**Web Appendix**

**Mobile Location-Based Services’ Value-in-Use in Inner Cities: Do a Customer’s Shopping Patterns, Prior User Experience, and Sales Promotions Matter?**

*Web Appendix A: Details of the PLS-SEM*

**Table A-1:**  Overview of used items’ wording and sources

|  |  |  |
| --- | --- | --- |
| **Constructs** | **Item** | **Source** |
| Monetary Benefits | Using this app during my last visit to the inner city helped me save money. | adapted and refined from Dickinger and Kleijnen (2008) |
| Support Benefits | Using this app during my last visit to the inner city supported me with relevant information. | adapted and refined from Martins et al. (2019) |
| Convenience Benefits | Using this app during my last visit to the inner city made the visit more convenient for me. | adapted and refined from Dickinger and Kleijnen (2008) |
| Fun Benefits | Using this app during my last visit to the inner city was truly fun. | adapted and refined from Bruns and Jacob (2014) |
| Social Benefits | Using this app during my last visit to the inner city made a good impression on other people. | adapted and refined from Pura (2005) |
| Epistemic Benefits | Using this app during my last visit to the inner city has led me to discover new things. | adapted and refined from Okazaki and Mendez (2013) |
| Irritation | I found the use of the app during my last visit to the inner city annoying. | adapted and refined from Martins et al. (2019) |
| Value-in-Use | Overall, the value of using this app during my last visit to the inner city was very high. | adapted and refined from Hendricks (2018) |
| The use of this app during my last visit to the inner city satisfied my needs and wants wholeheartedly. |
| Overall, the value of using this app during my last visit to the inner city was a very positive experience for me. |
|  |
| Experience Shopping | I used the inner city as a place to (go on) a shopping spree. | self-developed |
| Situation-Specific Shopping | I used the inner city as a place to shop only to do specific shopping-related stuff (e.g., buy, pick up, exchange). | self-developed |
| Habitual Shopping | I used the inner city as a place to shop to do my typical shopping as usual. | self-developed |
| Convenience Shopping | I used the inner city to make my purchases with the least possible effort. | self-developed |
| Social Shopping | I used the inner city as a place to talk to other people (e.g., sales personnel, other customers) while shopping. | self-developed |
| Bargain Hunting | I used the inner city as a place to shop for good deals and bargains. | self-developed |
| Inner-City Service Usage | I used the inner city to access services (e.g., hairdresser, bank, government agency, doctor), to visit restaurants/bars, or to enjoy leisure activities (e.g., cinemas, theaters, museums, or other attractions). | self-developed |

**Note:** The questionnaire was presented in German and translated into English for this paper.

**Table A-2:** MIMIC model: measurement model assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Construct** | **# Items** | **Loadings** | **Average Variance****Extracted (AVE)** | **Cronbach’s Alpha (CA)** | **Dijkstra-Henseler-Statistics (rhoA)** | **Composite Reliability (CR)** |
|  |  | > 0.7 | > 0.5 | > 0.7 | > 0.7 | > 0.7 |
| Value-in-Use | Value\_1 | 0.885\*\*\* | 0.769 [0.742; 0.794] | 0.850 [0.827; 0.871] | 0.866 [0.847; 0.883] | 0.909 [0.896; 0.921] |
| Value\_2 | 0.829\*\*\* |
| Value\_3 | 0.915\*\*\* |

**Note:** \*\*\* = p < 1%; in brackets: bias-corrected bootstrap confidence intervals

**Table A-3:** MIMIC model: assessment of discriminant validity using the HTMT criterion

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Monetary****Benefits** | **Support****Benefits** | **Convenience Benefits** | **Fun Benefits** | **Social Benefits** | **Epistemic****Benefits** | **Irritation** | **Value-in-Use** |
| **Monetary** **Benefits** |  |  |  |  |  |  |  |  |
| **Support** **Benefits** | 0.595 [0.538; 0.648] |  |  |  |  |  |  |  |
| **Convenience Benefits** | 0.636 [0.582; 0.686] | 0.741 [0.700; 0.778] |  |  |  |  |  |  |
| **Fun Benefits** | 0.410 [0.347; 0.468] | 0.607 [0.552; 0.656] | 0.657 [0.611; 0.700] |  |  |  |  |  |
| **Social Benefits** | 0.480 [0.409; 0.545] | 0.508 [0.444; 0.566] | 0.519 [0.452; 0.582] | 0.515 [0.458; 0.569] |  |  |  |  |
| **Epistemic** **Benefits** | 0.489 [0.429; 0.546] | 0.664 [0.613; 0.710] | 0.626 [0.570; 0.675] | 0.570 [0.514; 0.621] | 0.454 [0.386; 0.514] |  |  |  |
| **Irritation** | 0.063 [0.004; 0.137] | 0.056 [0.003; 0.130] | 0.117 [0.043; 0.190] | 0.251 [0.175; 0.324] | 0.095 [0.024; 0.166] | 0.084 [0.014; 0.159] |  |  |
| **Value-in-Use** | 0.510 [0.443; 0.571] | 0.699 [0.648; 0.744] | 0.743 [0.692; 0.787] | 0.775 [0.729; 0.811] | 0.567 [0.502; 0.623] | 0.679 [0.624; 0.727] | 0.235 [0.153; 0.316] |  |

