

Supplementary Material

Effortful Processing Reduces the Attraction Effect in Multi-alternative Decision Making: An Electrophysiological Study Using a Task-irrelevant Probe Technique

Takashi Tsuzuki*, Yuji Takeda, and Itsuki Chiba

* Correspondence: Takashi Tsuzuki: tsuzuki@rikkyo.ac.jp

Table 1 | The trinity choice sets used in the experiment.

Consumer product or service	Two attributes	Set 1					Set 2			
		A	В	D_{A}	D_{B}	A	В	D_{A}	D_{B}	
Athletic shoes	Quality of design (1-100)	80	65	78	63	77	62	75	60	
	Comfort in wearing (1–100)	65	75	63	73	67	77	65	75	
School bag	Weight (Kg)	0.80	1.20	0.87	1.27	0.70	1.10	0.77	1.17	
	Quality of design (1–100)	65	80	63	78	63	78	61	76	
Traveler's bag	Quality of design (1–100)	80	65	78	63	78	63	76	61	
	Weight (Kg)	1.20	0.80	1.27	0.87	1.10	0.70	1.17	0.77	
Coat	Quality of design (1–100)	70	80	68	78	68	78	66	76	
	Price (thousand Yen)	7.0	10.0	7.5	10.5	6.4	9.4	6.9	9.9	
Exercise clothes	Price (thousand Yen)	10.0	7.0	10.5	7.5	9.4	6.4	9.9	6.9	
	Quality of design (1–100)	80	70	78	68	78	68	76	66	
Wristwatch	Quality of design (1-100)	80	70	78	68	82	72	80	70	
	Price (thousand Yen)	9.00	5.00	9.67	5.67	9.80	5.80	10.47	6.47	
MP3 Player	Price (thousand Yen)	12.00	8.00	12.67	8.67	10.70	6.70	11.37	7.37	
	Sound quality (1-100)	76	70	75	69	74	68	73	67	
Earphones	Sound quality (1–100)	84	70	82	68	82	68	80	66	
	Price (thousand Yen)	4.00	3.00	4.17	3.17	3.80	2.80	3.97	2.97	
Electronic dictionary	Repletion of dictionaries (1-100)	75	65	73	63	77	67	75	65	
	Price (thousand Yen)	20.0	15.0	20.8	15.8	21.0	16.0	21.8	16.8	
Digital camera	Image quality (1-100)	70	76	69	75	72	78	71	77	
	Repletion of functions (1-100)	80	65	78	63	75	60	73	58	
Smartphone	Repletion of functions (1-100)	60	70	58	68	59	69	57	67	

	Quality of design (1-100)	80	60	77	57	82	62	79	59
Notebook computer	Repletion of functions (1-100)	65	75	63	73	67	77	65	75
	Price (thousand Yen)	60	90	65	95	66	96	71	101
Tablet personal computer	Price (thousand Yen)	15.0	20.0	15.8	20.8	16.0	21.0	16.8	21.8
	Repletion of functions (1-100)	65	75	63	73	67	77	61	71
Electronic keyboard	Number of distinctive functions	13	7	12	6	14	8	13	7
	Sound quality (1-100)	70	80	68	78	68	78	66	76
Liquid crystal display	Screen size (inch)	19	26	18	25	20	27	19	26
television	Image quality (1-100)	80	70	78	68	78	68	76	66
Single sofa	Price (thousand Yen)	14.00	10.00	14.67	10.67	13.20	9.20	13.87	9.87
	Comfort in seating (1–100)	75	65	73	63	73	63	71	61
Office chair	Comfort in seating (1–100)	65	75	63	73	63	73	61	71
	Price (thousand Yen)	10.00	14.00	10.67	14.67	9.20	13.20	9.87	13.87
Bed	Quality of design (1–100)	60	79	57	76	62	81	59	78
	Price (thousand Yen)	17.0	24.0	18.2	25.2	17.7	24.7	18.9	25.9
Bicycle	Price (thousand Yen)	20.0	15.0	20.8	15.8	21.0	16.0	21.8	16.8
	Quality of design (1–100)	70	60	68	58	72	62	70	60
Gas scooter	Quality of design (1–100)	75	60	73	58	77	62	75	60
	Gas mileage (km per liter)	60	70	58	68	59	69	67	67
Hair salon	Magazine's rating of skill (1–100)	80	70	78	68	78	68	76	66
	Time taken to reach there from home (min)	37	19	40	22	33	15	36	18
Fitness club	Repletion of equipment (1–100)	80	65	78	63	78	63	76	61
	Time taken to reach the club from home (min)	28	15	30	17	26	13	28	15
Rental apartment	Monthly rent (thousand Yen)	55.0	60.0	55.8	60.8	53.9	58.9	54.7	59.7
	Walking distance from the station to the apartment (min)	19	10	21	12	21	12	23	14
Restaurant	Magazine's rating of skill (1–100)	75	65	73	63	73	63	71	61
	Time taken to reach the restaurant	19	10	20	11	17	8	18	9
	from school (min)								

Note: Choice sets 1 and 2 consisted of 24 consumer products or services, their two attributes, and three alternatives (the target, competitor, and decoy), which also had two attribute values. "A" was a target when "A," "B," and " D_A " were presented as alternatives, whereas "B" was a target when "A," "B," and " D_B " were presented as alternatives.