

Web appendix

How Online Trust and Online Brand Equity Translate Online- and Omni-Channel-Specific Instruments into Repurchase Intentions

By *Bernhard Swoboda*, *Amelie Winters* and *Nils Fränzel*

		
<p><i>Bernhard Swoboda</i> is Professor of Marketing and Retailing at the Trier University, Universitaetsring 15, 54296 Trier, Germany, Phone: +49/651 201 3050, E-mail: b.swoboda@uni-trier.de. * Corresponding Author.</p>	<p><i>Amelie Winters</i> was Research Assistant and Doctoral Student at the Chair of Marketing and Retailing, Universitaetsring 15, 54296 Trier, Germany, Phone: +49/651 201 2613, E-mail: a.winters@uni-trier.de.</p>	<p><i>Nils Fränzel</i> is Research Assistant and Doctoral Student at the Chair of Marketing and Retailing, Universitaetsring 15, 54296 Trier, Germany, Phone: +49/651 201 2630, E-mail: n.fraenzel@uni-trier.de.</p>

Content

- A. Common method variance (p. 2)
- B. Endogeneity test (p. 3)
- C. Reliability and validity (p. 6)
- D. Test for measurement invariance (p. 7)
- E. Description of the cross-lagged model (p. 8)
- F. Results of the alternative models (p. 9)
- References (p. 15)

Web appendix A. Common method variance

A data collection at different time points reduces the potential threat of common method variance in our data set *ex ante* (Fuller et al. 2016). Additionally, we used an appropriate questionnaire design. First, the respondents were told that the study was anonymous and confidential and that there were no right or wrong answers. Moreover, the study started with the measures of the dependent variables (Chang et al. 2010). We calculated a single-factor test using confirmatory factor analysis. The results show that the models with all items loading on a single factor had a significantly worse fit than our proposed models did (see *Tab. A.1*).

	CFI	TLI	RMSEA	SRMR	χ^2 (df)	$\Delta \chi^2$ (df)	<i>p</i> -value of difference
<i>Online repurchase intention</i>							
Proposed model	.971	.966	.048	.039	635.921 (341)	6270.502 (36)	.000
Single factor model	.367	.319	.214	.148	6906.423 (377)		
<i>Offline repurchase intention</i>							
Proposed model	.969	.963	.050	.039	658.961 (341)	6283.010 (36)	.000
Single factor model	.366	.317	.215	.149	6941.971 (377)		

Notes: Difference tests were conducted using χ^2 tests of difference.

Tab. A.1: Study 1: Results of the single-factor tests

	CFI	TLI	RMSEA	SRMR	χ^2 (df)	$\Delta \chi^2$ (df)	<i>p</i> -value of difference
<i>Online repurchase intention</i>							
<i>Time point one</i>							
Proposed model	.993	.990	.044	.018	55.124 (32)	1032.683 (3)	.000
Single factor model	.690	.601	.282	.146	1087.807 (35)		
<i>Time point two</i>							
Proposed model	.992	.989	.050	.015	62.379 (32)	1285.345 (3)	.000
Single factor model	.664	.568	.315	.161	1347.724 (35)		
<i>Time point three</i>							
Proposed model	.975	.964	.090	.029	129.967 (32)	1217.705 (3)	.000
Single factor model	.661	.564	.315	.167	1347.672 (35)		
<i>Offline repurchase intention</i>							
<i>Time point one</i>							
Proposed model	.989	.985	.054	.023	67.788 (32)	1144.547 (3)	.000
Single factor model	.646	.545	.299	.163	1212.335 (35)		
<i>Time point two</i>							
Proposed model	.987	.982	.065	.023	83.388 (32)	1476.049 (3)	.000
Single factor model	.610	.498	.340	.153	1559.437 (35)		
<i>Time point three</i>							
Proposed model	.965	.951	.107	.035	168.861 (32)	1375.561 (3)	.000
Single factor model	.617	.508	.338	.186	1544.422 (35)		

Notes: Difference tests were conducted using χ^2 tests of difference.

Tab. A.2: Study 2: Results of the single-factor tests

Web appendix B. Endogeneity test

In order to reduce possible biases from endogeneity we used the instrumental variable (IV) approach. We checked whether the results of the studies change, if the exogenous variables are endogenized by including IVs for each marketing instrument. The IV's for study 1 are measured with one item: "The offline store is visually appealing; The physical store has a very good overall layout design; I believe that my personal data are well protected in this physical store; [Retailer] provides reliable service through its offline store; The physical store allows consumers to inform themselves about the online store; The employees are helpful when using the online store" (e. g., adapted from Montoya-Weiss et al. 2003; Oh et al. 2012). For study 2, we use brand attachment as an IV for online brand equity, which is theoretically a strong predictor for brand equity with one item ("I consider [retailer] as my first choice", e. g., Keller 2010; Park et al. 2010). Offline trust is used as an IV for online trust, as it was shown to be strongly associated with online trust ("[Retailer's] offline store can be trusted at all times", Bock et al. 2012). First, F-tests proved that the IVs are strong predictors of the analysed variables (see *Tab. B.1*). The IVs are included in the models to calculate consistent models in addition to the efficient (proposed) models (Antonakis et al. 2010, see *Tab. B.2*). Second, regarding the path estimates we verified whether changes emerged (Hausman 1978). Respective t-values were below the critical value of 1.96 and we conclude that the probability of endogeneity seems to be reduced.