**Note:** Brackets contain the bias-corrected bootstrap confidence intervals.

**Table A-4:** MIMIC model: results of the structural model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Inner VIF Values** | **Coefficient** | **p Value** | **f2** |
| Monetary Benefits | 1.933 | 0.014 | 0.669 | 0.000 (non) |
| Support Benefits | 2.809 | 0.117\*\*\* | 0.004 | 0.014 (non) |
| Convenience Benefits | 3.080 | 0.210\*\*\* | 0.000 | 0.041 (small) |
| Fun Benefits | 2.182 | 0.334\*\*\* | 0.000 | 0.146 (small) |
| Social Benefits | 1.593 | 0.092\*\*\* | 0.002 | 0.015 (non) |
| Epistemic Benefits | 2.030 | 0.181\*\*\* | 0.000 | 0.046 (small) |
| Irritation | 1.114 | -0.077\*\*\* | 0.002 | 0.015 (non) |
|  |
| **R2** | 0.649 (moderate exploratory power) |
| **R2 adjusted** | 0.645 |
| **Q2** | 0.467 (medium predictive relevance) |

**Table A-5:** MIMIC model: results of Park and Gupta’s (2012) Gaussian copula approach

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Original Model** | **Gaussian Copula Model 1** | **Gaussian Copula Model 2** | **Gaussian Copula Model 3** | **Gaussian Copula Model 4** | **Gaussian Copula Model 5** | **Gaussian Copula Model 6** | **Gaussian Copula Model 7** | **Gaussian Copula Model 127** |
| **Endogenous Variable: CB** | **Endogenous Variable: EB** | **Endogenous Variable: MB** | **Endogenous Variable: I** | **Endogenous Variable: SoB** | **Endogenous Variable: FB** | **Endogenous Variable: SuB** | **Endogenous Variable: all variables** |
| **Variable** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** |
| CB | 0.210 | <0.01 | 0.214 | <0.01 | 0.210 | <0.01 | 0.210 | <0.01 | 0.210 | <0.01 | 0.210 | <0.01 | 0.210 | <0.01 | 0.212 | <0.01 | 0.270 | <0.01 |
| EB | 0.181 | <0.01 | 0.181 | <0.01 | 0.171 | <0.01 | 0.181 | <0.01 | 0.180 | <0.01 | 0.181 | <0.01 | 0.181 | <0.01 | 0.183 | <0.01 | 0.172 | <0.01 |
| MB | 0.014 | 0.669 | 0.014 | 0.643 | 0.014 | 0.642 | 0.000 | 0.999 | 0.014 | 0.652 | 0.014 | 0.653 | 0.014 | 0.651 | 0.012 | 0.692 | -0.009 | 0.861 |
| I | -0.077 | <0.01 | -0.078 | <0.01 | -0.077 | <0.01 | -0.077 | <0.01 | -0.059 | 0.140 | -0.077 | <0.01 | -0.077 | <0.01 | -0.076 | <0.01 | -0.029 | 0.560 |
| SoB | 0.092 | <0.01 | 0.092 | <0.01 | 0.092 | <0.01 | 0.093 | <0.01 | 0.093 | <0.01 | 0.086 | 0.026 | 0.092 | <0.01 | 0.093 | <0.01 | 0.088 | 0.068 |
| FB | 0.334 | <0.01 | 0.334 | <0.01 | 0.334 | <0.01 | 0.334 | <0.01 | 0.334 | <0.01 | 0.334 | <0.01 | 0.327 | <0.01 | 0.334 | <0.01 | 0.326 | <0.01 |
| SuB | 0.117 | <0.01 | 0.116 | <0.01 | 0.117 | <0.01 | 0.116 | <0.01 | 0.115 | <0.01 | 0.117 | <0.01 | 0.117 | <0.01 | 0.087 | 0.070 | 0.056 | 0.353 |
| cCB |  |  | -0.004 | 0.900 |  |  |  |  |  |  |  |  |  |  |  |  | -0.051 | 0.374 |
| cEB |  |  |  |  | 0.007 | 0.752 |  |  |  |  |  |  |  |  |  |  | 0.008 | 0.801 |
| cMB |  |  |  |  |  |  | 0.011 | 0.631 |  |  |  |  |  |  |  |  | 0.018 | 0.630 |
| cI |  |  |  |  |  |  |  |  | -0.018 | 0.563 |  |  |  |  |  |  | -0.044 | 0.272 |
| cSoB |  |  |  |  |  |  |  |  |  |  | 0.006 | 0.813 |  |  |  |  | 0.005 | 0.888 |
| cFB |  |  |  |  |  |  |  |  |  |  |  |  | 0.005 | 0.801 |  |  | 0.005 | 0.860 |
| cSuB |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.024 | 0.345 | 0.044 | 0.238 |

**Note:** MB=Monetary Benefits, SuB=Support Benefits, CB=Convenience Benefits, FB=Fun Benefits, SoB=Social Benefits, EB=Epistemic Benefits, I=Irritation; Latent variable scores of the smartPLS output was used as input for the analysis in R-Studio.

*Web Appendix B: Details of the Moderation Analysis*

**Table A-6:** Moderated value-in-use model: measurement model assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Construct** | **# Items** | **Loadings** | **Average Variance****Extracted (AVE)** | **Cronbach’s Alpha (CA)** | **Dijkstra-Henseler-Statistics (rhoA)** | **Composite Reliability (CR)** |
|  |  | > 0.7 | > 0.5 | > 0.7 | > 0.7 | > 0.7 |
| Value-in-Use | Value\_1 | 0.885\*\*\* | 0.769 [0.742; 0.795] | 0.850 [0.827; 0.871] | 0.866 [0.847; 0.883] | 0.909 [0.896; 0.921] |
| Value\_2 | 0.830\*\*\* |
| Value\_3 | 0.915\*\*\* |

