# Appendix

**Table 1**

Regression estimation results of model 1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Model 1 | | | | | |
| OLS | | WTP | | Premium | |
| Coefficient  Std. Err. | t value | Coefficient  Std. Err. | z value | Coefficient  Std. Err. | t value |
| Familiarity | 0.304\*\*\* | 7.07 | 0.407\*\*\* | 7.14 | 1.617\*\*\* | 9.78 |
|  | 0.043 |  | 0.057 |  | 0.165 |  |
| Gender | 0.122\* | 1.96 | 0.049 | 0.61 | 0.287\*\*\* | 4.50 |
|  | 0.062 |  | 0.081 |  | 0.064 |  |
| Education | 0.014 | 0.54 | 0.071\*\* | 2.04 | 0.220\*\*\* | 6.12 |
|  | 0.026 |  | 0.035 |  | 0.036 |  |
| Age | 0.086\*\* | 2.32 | 0.045 | 0.68 | 0.366\*\*\* | 7.39 |
|  | 0.037 |  | 0.067 |  | 0.050 |  |
| Children | 0.115\* | 1.78 | 0.170\* | 1.95 | 0.755\*\*\* | 7.53 |
|  | 0.065 |  | 0.087 |  | 0.100 |  |
| Elder | 0.126\*\* | 1.97 | 0.135 | 1.61 | 0.568\*\*\* | 6.90 |
|  | 0.064 |  | 0.084 |  | 0.082 |  |
| Income | 0.194\*\*\* | 8.42 | 0.135\*\*\* | 4.34 | 0.616\*\*\* | 10.98 |
|  | 0.023 |  | 0.031 |  | 0.056 |  |
| Household size | -0.042 | -1.47 | -0.077\*\* | -2.06 | -0.300\*\*\* | 7.16 |
|  | 0.028 |  | 0.037 |  | 0.042 |  |
| Frequency | 0.284\*\*\* | 6.27 | 0.190\*\*\* | 3.11 | 0.815\*\*\* | 10.42 |
|  | 0.045 |  | 0.061 |  | 0.078 |  |
| Marriage |  |  | 0.119 | 0.95 |  |  |
|  |  |  | 0.125 |  |  |  |
| IMR\_1 |  |  |  |  | 5.211\*\*\* | 8.21 |
|  |  |  |  |  | 0.635 |  |
| Cons | -0.168 | -0.80 | -1.829\*\*\* | 6.33 | -10.269\*\*\* | 8.23 |
|  | 0.209 |  | 0.289 |  | 1.247 |  |
| *N* | 1158 | | | | |  |
| *R*2 | 0.201 |  |  |  | 0.246 |  |

Note: \*\*\* implies the significant result is on the level of 1%, \*\* implies the significant result is on the level of 5%, and \* implies the significant result is on the level of 10%.