	Model 1	Model 2
	F-value	F-value
IV1 → Aesthetic appeal (1)	271.218	282.904
IV2 → Ease of use (1)	129.195	131.099
IV3 → Security/privacy (1)	580.644	617.397
IV4 → Customer service (1)	130.788	135.595
IV5 → Online-offline integration (1)	623.908	646.227
IV6 → Channel consistency (1)	24.066	24.248

Notes: IV = Instrumental variable, F-value > 10 indicates strong predictor.

Tab. B.1: Study 1: F-test of strong instrumental variables

			Proposed / efficient model				Consistent model			
			Model 1:		Model 2:		Model 1:		Model 2:	
			Online RPI		Offline RPI		Online RPI		Offline RPI	
			β	p	β	p	β	p	β	p
<i>Direct effects</i>										
IV1	→ Aesthetic appeal (1)		-		-		.474 ***		.474 ***	
IV2	→ Ease of use (1)		-		-		.288 ***		.288 ***	
IV3	→ Security/privacy (1)		-		-		.830 ***		.830 ***	
IV4	→ Customer service (1)		-		-		.316 ***		.316 ***	
IV5	→ Online-offline integration (1)		-		-		.698 ***		.698 ***	
IV6	→ Channel consistency (1)		-		-		.190 ***		.192 ***	
Aesthetic appeal (1)	→ Online trust (2)		.166 **		.163 **		.172 **		.170 ***	
Ease of use (1)	→ Online trust (2)		-.117 ns		-.119 ns		-.068 ns		-.069 ns	
Security/privacy (1)	→ Online trust (2)		.311 ***		.312 ***		.312 ***		.313 ***	
Customer service (1)	→ Online trust (2)		.158 *		.158 *		.138 ***		.139 ***	
Online-offline integration (1)	→ Online trust (2)		.079 ns		.082 ns		.078 ns		.081 ns	
Channel consistency (1)	→ Online trust (2)		.114 *		.115 *		.114 **		.114 **	
Aesthetic appeal (1)	→ Online brand equity (2)		.443 ***		.443 ***		.440 ***		.440 ***	
Ease of use (1)	→ Online brand equity (2)		-.122 ns		-.123 ns		-.072 ns		-.073 ns	
Security/privacy (1)	→ Online brand equity (2)		.146 *		.147 **		.153 ***		.154 ***	
Customer service (1)	→ Online brand equity (2)		.007 ns		.003 ns		.006 ns		-.009 ns	
Online-offline integration (1)	→ Online brand equity (2)		.108 *		.109 *		.104 **		.104 **	
Channel consistency (1)	→ Online brand equity (2)		.159 **		.162 **		.162 ***		.165 ***	
Aesthetic appeal (1)	→ RPI (2)		-.022 ns		-.023 ns		-.015 ns		-.013 ns	
Ease of use (1)	→ RPI (2)		.038 ns		.020 ns		.025 ns		.008 ns	
Security/privacy (1)	→ RPI (2)		-.038 ns		-.084 ns		-.049 ns		-.073 ns	
Customer service (1)	→ RPI (2)		-.077 ns		-.104 ns		-.059 ns		-.090 ns	
Online-offline integration (1)	→ RPI (2)		.064 ns		.087 ns		.062 ns		.088 ns	
Channel consistency (1)	→ RPI (2)		.078 ns		.256 ***		.082 ns		.263 ***	
Online brand equity (2)	→ RPI (2)		.385 ***		.417 ***		.387 ***		.413 ***	
Online trust (2)	→ RPI (2)		.504 ***		.378 ***		.506 ***		.370 ***	
<i>Indirect effects</i>										
Aesthetic appeal (1)	→ Online trust (2)	→ RPI (3)	.084 **		.062 **		.087 ***		.063 *	
Ease of use (1)	→ Online trust (2)	→ RPI (3)	-.059 ns		-.045 ns		-.034 ns		-.025 ns	
Security/privacy (1)	→ Online trust (2)	→ RPI (3)	.157 ***		.118 ***		.158 ***		.116 ***	
Customer service (1)	→ Online trust (2)	→ RPI (3)	.080 *		.060 *		.070 ***		.051 ***	
Online-offline integration (1)	→ Online trust (2)	→ RPI (3)	.040 ns		.031 ns		.039 ns		.030 ns	
Channel consistency (1)	→ Online trust (2)	→ RPI (3)	.058 *		.044 *		.057 **		.042 *	
Aesthetic appeal (1)	→ Online brand equity (2)	→ RPI (3)	.170 ***		.184 ***		.171 ***		.182 ***	
Ease of use (1)	→ Online brand equity (2)	→ RPI (3)	-.047 ns		-.051 ns		-.028 ns		-.030 ns	
Security/privacy (1)	→ Online brand equity (2)	→ RPI (3)	.056 *		.061 **		.059 **		.064 **	
Customer service (1)	→ Online brand equity (2)	→ RPI (3)	.003 ns		.001 ns		-.002 ns		-.004 ns	
Online-offline integration (1)	→ Online brand equity (2)	→ RPI (3)	.042 *		.045 *		.040 **		.043 *	
Channel consistency (1)	→ Online brand equity (2)	→ RPI (3)	.061 **		.067 **		.063 ***		.068 ***	
<i>Total effects</i>										
Aesthetic appeal (1)	→ RPI (3)		.232 ***		.224 ***		.242 ***		.231 ***	
Ease of use (1)	→ RPI (3)		-.068 ns		-.076 ns		-.037 ns		-.048 ns	
Security/privacy (1)	→ RPI (3)		.175 **		.095 †(.067)		.168 ***		.106 *	
Customer service (1)	→ RPI (3)		.005 ns		-.043 ns		.008 ns		-.043 ns	
Online-offline integration (1)	→ RPI (3)		.146 *		.163 **		.142 **		.161 ***	
Channel consistency (1)	→ RPI (3)		.197 **		.367 ***		.202 ***		.373 ***	
<i>Covariates</i>										
Gender (1)	→ RPI (3)		.046 ns		.056 ns		.049 ns		.055 ns	
Age (1)	→ RPI (3)		-.011 ns		-.053 ns		-.013 ns		-.054 ns	
Internet expertise (1)	→ RPI (3)		.038 ns		.040 ns		.040 ns		.043 ns	
Assortment variety (1)	→ RPI (3)		-.078 ns		-.036 ns		-.084 ns		-.042 ns	
Price fairness (1)	→ RPI (3)		.015 ns		.007 ns		.013 ns		.009 ns	