**Note:** \*\*\* = p < 1%; in brackets: bias-corrected bootstrap confidence intervals

**Table A-7:** Moderated value-in-use model: assessment of discriminant validity using the HTMT criterion (moderation)

|  | **MB** | **SuB** | **CB** | **FB** | **SoB** | **EB** | **I** | **UE** | **UExMB** | **UExSuB** | **UExCB** | **UExFB** | **UExSoB** | **UExEB** | **UExI** | **Value-in-Use** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SuB** | 0.595 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [0.540; 0.646] |  |  |  |  |
| **CB** | 0.636 | 0.741 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [0.582; 0.684] | [0.700; 0.778] |  |  |  |  |  |  |  |  |
| **FB** | 0.410 | 0.607 | 0.657 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [0.345; 0.467] | [0.553; 0.657] | [0.610; 0.698] |  |  |  |  |  |  |  |  |
| **SoB** | 0.480 | 0.508 | 0.519 | 0.515 |  |  |  |  |  |  |  |  |  |  |  |  |
| [0.410; 0.546] | [0.446; 0.569] | [0.454; 0.581] | [0.460; 0.568] |  |  |  |  |  |  |  |  |
| **EB** | 0.489 | 0.664 | 0.626 | 0.570 | 0.454 |  |  |  |  |  |  |  |  |  |  |  |
| [0.428; 0.544] | [0.615; 0.709] | [0.573; 0.675] | [0.515; 0.623] | [0.388; 0.517] |  |  |  |  |  |  |  |  |
| **I** | 0.063 | 0.056 | 0.117 | 0.251 | 0.095 | 0.084 |  |  |  |  |  |  |  |  |  |  |
| [0.005; 0.138] | [0.004; 0.128] | [0.044; 0.188] | [0.178; 0.325] | [0.022; 0.167] | [0.012; 0.159] |  |  |  |  |  |  |  |  |
| **UE** | 0.061 | 0.122 | 0.160 | 0.112 | 0.057 | 0.007 | 0.066 |  |  |  |  |  |  |  |  |  |
| [0.005; 0.123] | [0.060; 0.185] | [0.094; 0.222] | [0.044; 0.175] | [0.004; 0.124] | [0.000; 0.023] | [0.007; 0.131] |  |  |  |  |  |  |  |  |  |
| **UExMB** | 0.010 | 0.014 | 0.018 | 0.048 | 0.012 | 0.025 | 0.017 | 0.043 |  |  |  |  |  |  |  |  |
| [0.000; 0.031] | [0.000; 0.047] | [0.000; 0.061] | [0.002; 0.125] | [0.000; 0.042] | [0.001; 0.084] | [0.000; 0.059] | [0.000; 0.150] |  |  |  |  |  |  |  |  |
| **UExSuB** | 0.013 | 0.014 | 0.053 | 0.053 | 0.070 | 0.000 | 0.067 | 0.275 | 0.463 |  |  |  |  |  |  |  |
| [0.000; 0.044] | [0.000; 0.046] | [0.004; 0.116] | [0.004; 0.114] | [0.006; 0.137] | [0.000; 0.000] | [0.008; 0.131] | [0.120; 0.414] | [0.254; 0.621] |  |  |  |  |  |  |  |

**Note:** Brackets contain the bias-corrected bootstrap confidence intervals. MB=Monetary Benefits, SuB=Support Benefits, CB=Convenience Benefits, FB=Fun Benefits, SoB=Social Benefits, EB=Epistemic Benefits, I=Irritation, UE=User Experience

**Table A-7:** continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **MB** | **SuB** | **CB** | **FB** | **SoB** | **EB** | **I** | **UE** | **UExMB** | **UExSuB** | **UExCB** | **UExFB** | **UExSoB** | **UExEB** | **UExI** | **Value-in-Use** |
| **UExCB** | 0.015 | 0.048 | 0.069 | 0.072 | 0.062 | 0.031 | 0.058 | 0.406 | 0.408 | 0.800 |  |  |  |  |  |  |
| [0.000; 0.052] | [0.003; 0.105] | [0.010; 0.129] | [0.013; 0.127] | [0.006; 0.128] | [0.001; 0.091] | [0.005; 0.121] | [0.185; 0.536] | [0.166; 0.599] | [0.714; 0.859] |  |  |  |  |  |  |
| **UExFB** | 0.040 | 0.047 | 0.071 | 0.001 | 0.007 | 0.033 | 0.068 | 0.474 | 0.163 | 0.691 | 0.788 |  |  |  |  |  |
| [0.002; 0.099] | [0.003; 0.100] | [0.013; 0.125] | [0.000; 0.001] | [0.000; 0.023] | [0.001; 0.097] | [0.009; 0.130] | [0.330; 0.592] | [0.005; 0.366] | [0.600; 0.760] | [0.715; 0.842] |  |  |  |  |  |
| **UEySoB** | 0.011 | 0.066 | 0.066 | 0.007 | 0.016 | 0.003 | 0.070 | 0.246 | 0.411 | 0.568 | 0.561 | 0.539 |  |  |  |  |
| [0.000; 0.037] | [0.006; 0.129] | [0.006; 0.133] | [0.000; 0.025] | [0.000; 0.054] | [0.000; 0.005] | [0.009; 0.135] | [0.074; 0.390] | [0.239; 0.559] | [0.445; 0.663] | [0.407; 0.671] | [0.374; 0.659] |  |  |  |  |
| **UExEB** | 0.024 | 0.000 | 0.035 | 0.038 | 0.003 | 0.077 | 0.014 | 0.050 | 0.326 | 0.557 | 0.424 | 0.384 | 0.317 |  |  |  |
| [0.001; 0.076] | [0.000; 0.000] | [0.001; 0.104] | [0.001; 0.110] | [0.000; 0.006] | [0.018; 0.142] | [0.000; 0.050] | [0.000; 0.162] | [0.069; 0.515] | [0.361; 0.704] | [0.198; 0.631] | [0.151; 0.604] | [0.134; 0.479] |  |  |  |
| **UExI** | 0.015 | 0.063 | 0.061 | 0.072 | 0.069 | 0.013 | 0.011 | 0.340 | 0.011 | 0.317 | 0.374 | 0.489 | 0.370 | 0.056 |  |  |
| [0.000; 0.052] | [0.007; 0.123] | [0.005; 0.127] | [0.009; 0.140] | [0.009; 0.133] | [0.000; 0.047] | [0.000; 0.039] | [0.124; 0.513] | [0.000; 0.028] | [0.156; 0.457] | [0.154; 0.537] | [0.274; 0.639] | [0.207; 0.504] | [0.000; 0.192] |  |  |
| **Value-in-Use** | 0.510 | 0.699 | 0.743 | 0.775 | 0.567 | 0.679 | 0.235 | 0.130 | 0.021 | 0.062 | 0.081 | 0.069 | 0.048 | 0.020 | 0.039 |  |
| [0.444; 0.570] | [0.648; 0.744] | [0.691; 0.785] | [0.730; 0.813] | [0.505; 0.624] | [0.626; 0.728] | [0.150; 0.317] | [0.058; 0.201] | [0.002; 0.040] | [0.017; 0.134] | [0.022; 0.149] | [0.019; 0.135] | [0.011; 0.125] | [0.002; 0.041] | [0.010; 0.096] |

