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What are the criteria for young people to choose plastic bottle tea ?

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Introduction

- According to the “Current conditions of tea industry” released by the Ministry of Agriculture, Forestry and Fisheries of Japan in May 2016, the consumption of leaf tea in Japan significantly decreased.
- While consumption of leaf tea has fallen sharply in Japan, consumption of tea as PET bottled green tea is increasing.
- PET-bottled tea presumably attracts consumers more than leaf tea does.
- Being interested in the future of the tea industry, we focused on the younger generation to find out the reason(s) of the growth in consumption of PET bottled tea.

Materials & Methods

Data Collection: Google Forms from October 14, 2021, to October 22, 2021.

Samples: University students in Japan and South Korea

Valid responses: 133 Japanese, 166 Koreans

Instrument: Questionnaire with 15 items of 5-point Likert scale, most of which were quoted from previous studies done by Watanabe et al.

Analysis: Maximum likelihood factor analysis with Promax rotation was done by SPSS Statistics ver.27.

Result

- South Korea

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.699
Bartlett's Test of Sphericity	Approx. Chi-Square	676.070
	df	105
	Sig.	0

Chi-square Goodness-of-Fit Test

Chi-Square	df	Sig.
32.234	30	0.357

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.74	24.93	24.93	2.12	14.13	14.13	2.591
2	1.974	13.162	38.093	1.389	9.261	23.391	1.919
3	1.448	9.651	47.744	2.13	14.202	37.593	1.875
4	1.206	8.042	55.786	1.231	8.207	45.799	1.903
5	1.046	6.972	62.757	0.826	5.509	51.309	1.568
6	1.004	6.691	69.449	0.673	4.49	55.798	1.549
7	0.789	5.26	74.708				
8	0.756	5.038	79.746				
9	0.615	4.101	83.847				
10	0.585	3.902	87.749				
11	0.533	3.554	91.303				
12	0.474	3.159	94.462				
13	0.364	2.429	96.891				
14	0.263	1.752	98.644				
15	0.203	1.356	100				

Pattern Matrix

	Factor					
	1	2	3	4	5	6
It is important if the tea is popular and talked about on social media	0.895	-0.075	0.006	-0.127	0.061	-0.101
I feel attracted to the tea see in commercials and advertisements	0.794	-0.012	0.046	0.130	-0.095	0.023
It is important if the tea is a time-limited offer or not	0.512	0.006	0.032	-0.026	0.024	0.222
The astringency is important	0.020	1.005	0.006	-0.053	-0.086	0.000
The bitterness is important.	-0.114	0.777	-0.024	0.024	0.060	-0.020
The sweetness is important	0.111	0.265	0.226	0.005	0.099	-0.026
The amount of tea is important	-0.079	-0.056	1.022	0.025	-0.013	-0.008
The price is important	0.230	0.078	0.457	-0.072	0.001	-0.017
The color of the tea is important	-0.162	-0.060	0.050	0.830	-0.044	-0.023
The brand name is important	0.285	0.042	-0.085	0.484	0.044	-0.119
Package design is important	0.302	0.013	-0.068	0.431	-0.021	0.044
The Umami is important	-0.024	-0.009	-0.026	-0.055	0.955	-0.018
The scent is important	0.099	-0.014	0.094	0.117	0.302	0.023
I am attracted to a product when I read a description of its nutrients such as the amount of catechins	0.016	-0.041	-0.026	-0.078	-0.034	0.884
Compatibility of the tea with food is important	-0.029	0.105	0.031	0.273	0.158	0.304

Factor Correlation Matrix

Factor	1	2	3	4	5	6
1	1	0.229	0.251	0.398	0.256	0.294
2	0.229	1	0.163	-0.025	0.201	0.222
3	0.251	0.163	1	0.305	0.364	0.291
4	0.398	-0.025	0.305	1	0.166	0.346
5	0.256	0.201	0.364	0.166	1	0.282
6	0.294	0.222	0.291	0.346	0.282	1

- Japan

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.707
Bartlett's Test of Sphericity	Approx. Chi-Square	504.562
	df	105
	Sig.	0

Chi-square Goodness-of-Fit Test

Chi-Square	df	Sig.
40.442	40	0.451

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.962	26.414	26.414	2.666	17.776	17.776	2.765
2	1.629	10.858	37.272	1.204	8.028	25.803	2.097
3	1.373	9.152	46.424	1.782	11.883	37.686	2.184
4	1.231	8.21	54.634	0.93	6.199	43.885	2.107
5	1.02	6.8	61.434	0.439	2.926	46.812	0.901
6	0.987	6.582	68.016				
7	0.8	5.333	73.349				
8	0.782	5.214	78.563				
9	0.671	4.472	83.035				
10	0.596	3.977	87.012				
11	0.566	3.773	90.785				
12	0.494	3.291	94.076				
13	0.365	2.435	96.511				
14	0.334	2.226	98.737				
15	0.189	1.263	100				

Pattern Matrix

	Factor				
	1	2	3	4	5
Package design is important	0.806	0.063	-0.069	0.032	-0.063
The color of the tea is important	0.622	0.037	0.062	0.028	0.052
The brand name is important	0.437	0.02	0.059	-0.004	-0.168
Compatibility of the tea with food is important	0.419	-0.082	0.032	0.04	0.216
I am attracted to a product when I read a description of its nutrients such as the amount of catechins	0.237	0.045	0.104	-0.022	0.074
It is important if the tea is popular and talked about on social media	-0.103	1.024	-0.003	0.069	-0.011
I feel attracted to the tea see in commercials and advertisements	0.35	0.494	0.029	-0.216	-0.045
It is important if the tea is a time-limited offer or not	0.06	0.42	-0.121	0.322	0.101
The astringency is important	0.015	-0.053	1.003	0.012	-0.023
The bitterness is important.	0.082	0.052	0.652	0.116	0.049
The Umami is important	-0.027	-0.031	0.132	0.663	-0.067
The sweetness is important	-0.001	0.084	0.038	0.449	-0.061
The scent is important	0.293	-0.073	-0.043	0.429	0.039
The price is important	0.064	-0.064	-0.042	-0.022	0.773
The amount of tea is important	-0.107	0.243	0.156	-0.149	0.334

Factor Correlation Matrix

Factor	1	2	3	4	5
1	1	0.39	0.348	0.535	0.14
2	0.39	1	0.247	0.189	0.059
3	0.348	0.247	1	0.4	0.076
4	0.535	0.189	0.4	1	-0.081
5	0.14	0.059	0.076	-0.081	1

Conclusions(future directions)

- Japan and South Korea both appeared as factors in terms of topic, astringency, bitterness, and umami.
- In particular, it has been revealed that both Japan and South Korea are influenced by SNS.
- Japan was influenced only by SNS, but in South Korea, not only by SNS but also by commercial ads and limited-time ads.
- In addition to SNS, items related to capacity, the color of the water, and nutrition were listed in the composition of Korean factors, and product packaging and prices were listed in Japan.
- It can be seen that South Korean university students were susceptible to marketing elements surrounding products such as SNS, commercials, limited-time, and nutritional items.
- It can be seen that Japanese university students were influenced by the packaging and price of the products themselves.
- In this study, we were able to understand the difference in the selection criteria between Japanese and Korean university.
- The study was conducted on university students, so the respondents tend to be in their early 20s.
- The purpose of future research is to expand the age range and obtain results by applying this research method.

References

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