Structural model fits:

Proposed / efficient model:

Model 1: CFI .932, TLI .920, RMSEA .067, SRMR .128, $\chi^2(470) = 1254.596$, SCF = 1.00.

Model 2: CFI .930, TLI .918, RMSEA .068, SRMR .127, $\chi^2(470) = 1279.778$, SCF = 1.01.

Consistent model:

Model 1: CFI .868, TLI .853, RMSEA .092, SRMR .202, $\chi^2(653) = 2716.112$, SCF = .80.

Model 2: CFI .865, TLI .850, RMSEA .093, SRMR .204, $\chi^2(653) = 2780.131$, SCF = .80.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$, β = standardized coefficients.

*** $p < .001$; ** $p < .01$; * $p < .05$; ns = not significant.

Tab. B.2: Study 1: Results of the efficient and consistent models

	Model 1	Model 2
IV1 → Online trust	F-value 939.908	F-value 1156.615
IV2 → Online brand equity	498.705	546.090

Notes: IV = Instrumental variable, F-value > 10 indicates strong predictor.

Tab. B.3: Study 2: F-test of strong instrumental variables

		Proposed / efficient model				Consistent model			
		Model 1:		Model 2:		Model 1:		Model 2:	
		Online RPI		Offline RPI		Online RPI		Offline RPI	
		β	p	β	p	β	p	β	p
<i>Direct effects</i>									
IV1	→ Online trust (1)	-		-		.788	***	.789	***
IV2	→ Online brand equity (1)	-		-		.467	***	.467	***
Online trust (1)	→ Online brand equity (2)	.097	**	.100	***	.108	***	.111	***
Online brand equity (1)	→ Online trust (2)	.086	**	.084	**	.090	***	.089	***
Online trust (1)	→ RPI (2)	.047	*	.096	***	.047	*	.098	***
Online brand equity (1)	→ RPI (2)	.082	*	.103	***	.083	**	.103	***
Online trust (1)	→ Online trust (2)	.619	***	.614	***	.633	***	.627	***
Online brand equity (1)	→ Online brand equity (2)	.610	***	.611	***	.623	***	.623	***
RPI (1)	→ RPI (2)	.682	***	.655	***	.683	***	.656	***
Online trust (2)	→ Online brand equity (3)	.104	**	.108	**	.112	**	.116	**
Online brand equity (2)	→ Online trust (3)	.089	**	.084	**	.091	***	.091	***
Online trust (2)	→ RPI (3)	.051	*	.104	***	.050	*	.104	***
Online brand equity (2)	→ RPI (3)	.088	**	.109	**	.087	**	.106	***
Online trust (2)	→ Online trust (3)	.650	***	.664	***	.648	***	.662	***
Online brand equity (2)	→ Online brand equity (3)	.646	***	.640	***	.638	***	.632	***
RPI (2)	→ RPI (3)	.657	***	.636	***	.659	***	.637	***
R ² RPI (3)		.525	***	.565	***	.526	***	.564	***
<i>Total effects</i>									
Online trust (1)	→ RPI (3)	.072	†(.060)	.136	***	.072	*	.139	***
Online brand equity (1)	→ RPI (3)	.112	**	.140	**	.113	**	.140	***
<i>Diff. in total effects</i>		t = 1.988*		t = .333ns		t = 2.429**		t = .135ns	
<i>Covariates</i>									
Gender (1)	→ RPI (1)	.058	**	.090	***	.057	**	.090	***
Gender (2)	→ RPI (2)	.063	**	.096	***	.063	**	.096	***
Gender (3)	→ RPI (3)	.066	**	.100	***	.066	**	.100	***
Age (1)	→ RPI (1)	-.058	**	-.064	**	-.057	**	-.064	**
Age (2)	→ RPI (2)	-.064	**	-.069	**	-.064	**	-.069	**
Age (3)	→ RPI (3)	-.068	**	-.072	**	-.068	**	-.073	**
Internet expertise (1)	→ RPI (1)	-.009	ns	-.016	ns	-.009	ns	-.016	ns
Internet expertise (2)	→ RPI (2)	-.009	ns	-.017	ns	-.010	ns	-.017	ns
Internet expertise (3)	→ RPI (3)	-.010	ns	-.017	ns	-.010	ns	-.017	ns