**Note:** Brackets contain the bias-corrected bootstrap confidence intervals. MB=Monetary Benefits, SuB=Support Benefits, CB=Convenience Benefits, FB=Fun Benefits, SoB=Social Benefits, EB=Epistemic Benefits, I=Irritation, UE=User Experience

**Table A-8:** Monetary benefits: conditional effect of focal predictor at values of the moderator

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User Experiencea** | **Conditional Effect** | **p-Value** | **LLCIb** | **ULCIb** |
| 1.0 | -0.0331 | 0.4138 | -0.0997 | 0.0335 |
| 1.8 | -0.0068 | 0.8387 | -0.0618 | 0.0482 |
| 2.6 | 0.0195 | 0.5198 | -0.0303 | 0.0693 |
| 3.4 | 0.0457 | 0.1556 | -0.0073 | 0.0987 |
| **3.7** | **0.0565** | **0.1000** | **0.0000** | **0.1131** |
| **4.2** | **0.0720** | **0.0614** | **0.0087** | **0.1353** |
| **5.0** | **0.0983** | **0.0382** | **0.0203** | **0.1762** |
| **5.8** | **0.1246** | **0.0311** | **0.0296** | **0.2195** |
| **6.6** | **0.1508** | **0.0286** | **0.0376** | **0.2641** |
| **7.4** | **0.1771** | **0.0278** | **0.0448** | **0.3094** |
| **8.2** | **0.2034** | **0.0277** | **0.0515** | **0.3552** |
| **9.0** | **0.2296** | **0.0279** | **0.0579** | **0.4014** |
| **9.8** | **0.2559** | **0.0283** | **0.0641** | **0.4477** |
| **10.6** | **0.2822** | **0.0287** | **0.0702** | **0.4942** |
| **11.4** | **0.3085** | **0.0291** | **0.0761** | **0.5408** |
| **12.2** | **0.3347** | **0.0295** | **0.0820** | **0.5875** |
| **13.0** | **0.3610** | **0.0299** | **0.0878** | **0.6343** |
| **13.8** | **0.3873** | **0.0302** | **0.0935** | **0.6811** |
| **14.6** | **0.4136** | **0.0306** | **0.0992** | **0.7279** |
| **15.4** | **0.4398** | **0.0309** | **0.1048** | **0.7748** |
| **16.2** | **0.4661** | **0.0312** | **0.1105** | **0.8217** |
| **17.0** | **0.4924** | **0.0315** | **0.1161** | **0.8687** |

**Note:** a Number of already taken trips (unstandardized); b Level of Confidence = 90%

**Table A-9:** Irritation: Conditional effect of focal predictor at values of the moderator

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User Experiencea** | **Conditional Effect** | **p-Value** | **LLCIb** | **ULCIb** |
| **1.0** | **-0.1150** | **0.0002** | **-0.1661** | **-0.0638** |
| **1.8** | **-0.0947** | **0.0002** | **-0.1362** | **-0.0532** |
| **2.6** | **-0.0744** | **0.0012** | **-0.1120** | **-0.0368** |
| **3.4** | **-0.0541** | **0.0301** | **-0.0951** | **-0.0131** |
| **3.8** | **-0.0447** | **0.1000** | **-0.0895** | **0.0000** |
| 4.2 | -0.0338 | 0.2684 | -0.0841 | 0.0165 |
| 5.0 | -0.0136 | 0.7229 | -0.0765 | 0.0494 |
| 5.8 | 0.0067 | 0.8861 | -0.0705 | 0.0840 |
| 6.6 | 0.0270 | 0.6309 | -0.0655 | 0.1195 |
| 7.4 | 0.0473 | 0.4723 | -0.0610 | 0.1556 |
| 8.2 | 0.0676 | 0.3714 | -0.0568 | 0.1920 |
| 9.0 | 0.0879 | 0.3043 | -0.0529 | 0.2286 |
| 9.8 | 0.1081 | 0.2577 | -0.0491 | 0.2654 |
| 10.6 | 0.1284 | 0.2241 | -0.0454 | 0.3022 |
| 11.4 | 0.1487 | 0.1990 | -0.0418 | 0.3392 |
| 12.2 | 0.1690 | 0.1796 | -0.0382 | 0.3762 |
| 13.0 | 0.1893 | 0.1644 | -0.0347 | 0.4132 |
| 13.8 | 0.2095 | 0.1522 | -0.0312 | 0.4503 |
| 14.6 | 0.2298 | 0.1422 | -0.0278 | 0.4874 |
| 15.4 | 0.2501 | 0.1339 | -0.0244 | 0.5246 |
| 16.2 | 0.2704 | 0.1268 | -0.0210 | 0.5617 |
| 17.0 | 0.2907 | 0.1209 | -0.0176 | 0.5989 |