**Table 2**

Regression estimation results of model 2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Model 2 | | | | | |
| OLS | | WTP | | Premium | |
| Coefficient  Std. Err. | t value | Coefficient  Std. Err. | z value | Coefficient  Std. Err. | t value |
| Familiarity | 0.295\*\*\* | 6.89 | 0.400\*\*\* |  | 1.659\*\*\* |  |
|  | 0.043 |  | 0.057 |  | 0.162 |  |
| Gender | 0.114\* | 1.84 | 0.064 |  | 0.350\*\*\* |  |
|  | 0.062 |  | 0.082 |  | 0.066 |  |
| Education | -0.006 | -0.24 | 0.045 |  | 0.121\*\*\* |  |
|  | 0.027 |  | 0.036 |  | 0.030 |  |
| Age | 0.069\* | 1.85 | 0.029 |  | 0.280\*\*\* |  |
|  | 0.037 |  | 0.067 |  | 0.043 |  |
| Children | 0.101 | 1.56 | 0.162\* |  | 0.737\*\*\* |  |
|  | 0.064 |  | 0.088 |  | 0.096 |  |
| Elder | 0.129\*\* | 2.02 | 0.154\* |  | 0.668\*\*\* |  |
|  | 0.064 |  | 0.085 |  | 0.087 |  |
| Income | 0.183\*\*\* | 7.93 | 0.117\*\*\* |  | 0.567\*\*\* |  |
|  | 0.023 |  | 0.031 |  | 0.049 |  |
| Household size | -0.042 | -1.48 | -0.072\* |  | -0.294\*\*\* |  |
|  | 0.028 |  | 0.038 |  | 0.040 |  |
| Frequency | 0.282\*\*\* | 6.20 | 0.191\*\*\* |  | 0.843\*\*\* |  |
|  | 0.045 |  | 0.062 |  | 0.078 |  |
| Marriage |  |  | 0.097 |  |  |  |
|  |  |  | 0.127 |  |  |  |
| Packaging | 0.013 | 0.13 | -0.144 |  | -0.510\*\*\* |  |
|  | 0.098 |  | 0.132 |  | 0.113 |  |
| Price | -0.559\*\*\* | -4.11 | -0.590\*\*\* |  | -2.544\*\*\* |  |
|  | 0.136 |  | 0.186 |  | 0.263 |  |
| Brand | -0.240\* | -1.93 | -0.157 |  | -0.636\*\*\* |  |
|  | 0.125 |  | 0.171 |  | 0.129 |  |
| Date | -0.495\*\*\* | -3.30 | -0.341\* |  | -1.507\*\*\* |  |
|  | 0.150 |  | 0.203 |  | 0.186 |  |
| Flavor | -0.451\*\*\* | -3.66 | -0.255 |  | -1.144\*\*\* |  |
|  | 0.123 |  | 0.169 |  | 0.143 |  |
| Supermarket | 0.034 | 0.52 | 0.201\*\* |  | 0.806\*\*\* |  |
|  | 0.065 |  | 0.087 |  | 0.109 |  |
| Online | 0.076 | 0.46 | 0.292 |  | 1.178\*\*\* |  |
|  | 0.166 |  | 0.222 |  | 0.205 |  |
| IMR\_2 |  |  |  |  | 5.521\*\*\* |  |
|  |  |  |  |  | 0.633 |  |
| Cons | 0.373 | 1.48 | -1.496\*\*\* |  | -9.357\*\*\* |  |
|  | 0.251 |  | 0.347 |  | 1.141 |  |
| *N* | 1158 |  | 1158 |  | 1158 |  |
| *R*2 | 0.220 |  |  |  | 0.269 |  |

Note: \*\*\* implies the significant result is on the level of 1%, \*\* implies the significant result is on the level of 5%, and \* implies the significant result is on the level of 10%.