Structural model fits:

Proposed / efficient model:

Model 1: CFI .928, TLI .924, RMSEA .067, SRMR .183, $\chi^2(662) = 1794.952$, SCF = .86.

Model 2: CFI .926, TLI .921, RMSEA .069, SRMR .169, $\chi^2(662) = 1840.577$, SCF = .86.

Consistent model:

Model 1: CFI .904, TLI .898, RMSEA .080, SRMR .202, $\chi^2(721) = 2470.852$, SCF = .78.

Model 2: CFI .893, TLI .886, RMSEA .086, SRMR .193, $\chi^2(721) = 2708.541$, SCF = .78.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$. Standardized coefficients are shown.

*** $p < .001$; ** $p < .01$; * $p < .05$; ns = not significant.

Tab. B.4: Study 2: Results of the cross-lagged models

Web appendix C. Reliability and validity

Con-struct	Item	Time point one					Time point two					Time point three				
		MV/Std.	FL	KMO	ItTC	α	MV/Std.	FL	KMO	ItTC	α	MV/Std.	FL	KMO	ItTC	α
Online trust	ONT1	3.6/1.5	.957		.939		3.5/1.5	.958		.940		3.6/1.5	.967		.951	
	ONT2	3.6/1.4	.940	.779	.922	.969	3.5/1.4	.973	.784	.952	.974	3.5/1.4	.974	.787	.957	.977
	ONT3	3.6/1.5	.971		.945		3.5/1.5	.957		.940		3.5/1.5	.961		.946	
Online brand equity	ONB1	4.3/1.5	.906		.862		4.2/1.5	.946		.907		4.1/1.4	.940		.913	
	ONB2	4.2/1.5	.968	.818	.913		4.2/1.5	.958		.915		4.1/1.5	.953		.924	
	ONB3	4.2/1.5	.878		.844	.934	4.2/1.5	.918	.830	.886	.945	4.1/1.5	.946	.866	.920	.960
	ONB4	3.5/1.5	.781		.758		3.6/1.5	.785		.769		4.0/1.5	.867		.851	
Online RPI	ONRPI1	3.2/1.9	.901		.782		3.0/1.9	.890		.763		2.8/1.8	.823		.690	
	ONRPI2	2.3/1.4	.787	.720	.715	.852	2.2/1.5	.792	.731	.734	.867	2.6/1.5	.809	.728	.720	.839
	ONRPI3	3.1/2.0	.774		.712		3.0/1.8	.810		.778		3.1/1.9	.773		.713	
Offline RPI	OFRPI1	4.1/2.0	.873		.770		4.0/2.1	.840		.787		3.5/1.9	.727		.745	
	OFRPI2	2.5/1.5	.807	.733	.732	.855	2.6/1.5	.801	.739	.726	.864	2.9/1.6	.827	.718	.664	.843
	OFRPI3	3.6/2.0	.796		.727		3.6/1.9	.866		.742		3.7/1.9	.863		.728	

Notes: RPI = Repurchase intention, MV/Std. = Mean values and standard deviations, FL = Factor loadings (exploratory), KMO = Kaiser-Meyer-Olkin Criterion ($\geq .5$), ItTC = Item-to-Total Correlation ($\geq .3$), α = Cronbach's alpha ($\geq .7$). All items measured on 7-point Likert-type scales: 1 = strongly disagree, 7 = strongly agree.

Tab. C.1: Study 2: Reliability and validity (explorative)

Web appendix D. Study 2: Test for measurement invariance

We tested for measurement equivalence to ensure comparability across the three time points. First, we ensured configural invariance by estimating a baseline model in which the factor loadings and intercepts are freely estimated. Second, we tested for metric invariance by fixing the factor loadings of each item. A comparison of configural and the metric model shows that all deviations are within limits. We additionally relied on differences in the comparative fit indices (Chen 2007) to ensure measurement invariance. Partial metric invariance was ascertained by freely estimating some of the factor loadings.