**Note:** a Number of already taken trips (unstandardized); b Level of Confidence = 90%

**Table A-10:** Fun Benefits: Conditional effect of focal predictor at values of the moderator

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User Experiencea** | **Conditional Effect** | **p-Value** | **LLCIb** | **ULCIb** |
| **1.0** | **0.2530** | **0.0000** | **0.1813** | **0.3247** |
| **1.8** | **0.2999** | **0.0000** | **0.2427** | **0.3571** |
| **2.6** | **0.3468** | **0.0000** | **0.2937** | **0.4000** |
| **3.4** | **0.3938** | **0.0000** | **0.3322** | **0.4553** |
| **4.2** | **0.4407** | **0.0000** | **0.3620** | **0.5193** |
| **5.0** | **0.4876** | **0.0000** | **0.3876** | **0.5876** |
| **5.8** | **0.5345** | **0.0000** | **0.4111** | **0.6579** |
| **6.6** | **0.5814** | **0.0000** | **0.4335** | **0.7293** |
| **7.4** | **0.6283** | **0.0000** | **0.4553** | **0.8014** |
| **8.2** | **0.6753** | **0.0000** | **0.4767** | **0.8738** |
| **9.0** | **0.7222** | **0.0000** | **0.4978** | **0.9465** |
| **9.8** | **0.7691** | **0.0000** | **0.5188** | **1.0194** |
| **10.6** | **0.8160** | **0.0000** | **0.5396** | **1.0924** |
| **11.4** | **0.8629** | **0.0000** | **0.5603** | **1.1656** |
| **12.2** | **0.9099** | **0.0000** | **0.5810** | **1.2387** |
| **13.0** | **0.9568** | **0.0000** | **0.6016** | **1.3120** |
| **13.8** | **1.0037** | **0.0000** | **0.6221** | **1.3853** |
| **14.6** | **1.0506** | **0.0000** | **0.6427** | **1.4586** |
| **15.4** | **1.0975** | **0.0000** | **0.6631** | **1.5319** |
| **16.2** | **1.1445** | **0.0000** | **0.6836** | **1.6053** |
| **17.0** | **1.1914** | **0.0001** | **0.7040** | **1.6787** |

**Note:** a Number of already taken trips (unstandardized); b Level of Confidence = 90%

*Web Appendix C: Details of the fsQCA Procedure*

*Identification of Necessary Conditions*

After evaluating the consistency, the next step during the check for necessary conditions is to examine the coverage of those conditions surpassing the threshold of 0.9 (Schneider and Wagemann 2012). Results show that all coverage values do not exceed the value 0.84 and go as low as 0.62. According to the few existing guidelines in extant literature, coverage values should exceed the threshold of 0.5, as values below 0.5 are a strong indication of triviality (e.g., Goertz 2006; Ragin 2006) and, therefore, are not relevant necessary conditions (Schneider and Wagemann 2012). Additionally, coverage values should be as close to 1 as possible. Even though all coverage values are above the 0.5 threshold, cases exist in which the tested assumption of (relevant) necessity regarding the analyzed conditions is violated. This is indicated by both the consistency and coverage values being below 1. In sum, this is an indication that the analyzed conditions exhibiting a consistency value above 0.9 are merely non-perfect necessary conditions.

*Identification of Sufficient Conditions*

A truth table has 2k rows, with k being the number of conditions included in the analysis, i.e., the truth table in this analysis contains 128 rows in total. A separate truth table must be constructed for each analysis (i.e. shopping pattern) and analysis of each outcome, which leads to the construction of eight separate truth tables overall. To construct and analyze the truth tables, fsQCA 3.0 software (Ragin and Davey 2016) was used. We deleted all truth table rows for which there were no cases in our data, i.e., no trips occurred with the exact combination of conditions. Table A-11 shows the number of rows for which our data contained empirical evidence, which explains the number of different combinations observable in our data set.

**Table A-11:** Overview of the number of observed combinations in the truth tables

|  |  |  |  |
| --- | --- | --- | --- |
| **Experience Shopping**(n=350) | **Situation-Specific****Shopping**(n=129) | **Bargain Hunting**(n=54) | **Inner-City Service Usage**(n=131) |
| 69 | 47 | 27 | 49 |

In the next step of the truth table construction, the researcher must decide whether or not a combination of conditions in a given truth table row is considered to be sufficient for the analyzed outcome (Ragin 2000). Based on the consistency measure displayed for each truth table row, the following steps were taken to decide whether a row could be considered sufficient for the outcome and, therefore, assigned the value “1”. The value “0” is assigned to rows that were not considered sufficient for the outcome. First, all rows with a consistency value below 0.8 (Ragin 2000) were coded with the value “0” for the outcome. Second, the remaining rows were checked for gaps between the consistency values, and if gaps were found, the truth table was adjusted accordingly, usually toward a consistency value above 0.85, which Ragin (2006) strongly recommends. Third, PRI-measure (Schneider and Wagemann 2012) was employed to assign rows that exhibit high consistency values clearly for both high value-in-use and its negation to only one outcome, which usually resulted in a further upward adjustment of the consistency value cut-off (see Tables 15 and 16) for final consistency cut-off values). The minimum number of cases for a given truth table row included in the analysis was 1.