**Table 3**

Regression estimation results of model 3

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Model 3 | | | | | |
| OLS | | WTP | | Premium | |
| Coefficient  Std. Err. | t value | Coefficient  Std. Err. | z value | Coefficient  Std. Err. | t value |
| Familiarity | 0.153\*\*\* | 3.54 | 0.177\*\*\* | 2.74 | 0.326\*\*\* | 6.82 |
|  | 0.043 |  | 0.065 |  | 0.048 |  |
| Gender | 0.182\*\*\* | 3.06 | 0.172\* | 1.92 | 0.370\*\*\* | 5.86 |
|  | 0.060 |  | 0.090 |  | 0.063 |  |
| Education | 0.026 | 1.01 | 0.132\*\*\* | 3.34 | 0.168\*\*\* | 5.38 |
|  | 0.026 |  | 0.040 |  | 0.031 |  |
| Age | 0.072\*\* | 2.05 | 0.043 | 0.59 | 0.147\*\*\* | 4.11 |
|  | 0.035 |  | 0.073 |  | 0.036 |  |
| Children | 0.069 | 1.13 | 0.156\* | 1.66 | 0.264\*\*\* | 4.07 |
|  | 0.061 |  | 0.094 |  | 0.065 |  |
| Elder | 0.122\*\* | 2.02 | 0.167\* | 1.85 | 0.313\*\*\* | 4.90 |
|  | 0.060 |  | 0.091 |  | 0.064 |  |
| Income | 0.157\*\*\* | 7.16 | 0.107\*\*\* | 3.14 | 0.268\*\*\* | 10.35 |
|  | 0.022 |  | 0.034 |  | 0.026 |  |
| Household size | -0.039 | -1.44 | -0.065 | -1.60 | -0.121\*\*\* | 4.25 |
|  | 0.027 |  | 0.040 |  | 0.028 |  |
| Frequency | 0.250\*\*\* | 5.81 | 0.169\*\* | 2.54 | 0.398\*\*\* | 8.60 |
|  | 0.043 |  | 0.067 |  | 0.046 |  |
| Marriage |  |  | 0.090 | 0.66 |  |  |
|  |  |  | 0.136 |  |  |  |
| Packaging | -0.007 | -0.07 | -0.180 | -1.26 | -0.261\*\*\* | -2.69 |
|  | 0.093 |  | 0.143 |  | 0.097 |  |
| Brand | -0.218\* | -1.84 | -0.183 | -0.99 | -0.419\*\*\* | -3.54 |
|  | 0.118 |  | 0.185 |  | 0.118 |  |
| Price | -0.512\*\*\* | -3.97 | -0.639\*\*\* | 3.20 | -1.248\*\*\* | -7.87 |
|  | 0.129 |  | 0.200 |  | 0.159 |  |
| Date | -0.417\*\*\* | -2.94 | -0.288 | -1.34 | -0.711\*\*\* | -4.94 |
|  | 0.142 |  | 0.215 |  | 0.144 |  |
| Flavor | -0.393\*\*\* | -3.35 | -0.268 | -1.47 | -0.642\*\*\* | -5.40 |
|  | 0.117 |  | 0.182 |  | 0.119 |  |
| Supermarket | 0.032 | 0.52 | 0.217\*\* | 2.33 | 0.323\*\*\* | 4.52 |
|  | 0.062 |  | 0.093 |  | 0.072 |  |
| Online | -0.093 | -0.59 | 0.068 | 0.29 | 0.038 | 0.25 |
|  | 0.158 |  | 0.237 |  | 0.155 |  |
| Safety Cognition | 0.057 | 1.45 | 0.028 | 0.47 | 0.093\*\* | 2.41 |
|  | 0.039 |  | 0.059 |  | 0.038 |  |
| Environment Cognition | 0.059\* | 1.76 | 0.018 | 0.35 | 0.076\*\* | 2.30 |
|  | 0.034 |  | 0.050 |  | 0.033 |  |
| Policy Cognition | 0.019 | 0.65 | 0.086\* | 1.93 | 0.108\*\*\* | 3.55 |
|  | 0.029 |  | 0.044 |  | 0.031 |  |
| Psychology Cognition | 0.086\*\*\* | 3.00 | 0.048 | 1.11 | 0.139\*\*\* | 4.84 |
|  | 0.029 |  | 0.043 |  | 0.029 |  |
| Safety Motivation | 0.241\*\*\* | 4.85 | 0.369\*\*\* | 4.87 | 0.650\*\*\* | 8.99 |
|  | 0.050 |  | 0.076 |  | 0.072 |  |
| Policy Motivation | 0.058 | 1.15 | 0.153\*\* | 2.01 | 0.237\*\*\* | 4.32 |
|  | 0.051 |  | 0.076 |  | 0.055 |  |
| Environment Motivation | 0.039 | 0.79 | 0.173\*\* | 2.39 | 0.281\*\*\* | 4.88 |
|  | 0.049 |  | 0.072 |  | 0.058 |  |
| Psychology Motivation | 0.083\*\* | 2.12 | 0.188\*\*\* | 3.14 | 0.283\*\*\* | 6.10 |
|  | 0.039 |  | 0.060 |  | 0.046 |  |
| IMR\_3 |  |  |  |  | 1.890\*\*\* | 7.62 |
| Cons | 0.598\*\* | 2.51 | -1.398\*\*\* | 3.70 | -2.495\*\*\* | -5.33 |
|  | 0.239 |  | 0.378 |  | 0.468 |  |
| *N* | 1158 |  | 1158 |  | 1158 |  |
| *R*2 | 0.311 |  |  |  | 0.345 |  |

Note: \*\*\* implies the significant result is on the level of 1%, \*\* implies the significant result is on the level of 5%, and \* implies the significant result is on the level of 10%.