Model	χ^2/df (<i>p</i> -value)	χ^2 -Difference (<i>p</i> -value)	CFI (Δ CFI)	TLI (Δ TLI)	RMSEA (Δ RMSEA)	SCF
<i>Model 1</i>						
Model 1: Configural invariance	1,041.474/369 (.000)		.944	.934	.070	1.16
Model 2: Full metric invariance	1,070.549/383 (.000)	24.731 (.037)	.943 (.001)	.935 (.001)	.069 (.001)	1.15
Model 3: Partial metric invariance ^a	1,064.331/380 (.000)	19.677 (.050)	.943 (.000)	.935 (.000)	.069 (.000)	1.15
<i>Model 2</i>						
Model 1: Configural invariance	1,119.750/369 (.000)		.938	.927	.073	1.16
Model 2: Full metric invariance	1,155.412/383 (.000)	32.836 (.003)	.936 (.002)	.927 (.000)	.073 (.000)	1.14
Model 3: Partial metric invariance ^b	1,142.603/381 (.000)	16.785 (.158)	.937 (.001)	.928 (.001)	.073 (.000)	1.14

Notes: SCF = Scaling correction factor for MLM. ^aFactor loading freed for the following item: ONB4 time point two, RPI2 time point one, RPI2 time point two. ^bFactor loading freed for the following item: RPI1 time point one, RPI1 time point two.

Tab. D.1: Study 2: Measurement invariance across time points

Web appendix E. Study 2: Description of the cross-lagged model

Cross-lagged panel models are appropriate for studying causality in longitudinal data because reciprocal relationships between variables can be conceptualized over time (Allison et al. 2017). Autoregressive relationships between a variable and its prior state have to be modelled (Zyphur et al. 2019). The constructs are measured at three time points. We follow the advice of Burkholder and Harlow (2003) and include disturbance correlations in the cross-lagged design. These correlations were modelled between the same indicators across the three time points. Disturbance correlations are also included between all constructs at time point two and are then integrated at time point three. They are constrained and thus estimated equally (Allison et al. 2017).

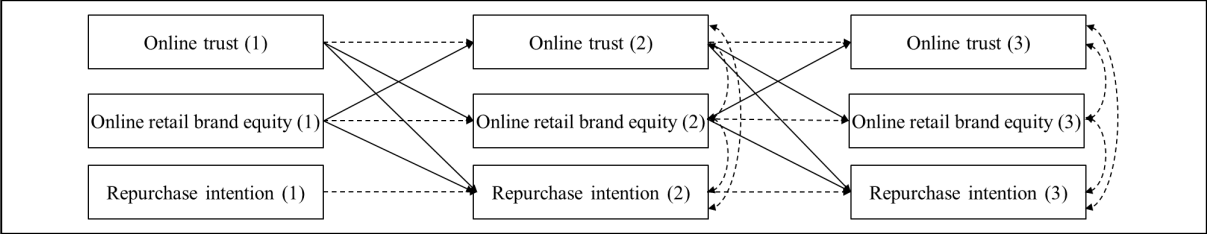


Fig. E.1: Structure of the cross-lagged model

Web appendix F. Results of the alternative models

			Model 1: Online RPI		Model 2: Offline RPI	
			β	p	β	p
<i>Direct effects</i>						
Aesthetic appeal (1)	→ Online brand equity (2)		.442	***	.442	***
Ease of use (1)	→ Online brand equity (2)		-.126	ns	-.124	ns
Security/privacy (1)	→ Online brand equity (2)		.148	**	.149	**
Customer service (1)	→ Online brand equity (2)		.003	ns	.002	ns
Online-offline integration (1)	→ Online brand equity (2)		.108	*	.108	*
Channel consistency (1)	→ Online brand equity (2)		.164	**	.164	**
<hr/>						
Aesthetic appeal (1)	→ RPI (2)		.059	ns	.036	ns
Ease of use (1)	→ RPI (2)		-.061	ns	-.048	ns
Security/privacy (1)	→ RPI (2)		.124	*	.039	ns
Customer service (1)	→ RPI (2)		-.015	ns	-.057	ns
Online-offline integration (1)	→ RPI (2)		.104	ns	.118	*
Channel consistency (1)	→ RPI (2)		.137	*	.302	***
Online brand equity (2)	→ RPI (2)		.394	***	.425	***
<hr/>						
<i>Indirect effects</i>						
Aesthetic appeal (1)	→ Online brand equity (2)	→ RPI (3)	.174	***	.188	***
Ease of use (1)	→ Online brand equity (2)	→ RPI (3)	-.049	ns	-.101	ns
Security/privacy (1)	→ Online brand equity (2)	→ RPI (3)	.058	*	.063	**
Customer service (1)	→ Online brand equity (2)	→ RPI (3)	.001	ns	.001	ns
Online-offline integration (1)	→ Online brand equity (2)	→ RPI (3)	.042	*	.046	*
Channel consistency (1)	→ Online brand equity (2)	→ RPI (3)	.064	**	.070	**
<hr/>						
<i>Total effects</i>						
Aesthetic appeal (1)	→ RPI (3)		.233	***	.224	***
Ease of use (1)	→ RPI (3)		-.111	ns	-.053	ns
Security/privacy (1)	→ RPI (3)		.182	**	.102	†(.054)
Customer service (1)	→ RPI (3)		-.013	ns	-.056	ns
Online-offline integration (1)	→ RPI (3)		.146	*	.164	**
Channel consistency (1)	→ RPI (3)		.201	**	.372	***
<hr/>						
<i>Covariates</i>						
Gender (1)	→ RPI (3)		.034	ns	.050	ns
Age (1)	→ RPI (3)		.011	ns	-.040	ns
Internet expertise (1)	→ RPI (3)		.062	ns	-.026	ns
Assortment variety (1)	→ RPI (3)		-.047	ns	-.017	ns
Price fairness (1)	→ RPI (3)		.077	ns	.031	ns