*Results of Sufficient Condition*

*High Value-in-Use*

The results of the truth table analysis regarding high value-in-use can be found in Table 15. For experience shopping, the overall solution comprises 15 paths altogether, which all lead to high value-in-use. Notably, several paths (denoted as a, b, etc.) share the same core conditions, but exhibit different peripheral conditions. Additionally, nine paths contain combinations of both hedonic and utilitarian core benefit conditions (e.g., Paths 1-3), while three contain solely hedonic and three solely utilitarian core benefit conditions. Interestingly, some paths contain negated benefit conditions, which display certain compensatory power of other benefit conditions contained in those paths (e.g., Path 3). According to the raw coverage values, Paths 1a and 1b (a combination of the core conditions of high convenience, fun, and epistemic benefits), Path 2a (a combination of high support and fun benefits, as well as low irritation), and Path 4 (a combination of high fun and epistemic benefits and low irritation) are the most empirically relevant paths, with raw coverage values of 0.53, 0.51, and 0.50, respectively. In many of the paths, low irritation is part of the sufficient combination that underlines its importance for this shopping pattern.

The overall solution term for situation-specific shopping and a high value-in-use outcome contain 11 paths, with some paths sharing some core conditions. In four paths, solely hedonic core benefit conditions are part of each path, while six paths exhibit both utilitarian and hedonic core benefit conditions. Notably, no path contains only utilitarian core benefit conditions. Paths 1a and 1b, which are a combination of the core conditions of high fun and epistemic benefits and low irritation, exhibit the highest and second-highest raw coverage values.

Eleven paths form the overall solution for bargain hunting, with four paths displaying a combination of both hedonic and utilitarian core benefit conditions. Four other paths are dominated by only one utilitarian core condition (Paths 2a-2d), and three other paths contain purely hedonic core benefit conditions. The most empirically relevant paths, according to their raw coverage values, are Paths 1a-1c, comprising a combination of high support, convenience, and fun benefits as core conditions, closely followed by Paths 2a-2c, containing only high convenience as a core condition.

For inner-city service usage, the overall solution comprises seven paths in total, of which all are a combination of both hedonic and utilitarian core conditions, although some of these core benefit conditions are negated (e.g., Paths 2 and 3). Raw coverage values are highest for Paths 1a (0.47) and 1b (0.40), which contain a combination of high convenience, fun, and epistemic benefits as core conditions. This is followed by Paths 3a (0.37) and 3b (0.34), interestingly a combination of high convenience and low social benefits, as well as low irritation, as core conditions.

*Low Value-in-Use*

The results of the sufficient paths leading to low value-in-use can be found in Table 16. Regarding the low value-in-use outcome, experience shopping contains 15 paths in the overall solution, with a total of 13 paths containing both utilitarian and hedonic core benefit conditions. One path contains solely hedonic core benefit conditions (Path 7), while another contains solely utilitarian core conditions (Path 6). Interestingly, Path 1 displays a relatively high raw coverage value (0.71) and comprises a combination of low support, convenience, epistemic, and social benefits as core conditions. Path 3 has the next highest raw coverage value (0.67), with a combination of low convenience, fun, and epistemic benefits, followed by Path 4 (0.43). Notable in this shopping pattern are Paths 10a-10c. Although their empirical relevance is rather low, these paths point out that even though some, if not most, benefit conditions are evaluated as high by users, they cannot compensate for low perceived epistemic benefits.

Situation-specific shopping displays 11 paths in its overall solution, with nine paths containing combinations of utilitarian and hedonic core benefit conditions and two paths containing only hedonic core benefit conditions. Path 4 exhibits the highest raw coverage (0.76) and, therefore, has the highest empirical relevance out of all the other paths for this shopping pattern. Like Path 3, it contains low support, convenience, epistemic, and social core benefit conditions, supplemented by low fun as a core condition. The third highest raw coverage path (0.70) is a combination of low support, fun, and epistemic core benefit conditions. In addition, all paths with high raw coverage values (Paths 1-5) contain core conditions that are part of the combinations of these high raw-coverage paths.

Regarding bargain hunting, the overall solution comprises five total paths, all of which contain a mix of utilitarian and hedonic core benefit conditions. Interestingly, Path 2a displays the highest raw coverage, at 0.64, and contains a combination of low convenience, fun, and epistemic benefits as core conditions. The core conditions in this path also are contained partly in the remaining paths as core conditions, illustrating their (empirical) relevance.

The overall solution for the inner-city service usage pattern contains 16 total paths, out of which seven contain both utilitarian and hedonic core benefit conditions, and five contain solely hedonic core benefit conditions. Three of the remaining paths contain only convenience benefits as a core benefit condition. Noteworthy is that although the overall solution comprises 16 paths, only three exhibit raw coverage values above 0.3: Paths 1, 2, and 5, with Paths 1 and 2 showing the highest raw coverage values (0.68 and 0.63, respectively). Additionally, Paths 1 and 2 differ only in one core condition: Low fun is part of the combination of low monetary, convenience, and epistemic benefit conditions in Path 2. Path 5, as the third-highest raw coverage value path, contains a combination of low convenience and epistemic benefits, as well as high irritation as core conditions.