**Table 4**

Descriptive statistics of consumption habits.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variables | Frequency | | Ratio % | |
| Yes | No | Yes | No |
| Brand | 359 | 799 | 31.00 | 69.00 |
| Date | 101 | 1057 | 8.72 | 91.28 |
| Place | 78 | 1080 | 6.74 | 93.26 |
| Flavor | 437 | 721 | 37.74 | 62.26 |
| Supermarket | 758 | 400 | 65.46 | 34.54 |
| Online | 40 | 1118 | 3.45 | 96.55 |

**Table 5**

Descriptive statistics of cognition and motivation.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | Rating | | | | | Mean | S.D |
| 1 | 2 | 3 | 4 | 5 |
| Safety Cognition | 106 | 430 | 521 | 82 | 19 | 2.55 | 0.819 |
| Environment Cognition | 197 | 376 | 472 | 86 | 27 | 2.46 | 0.937 |
| Policy Cognition | 89 | 189 | 517 | 268 | 95 | 3.08 | 1.012 |
| Psychology Cognition | 144 | 219 | 479 | 257 | 59 | 2.89 | 1.049 |
| Safety Motivation | 23 | 31 | 514 | 423 | 167 | 3.59 | 0.839 |
| Policy Motivation | 16 | 44 | 452 | 467 | 179 | 3.65 | 0.835 |
| Environment Motivation | 11 | 30 | 321 | 502 | 294 | 3.9 | 0.843 |
| Psychology Motivation | 26 | 63 | 523 | 423 | 123 | 3.48 | 0.84 |

**Table 6**

Distribution of WTP and premium.

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Description | Frequency | Ratio % |
| WTP | Unwillingness | 580 | 50.09 |
| Willingness | 578 | 49.91 |
| Premium | 0% | 580 | 50.09 |
| 1%-50% | 418 | 36.10 |
| 51%-100% | 98 | 8.46 |
| 101%-150% | 26 | 2.25 |
| 151%-200% | 14 | 1.21 |
| 201%-250% | 7 | 0.60 |
| 251%-300% | 6 | 0.52 |
| >=300% | 9 | 0.78 |
| Total | 1158 | | 100 |

