0.02	0.05	-0.08	0.12	.68
	High cosmopolitanism	COO	---	---		0.20	0.23	-0.21	0.75	.27
			---	BBI (total)	---	0.43	0.23	-0.08	0.86	.09
			---	Functional	---	0.25	0.22	-0.19	0.67	.21
			---	Social	---	-0.02	0.10	-0.23	0.17	.80
			---	Environmental	---	0.15	0.06	0.04	0.30	< .01
Consumer in developed country ^ Product from emerging market (n = 624)	Low cosmopolitanism	COO	---	---		0.01	0.12	-0.25	0.21	.94
			---	BBI (total)	---	0.24	0.10	0.08	0.47	< .01
			---	Functional	---	0.35	0.46	-0.07	1.07	.10
			---	Social	---	-0.01	0.40	-0.54	0.34	.95
			---	Environmental	---	0.00	0.02	-0.04	0.03	.84
	High cosmopolitanism	COO	---	---		0.22	0.09	0.05	0.41	< .01
			---	BBI (total)	---	0.43	0.07	0.31	0.60	< .001
			---	Functional	---	0.25	0.14	-0.02	0.52	.07
			---	Social	---	0.41	0.12	0.19	0.69	< .001
			---	Environmental	---	0.01	0.04	-0.07	0.08	.83

Consumer in developed country ^ Product from developed market (n = 618)	Low cosmopolitanism	COO	---	---		−0.37	0.37	−1.14	0.24	.27
			---	BBI (total)	---	0.31	0.31	−0.20	0.95	.25
			---	Functional	---	0.39	0.54	−0.50	1.36	.42
			---	Social	---	0.13	0.38	−0.52	0.77	.63
			---	Environmental	---	−0.06	0.14	−0.35	0.20	.67
	High cosmopolitanism	COO	---	---		−0.08	0.15	−0.40	0.20	.58
			---	BBI (total)	---	0.56	0.12	0.37	0.84	< .001
			---	Functional	---	0.82	0.20	0.49	1.27	< .001
			---	Social	---	0.09	0.07	−0.04	0.23	.17
			---	Environmental	---	0.04	0.03	−0.02	0.12	.19
Consumer in emerging country ^ Product from emerging market (n = 638)	Low cosmopolitanism	COO	---	---		0.16	0.09	−0.01	0.35	.06
			---	BBI (total)	---	0.43	0.08	0.28	0.57	< .001
			---	Functional	---	−0.03	0.18	−0.46	0.21	.86
			---	Social	---	0.48	0.16	0.26	0.89	< .001
			---	Environmental	---	0.03	0.03	−0.03	0.09	.40
	High cosmopolitanism	COO	---	---		−0.04	0.21	−0.38	0.20	.75
			---	BBI (total)	---	0.81	0.21	0.58	1.15	< .001
			---	Functional	---	−0.04	0.77	−1.09	0.44	.93
			---	Social	---	0.88	0.96	0.34	2.28	< .05
			---	Environmental	---	0.09	0.04	0.03	0.18	< .01

$\chi^2 = 10985.575$, $df = 4699$, $p < .001$, CFI = .90, TLI = .89, SRMR=.078, RMSEA = .024

Note. CI: confidence interval (estimated using 2,000 bootstraps); χ^2 : chi square; df : degrees of freedom; RMSEA: root mean square error of approximation; SRMR: standardised root mean residual; CFI: comparative fit index; BBI: benefit-based image; COO: country of origin.

Source: Authors.