Structural model fit:

Model 1: CFI .924, TLI .912, RMSEA .070, SRMR .133, $\chi^2(396) = 1132.203$, SCF = 1.02.

Model 2: CFI .922, TLI .910, RMSEA .071, SRMR .134, $\chi^2(396) = 1154.357$, SCF = 1.02.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$, β = standardized coefficients

*** $p < .001$; ** $p < .01$; * $p < .05$; ns = not significant.

Tab. F.1: Study 1: Results of the alternative model (brand equity only)

		Model 1: Online RPI		Model 2: Offline RPI		
		β	p	β	p	
<i>Direct effects</i>						
Aesthetic appeal (1)	→ Online trust (2)	.165	**	.165	**	
Ease of use (1)	→ Online trust (2)	-.120	ns	-.120	ns	
Security/privacy (1)	→ Online trust (2)	.306	***	.306	***	
Customer service (1)	→ Online trust (2)	.166	*	.166	*	
Online-offline integration (1)	→ Online trust (2)	.074	ns	.074	ns	
Channel consistency (1)	→ Online trust (2)	.115	*	.116	*	
<hr/>						
Aesthetic appeal (1)	→ RPI (2)	.144	*	.155	**	
Ease of use (1)	→ RPI (2)	.007	ns	.005	ns	
Security/privacy (1)	→ RPI (2)	.024	ns	-.016	ns	
Customer service (1)	→ RPI (2)	-.079	ns	-.108	ns	
Online-offline integration (1)	→ RPI (2)	.107	ns	.134	*	
Channel consistency (1)	→ RPI (2)	.137	**	.320	***	
Online trust (2)	→ RPI (2)	.504	***	.374	***	
<hr/>						
<i>Indirect effects</i>						
Aesthetic appeal (1)	→ Online trust (2)	→ RPI (3)	.083	**	.062	**
Ease of use (1)	→ Online trust (2)	→ RPI (3)	-.060	ns	-.045	ns
Security/privacy (1)	→ Online trust (2)	→ RPI (3)	.154	***	.114	***
Customer service (1)	→ Online trust (2)	→ RPI (3)	.084	*	.062	*
Online-offline integration (1)	→ Online trust (2)	→ RPI (3)	.037	ns	.028	ns
Channel consistency (1)	→ Online trust (2)	→ RPI (3)	.058	*	.043	*
<hr/>						
<i>Total effects</i>						
Aesthetic appeal (1)	→ RPI (3)	.227	***	.217	***	
Ease of use (1)	→ RPI (3)	-.053	ns	-.050	ns	
Security/privacy (1)	→ RPI (3)	.178	**	.098	†(.059)	
Customer service (1)	→ RPI (3)	.005	ns	-.045	ns	
Online-offline integration (1)	→ RPI (3)	.145	*	.161	**	
Channel consistency (1)	→ RPI (3)	.195	**	.363	***	
<hr/>						
<i>Covariates</i>						
Gender (1)	→ RPI (3)	.033	ns	.036	ns	
Age (1)	→ RPI (3)	-.016	ns	-.060	ns	
Internet expertise (1)	→ RPI (3)	.020	ns	-.065	ns	
Assortment variety (1)	→ RPI (3)	-.070	ns	-.025	ns	
Price fairness (1)	→ RPI (3)	-.004	ns	-.035	ns	

Structural model fit:

Model 1: CFI .924, TLI .912, RMSEA .073, SRMR .139, $\chi^2(367) = 1101.636$, SCF = 1.01.