**Table 7**

Robustness test results of model 4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Model 4 | | | | | |
| OLS | | WTP | | Premium | |
| Coefficient  Std. Err. | t value | Coefficient  Std. Err. | z value | Coefficient  Std. Err. | t value |
| Familiarity | 0.126\*\*\* | 3.01 | 0.170\*\*\* | 2.59 | 0.283\*\*\* | 5.81 |
|  | 0.042 |  | 0.066 |  | 0.049 |  |
| Gender | 0.164\*\*\* | 2.85 | 0.179\*\* | 1.98 | 0.341\*\*\* | 5.36 |
|  | 0.058 |  | 0.090 |  | 0.064 |  |
| Education | 0.029 | 1.16 | 0.134\*\*\* | 3.36 | 0.152\*\*\* | 4.18 |
|  | 0.025 |  | 0.040 |  | 0.032 |  |
| Age | 0.028 | 0.77 | 0.023 | 0.29 | 0.095\*\* | 2.52 |
|  | 0.037 |  | 0.079 |  | 0.038 |  |
| Children | 0.058 | 0.97 | 0.131 | 1.38 | 0.213\*\*\* | 3.33 |
|  | 0.060 |  | 0.095 |  | 0.064 |  |
| Elder | 0.121\*\* | 2.04 | 0.155\* | 1.68 | 0.276\*\*\* | 4.36 |
|  | 0.059 |  | 0.092 |  | 0.063 |  |
| Income | 0.146\*\*\* | 6.80 | 0.103\*\*\* | 2.99 | 0.243\*\*\* | 9.20 |
|  | 0.021 |  | 0.035 |  | 0.026 |  |
| Household size | -0.038 | -1.41 | -0.052 | -1.25 | -0.096\*\*\* | -3.44 |
|  | 0.027 |  | 0.042 |  | 0.028 |  |
| Frequency | 0.236\*\*\* | 5.59 | 0.176\*\*\* | 2.61 | 0.378\*\*\* | 7.94 |
|  | 0.042 |  | 0.067 |  | 0.048 |  |
| Packaging | -0.012 | -0.13 | -0.192 | -1.33 | -0.235\*\* | -2.44 |
|  | 0.091 |  | 0.145 |  | 0.096 |  |
| Price | -0.442\*\*\* | -3.51 | -0.612\*\*\* | -3.02 | -1.046\*\*\* | -6.60 |
|  | 0.126 |  | 0.203 |  | 0.159 |  |
| Brand | -0.208\* | -1.79 | -0.182 | -0.97 | -0.377\*\*\* | -3.21 |
|  | 0.116 |  | 0.188 |  | 0.118 |  |
| Date | -0.342\*\* | -2.46 | -0.254 | -1.16 | -0.565\*\*\* | -3.99 |
|  | 0.139 |  | 0.219 |  | 0.141 |  |
| Flavor | -0.325\*\*\* | -2.82 | -0.226 | -1.22 | -0.508\*\*\* | -4.34 |
|  | 0.115 |  | 0.186 |  | 0.117 |  |
| Supermarket | 0.063 | 1.04 | 0.213\*\* | 2.27 | 0.302\*\*\* | 4.26 |
|  | 0.060 |  | 0.094 |  | 0.071 |  |
| Online | -0.048 | -0.32 | 0.073 | 0.31 | 0.061 | 0.40 |
|  | 0.153 |  | 0.238 |  | 0.152 |  |
| Safety Cognition | 0.046 | 1.22 | 0.023 | 0.39 | 0.070\* | 1.86 |
|  | 0.038 |  | 0.060 |  | 0.038 |  |
| Environment Cognition | 0.046 | 1.42. | 0.016 | 0.31 | 0.053 | 1.64 |
|  | 0.033 |  | 0.051 |  | 0.032 |  |
| Policy Cognition | 0.025 | 0.90 | 0.084\* | 1.87 | 0.097\*\*\* | 3.23 |
|  | 0.028 |  | 0.045 |  | 0.030 |  |
| Psychology Cognition | 0.073\*\* | 2.58 | 0.048 | 1.10 | 0.119\*\*\* | 4.12 |
|  | 0.028 |  | 0.044 |  | 0.029 |  |
| Safety Motivation | 0.233\*\*\* | 4.83 | 0.360\*\*\* | 4.70 | 0.577\*\*\* | 7.84 |
|  | 0.048 |  | 0.077 |  | 0.074 |  |
| Policy Motivation | 0.070 | 1.43 | 0.163\*\* | 2.11 | 0.230\*\*\* | 4.17 |
|  | 0.049 |  | 0.077 |  | 0.055 |  |
| Environment Motivation | 0.066 | 1.38 | 0.183\*\* | 2.50 | 0.271\*\*\* | 4.69 |
|  | 0.048 |  | 0.073 |  | 0.058 |  |
| Psychology Motivation | 0.083\*\* | 2.18 | 0.188\*\*\* | 3.11 | 0.255\*\*\* | 5.43 |
|  | 0.038 |  | 0.061 |  | 0.047 |  |
| Marriage |  |  | 0.121 | 0.85 |  |  |
|  |  |  | 0.142 |  |  |  |
| Cognition\*Motivation | 0.215\*\*\* | 3.44 | 0.124 | 1.02 | 0.208\*\*\* | 3.38 |
|  | 0.063 |  | 0.122 |  | 0.062 |  |
| IMR\_5 |  |  |  |  | 1.629\*\*\* | 6.11 |
|  |  |  |  |  | 0.267 |  |
| Cons | 0.733\*\*\* | 3.07 | -1.414\*\*\* | -3.61 | -2.033\*\*\* | -3.98 |
|  | 0.239 |  | 0.392 |  | 0.510 |  |
| *N* | 1129 |  | 1129 |  | 1129 |  |
| *R*2 | 0.299 |  |  |  | 0.322 |  |

Note: \*\*\* implies the significant result is on the level of 1%, \*\* implies the significant result is on the level of 5%, and \* implies the significant result is on the level of 10%.