*Web Appendix D: Details of the Mediation Analysis*

**Table A-12:** Mediated value-in-use model: measurement model assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Construct** | **# Items** | **Loadings** | **Average Variance****Extracted (AVE)** | **Cronbach’s Alpha (CA)** | **Dijkstra-Henseler-Statistics (rhoA)** | **Composite Reliability (CR)** |
|  |  | > 0.7 | > 0.5 | > 0.7 | > 0.7 | > 0.7 |
| Value-in-Use | Value\_1 | 0.885\*\*\* | 0.769 [0.741; 0.794] | 0.850 [0.826; 0.871] | 0.866 [0.846; 0.883] | 0.909 [0.896; 0.920] |
| Value\_2 | 0.829\*\*\* |
| Value\_3 | 0.915\*\*\* |

**Note:** \*\*\* = p < 1%; in brackets: bias-corrected bootstrap confidence intervals

**Table A-13:** Mediated value-in-use model: assessment of discriminant validity using the HTMT criterion

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Monetary****Benefits** | **Support****Benefits** | **Convenience Benefits** | **Fun Benefits** | **Social Benefits** | **Epistemic****Benefits** | **Irritation** | **Number Seen Monetary Offers** | **Number Seen Non-Monetary Offers** | **Value-in-Use** |
| **Monetary****Benefits** |  |  |  |  |  |  |  |  |  |  |
| **Support****Benefits** | 0.595[0.538; 0.645] |  |  |  |  |  |  |  |  |  |
| **Convenience Benefits** | 0.636[0.584; 0.685] | 0.741[0.699; 0.778] |  |  |  |  |  |  |  |  |
| **Fun Benefits** | 0.410[0.347; 0.467] | 0.607[0.554; 0.657] | 0.657[0.611; 0.700] |  |  |  |  |  |  |  |
| **Social Benefits** | 0.480[0.410; 0.543] | 0.508[0.445; 0.567] | 0.519[0.454; 0.579] | 0.515[0.457; 0.568] |  |  |  |  |  |  |
| **Epistemic****Benefits** | 0.489[0.428; 0.548] | 0.664[0.614; 0.711] | 0.626[0.572; 0.676] | 0.570[0.515; 0.622] | 0.454[0.387; 0.515] |  |  |  |  |  |
| **Irritation** | 0.063[0.005; 0.137] | 0.056[0.004; 0.127] | 0.117[0.045; 0.188] | 0.251[0.177; 0.327] | 0.095[0.019; 0.167] | 0.084[0.014; 0.159] |  |  |  |  |
| **Number Seen Monetary Offers** | 0.252[0.173; 0.329] | 0.274[0.205; 0.337] | 0.164[0.091; 0.234] | 0.149[0.083; 0.214] | 0.173[0.105; 0.242] | 0.160[0.082; 0.232] | 0.030[0.001; 0.087] |  |  |  |
| **Number Seen Non-Monetary Offers** | 0.068[0.008; 0.134] | 0.164[0.096; 0.227] | 0.112[0.044; 0.179] | 0.122[0.057; 0.180] | 0.089[0.024; 0.156] | 0.142[0.075; 0.203] | 0.007[0.000; 0.024] | 0.381[0.271; 0.497] |  |  |
| **Value-in-Use** | 0.510[0.445; 0.569] | 0.699[0.648; 0.744] | 0.743[0.692; 0.784] | 0.775[0.731; 0.814] | 0.567[0.503; 0.623] | 0.679[0.625; 0.726] | 0.235[0.149; 0.317] | 0.170[0.098; 0.237] | 0.091[0.030; 0.159] |  |

**Note:** Brackets contain the bias-corrected bootstrap confidence intervals.

**Table A-14:** Mediated value-in-use model: exploatory power and predictive relevance

|  |  |  |
| --- | --- | --- |
| **Construct** | **R2** | **Q2** |
| **Value-in-Use** | 0.650(moderate exploratory power) | 0.488(medium predictive relevance) |
| **Monetary Benefits** | 0.064 | 0.055 |
| **Support Benefits** | 0.080 | 0.072 |
| **Convenience Benefits** | 0.030 | 0.027 |
| **Fun Benefits** | 0.027 | 0.024 |
| **Social Benefits** | 0.031 | 0.026 |
| **Epistemic Benefits** | 0.033 | 0.029 |
| **Irritation** | 0.001 | -0.002 |

**Table A-15:** Mediated value-in-use model: Results of Park and Gupta’s (2012) Gaussian copula approach

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Original****Model** | **DV: Value-in-Use** | **DV: Monetary Benefits** | **DV: Support Benefits** |
| **Gaussian****Copula Model 1** | **Gaussian****Copula Model 2** | **Gaussian****Copula Model 3** | **Gaussian****Copula Model 4** | **Gaussian****Copula Model 5** | **Gaussian****Copula Model 6** | **Gaussian****Copula Model 7** | **Gaussian****Copula Model 8** | **Gaussian****Copula Model 9** |
| **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** | **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** | **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** |
| **Variable** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-Value** |
| **MonO** | 0.007 | 0.786 | 0.007 | 0.804 | 0.007 | 0.786 | 0.132 | 0.441 | 0.264 | <0.01 | 0.265 | <0.01 | 0.071 | 0.799 | 0.247 | <0.01 | 0.248 | <0.01 | 0.109 | 0.692 |
| **NonMonO** | -0.036 | 0.096 | -0.036 | 0.129 | -0.036 | 0.140 | -0.111 | 0.287 | -0.033 | 0.387 | -0.033 | 0.402 | 0.083 | 0.625 | 0.070 | 0.064 | 0.070 | 0.074 | 0.153 | 0.363 |
| **CB** | 0.210 | <0.01 | 0.210 | <0.01 | 0.210 | <0.01 | 0.209 | <0.01 |  |  |  |  |  |  |  |  |  |  |  |  |
| **EB** | 0.183 | <0.01 | 0.183 | <0.01 | 0.183 | <0.01 | 0.183 | <0.01 |  |  |  |  |  |  |  |  |  |  |  |  |
| **MB** | 0.011 | 0.749 | 0.011 | 0.730 | 0.011 | 0.730 | 0.011 | 0.717 |  |  |  |  |  |  |  |  |  |  |  |  |
| **I** | -0.077 | <0.01 | -0.077 | <0.01 | -0.077 | <0.01 | -0.076 | <0.01 |  |  |  |  |  |  |  |  |  |  |  |  |
| **SoB** | 0.092 | <0.01 | 0.092 | <0.01 | 0.092 | <0.01 | 0.092 | <0.01 |  |  |  |  |  |  |  |  |  |  |  |  |
| **FB** | 0.335 | <0.01 | 0.335 | <0.01 | 0.335 | <0.01 | 0.335 | <0.01 |  |  |  |  |  |  |  |  |  |  |  |  |
| **SuB** | 0.120 | <0.01 | 0.120 | <0.01 | 0.120 | <0.01 | 0.121 | <0.01 |  |  |  |  |  |  |  |  |  |  |  |  |
| **cMonO** |  |  | 0.001 | 0.993 |  |  | -0.290 | 0.460 | 0.002 | 0.952 |  |  | 0.449 | 0.482 | 0.001 | 0.974 |  |  | 0.321 | 0.612 |
| **cNonMonO** |  |  |  |  | 0.001 | 0.958 | 0.218 | 0.459 |  |  | 0.001 | 0.986 | -0.335 | 0.483 |  |  | 0.00007 | 0.998 | -0.240 | 0.612 |