Model 2: CFI .922, TLI .910, RMSEA .074, SRMR .137, $\chi^2(367) = 1118.415$, SCF = 1.01.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$, β = standardized coefficients

*** $p < .001$; ** $p < .01$; * $p < .05$; ns = not significant.

Tab. F.2: Study 1: Results of the alternative model (trust only)

			Model 1: Total RPI	
			β	p
<i>Direct effects</i>				
Aesthetic appeal (1)	→ Online trust (2)		.163	**
Ease of use (1)	→ Online trust (2)		-.122	ns
Security/privacy (1)	→ Online trust (2)		.312	***
Customer service (1)	→ Online trust (2)		.158	*
Online-offline integration (1)	→ Online trust (2)		.083	ns
Channel consistency (1)	→ Online trust (2)		.115	*
<hr/>				
Aesthetic appeal (1)	→ Online brand equity (2)		.443	***
Ease of use (1)	→ Online brand equity (2)		-.122	ns
Security/privacy (1)	→ Online brand equity (2)		.147	*
Customer service (1)	→ Online brand equity (2)		.002	ns
Online-offline integration (1)	→ Online brand equity (2)		.109	*
Channel consistency (1)	→ Online brand equity (2)		.162	**
<hr/>				
Aesthetic appeal (1)	→ RPI (2)		-.057	ns
Ease of use (1)	→ RPI (2)		.075	ns
Security/privacy (1)	→ RPI (2)		-.086	ns
Customer service (1)	→ RPI (2)		-.086	ns
Online-offline integration (1)	→ RPI (2)		.092	ns
Channel consistency (1)	→ RPI (2)		.198	***
Online brand equity (2)	→ RPI (2)		.453	***
Online trust (2)	→ RPI (2)		.401	***
<hr/>				
<i>Indirect effects</i>				
Aesthetic appeal (1)	→ Online trust (2)	→ RPI (3)	.065	**
Ease of use (1)	→ Online trust (2)	→ RPI (3)	-.048	ns
Security/privacy (1)	→ Online trust (2)	→ RPI (3)	.125	***
Customer service (1)	→ Online trust (2)	→ RPI (3)	.063	*
Online-offline integration (1)	→ Online trust (2)	→ RPI (3)	.033	ns
Channel consistency (1)	→ Online trust (2)	→ RPI (3)	.046	*
<hr/>				
Aesthetic appeal (1)	→ Online brand equity (2)	→ RPI (3)	.200	***
Ease of use (1)	→ Online brand equity (2)	→ RPI (3)	-.055	ns
Security/privacy (1)	→ Online brand equity (2)	→ RPI (3)	.067	**
Customer service (1)	→ Online brand equity (2)	→ RPI (3)	.001	ns
Online-offline integration (1)	→ Online brand equity (2)	→ RPI (3)	.050	*
Channel consistency (1)	→ Online brand equity (2)	→ RPI (3)	.073	**
<hr/>				
<i>Total effects</i>				
Aesthetic appeal (1)	→ RPI (3)		.208	***
Ease of use (1)	→ RPI (3)		-.028	ns
Security/privacy (1)	→ RPI (3)		.106	*
Customer service (1)	→ RPI (3)		.021	ns
Online-offline integration (1)	→ RPI (3)		.175	*
Channel consistency (1)	→ RPI (3)		.317	***
<hr/>				
<i>Covariates</i>				
Gender (1)	→ RPI (3)		.064	ns
Age (1)	→ RPI (3)		-.034	ns
Internet expertise (1)	→ RPI (3)		.043	ns
Assortment variety (1)	→ RPI (3)		-.031	ns
Price fairness (1)	→ RPI (3)		-.031	ns

Structural model fit:

CFI .930, TLI .918, RMSEA .068, SRMR .128, $\chi^2(470) = 1283.748$, SCF = 1.01.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$, β = standardized coefficients.

*** $p < .001$; ** $p < .01$; * $p < .05$; ns = not significant.

Tab. F.3: Study 1: Results of the alternative model (total repurchase intention)