**Note:** MonO=Number of seen Monetary Offers, NonMonO=Numbers of seen Non-Monetary Offers, MB=Monetary Benefits, SuB=Support Benefits, CB=Convenience Benefits, FB=Fun Benefits, SoB=Social Benefits, EB=Epistemic Benefits, I=Irritation

**Table A-15:** continued

|  |  |  |  |
| --- | --- | --- | --- |
|  | **DV: Convenience Benefits** | **DV: Fun Benefits** | **DV: Social Benefits** |
| **Gaussian****Copula Model 10** | **Gaussian****Copula Model 11** | **Gaussian****Copula Model 12** | **Gaussian****Copula Model 13** | **Gaussian****Copula Model 14** | **Gaussian****Copula Model 15** | **Gaussian****Copula Model 16** | **Gaussian****Copula Model 17** | **Gaussian****Copula Model 18** |
| **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** | **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** | **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** |
| **Variable** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** | **Value** | **p-****Value** |
| **MonO** | 0.143 | <0.01 | 0.142 | <0.01 | 0.141 | 0.619 | 0.121 | <0.01 | 0.120 | <0.01 | 0.249 | 0.379 | 0.163 | <0.01 | 0.163 | <0.01 | 0.240 | 0.397 |
| **NonMonO** | 0.058 | 0.135 | 0.058 | 0.147 | 0.059 | 0.732 | 0.076 | 0.051 | 0.076 | 0.059 | -0.001 | 0.994 | 0.027 | 0.490 | 0.027 | 0.504 | -0.019 | 0.911 |
| **CB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **EB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **MB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **I** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SoB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **FB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SuB** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **cMonO** | -0.001 | 0.978 |  |  | 0.003 | 0.996 | -0.002 | 0.965 |  |  | -0.298 | 0.646 | -0.001 | 0.979 |  |  | -0.178 | 0.784 |
| **cNonMonO** |  |  | -0.001 | 0.978 | -0.003 | 0.995 |  |  | -0.001 | 0.987 | 0.222 | 0.648 |  |  | -0.001 | 0.992 | 0.133 | 0.785 |

**Note:** MonO=Number of seen Monetary Offers, NonMonO=Numbers of seen Non-Monetary Offers, MB=Monetary Benefits, SuB=Support Benefits, CB=Convenience Benefits, FB=Fun Benefits, SoB=Social Benefits, EB=Epistemic Benefits, I=Irritation

**Table A-15:** continued

|  |  |  |
| --- | --- | --- |
|  | **DV: Epistemic Benefits** | **DV: Irritation** |
| **Gaussian****Copula Model 19** | **Gaussian****Copula Model 20** | **Gaussian****Copula Model 21** | **Gaussian****Copula Model 22** | **Gaussian****Copula Model 23** | **Gaussian****Copula Model 24** |
| **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** | **Endogenous****Variable:****MonO** | **Endogenous****Variable:****NonMonO** | **Endogenous****Variables:****MonO, NonMonO** |
| **Variable** | **Value** | **p-Value** | **Value** | **p-Value** | **Value** | **p-Value** | **Value** | **p-Value** | **Value** | **p-Value** | **Value** | **p-Value** |
| **MonO** | 0.123 | <0.01 | 0.124 | <0.01 | 0.080 | 0.776 | -0.031 | 0.464 | -0.031 | 0.425 | -0.323 | 0.260 |
| **NonMonO** | 0.095 | 0.015 | 0.094 | 0.019 | 0.120 | 0.485 | 0.005 | 0.905 | 0.005 | 0.896 | 0.180 | 0.304 |
| **CB** |  |  |  |  |  |  |  |  |  |  |  |  |
| **EB** |  |  |  |  |  |  |  |  |  |  |  |  |
| **MB** |  |  |  |  |  |  |  |  |  |  |  |  |
| **I** |  |  |  |  |  |  |  |  |  |  |  |  |
| **SoB** |  |  |  |  |  |  |  |  |  |  |  |  |
| **FB** |  |  |  |  |  |  |  |  |  |  |  |  |
| **SuB** |  |  |  |  |  |  |  |  |  |  |  |  |
| **cMonO** | 0.002 | 0.958 |  |  | 0.102 | 0.875 | 0.00004 |  |  |  | 0.676 | 0.305 |
| **cNonMonO** |  |  | 0.001 | 0.966 | -0.075 | 0.877 |  |  | -0.002 | 0.952 | -0.506 | 0.304 |

**Note:** MonO=Number of seen Monetary Offers, NonMonO=Numbers of seen Non-Monetary Offers, MB=Monetary Benefits, SuB=Support Benefits, CB=Convenience Benefits, FB=Fun Benefits, SoB=Social Benefits, EB=Epistemic Benefits, I=Irritation

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