			Model 1: Online RPI		Model 2: Offline RPI	
			β	p	β	p
<i>Direct effects</i>						
Aesthetic appeal (1)	→ Online trust (2)		.177	**	.173	**
Ease of use (1)	→ Online trust (2)		-.106	ns	-.110	ns
Security/privacy (1)	→ Online trust (2)		.302	***	.304	***
Customer service (1)	→ Online trust (2)		.161	*	.161	*
Online-offline integration (1)	→ Online trust (2)		.067	ns	.068	ns
Channel consistency (1)	→ Online trust (2)		.099	†(.054)	.103	*
<hr/>						
Aesthetic appeal (1)	→ Brand equity (2)		.437	***	.437	***
Ease of use (1)	→ Brand equity (2)		-.139	ns	-.141	ns
Security/privacy (1)	→ Brand equity (2)		.155	*	.157	**
Customer service (1)	→ Brand equity (2)		-.006	ns	.008	ns
Online-offline integration (1)	→ Brand equity (2)		.115	*	.115	*
Channel consistency (1)	→ Brand equity (2)		.201	***	.205	***
<hr/>						
Aesthetic appeal (1)	→ RPI (2)		-.034	ns	-.045	ns
Ease of use (1)	→ RPI (2)		.034	ns	.021	ns
Security/privacy (1)	→ RPI (2)		-.037	ns	-.089	ns
Customer service (1)	→ RPI (2)		-.071	ns	-.099	ns
Online-offline integration (1)	→ RPI (2)		.065	ns	.084	ns
Channel consistency (1)	→ RPI (2)		.066	ns	.234	***
Online brand equity (2)	→ RPI (2)		.416	***	.473	***
Online trust (2)	→ RPI (2)		.487	***	.361	***
<hr/>						
<i>Indirect effects</i>						
Aesthetic appeal (1)	→ Online trust (2)	→ RPI (3)	.086	**	.062	**
Ease of use (1)	→ Online trust (2)	→ RPI (3)	-.052	ns	-.040	ns
Security/privacy (1)	→ Online trust (2)	→ RPI (3)	.147	***	.110	***
Customer service (1)	→ Online trust (2)	→ RPI (3)	.078	*	.060	*
Online-offline integration (1)	→ Online trust (2)	→ RPI (3)	.032	ns	.025	ns
Channel consistency (1)	→ Online trust (2)	→ RPI (3)	.048	†(.053)	.037	*
<hr/>						
Aesthetic appeal (1)	→ Brand equity (2)	→ RPI (3)	.182	***	.207	***
Ease of use (1)	→ Brand equity (2)	→ RPI (3)	-.058	ns	-.067	ns
Security/privacy (1)	→ Brand equity (2)	→ RPI (3)	.065	*	.074	**
Customer service (1)	→ Brand equity (2)	→ RPI (3)	-.002	ns	-.004	ns
Online-offline integration (1)	→ Brand equity (2)	→ RPI (3)	.048	*	.054	*
Channel consistency (1)	→ Brand equity (2)	→ RPI (3)	.084	**	.097	***
<hr/>						
<i>Total effects</i>						
Aesthetic appeal (1)	→ RPI (3)		.232	***	.225	***
Ease of use (1)	→ RPI (3)		-.075	ns	-.086	ns
Security/privacy (1)	→ RPI (3)		.175	**	.095	†(.064)
Customer service (1)	→ RPI (3)		.005	ns	-.058	ns
Online-offline integration (1)	→ RPI (3)		.146	*	.163	**
Channel consistency (1)	→ RPI (3)		.198	**	.369	***
<hr/>						
<i>Covariates</i>						
Gender (1)	→ RPI (3)		.050	ns	.062	ns
Age (1)	→ RPI (3)		-.017	ns	-.055	ns
Internet expertise (1)	→ RPI (3)		.037	ns	-.037	ns
Assortment variety (1)	→ RPI (3)		-.078	ns	-.034	ns
Price fairness (1)	→ RPI (3)		.024	ns	.007	ns

Structural model fit:

Model 1: CFI .876, TLI .856, RMSEA .086, SRMR .120, $\chi^2(596) = 2244.622$, SCF = 1.01.

Model 2: CFI .872, TLI .851, RMSEA .088, SRMR .121, $\chi^2(596) = 2324.852$, SCF = 1.01.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$, β = standardized coefficients.

*** $p < .001$; ** $p < .01$; * $p < .05$; ns = not significant.

Tab. F.4: Study 1: Results of the alternative model (brand equity)

		Model 1: Total RPI	
		β	p
<i>Direct effects</i>			
Online trust (1)	→ Online brand equity (2)	.098	**
Online brand equity (1)	→ Online trust (2)	.085	**
Online trust (1)	→ RPI (2)	.096	***
Online brand equity (1)	→ RPI (2)	.139	***
Online trust (1)	→ Online trust (2)	.613	***
Online brand equity (1)	→ Online brand equity (2)	.610	***
RPI (1)	→ RPI (2)	.675	***
Online trust (2)	→ Online brand equity (3)	.107	**
Online brand equity (2)	→ Online trust (3)	.090	**
Online trust (2)	→ RPI (3)	.102	***
Online brand equity (2)	→ RPI (3)	.145	***
Online trust (2)	→ Online trust (3)	.666	***
Online brand equity (2)	→ Online brand equity (3)	.646	***
RPI (2)	→ RPI (3)	.675	***
R ² RPI (3)		.581	***
<i>Total effects</i>			
Online trust (1)	→ RPI (3)	.137	***
Online brand equity (1)	→ RPI (3)	.184	**
<i>Diff. in total effects</i>		5.658	**
<i>Covariates</i>			
Gender (1)	→ RPI (1)	.095	***
Gender (2)	→ RPI (2)	.105	***
Gender (3)	→ RPI (3)	.107	***
Age (1)	→ RPI (1)	-.054	**
Age (2)	→ RPI (2)	-.059	**
Age (3)	→ RPI (3)	-.061	**
Internet expertise (1)	→ RPI (1)	-.007	ns
Internet expertise (2)	→ RPI (2)	-.007	ns
Internet expertise (3)	→ RPI (3)	-.007	ns

Structural model fits:

CFI .927, TLI .922; RMSEA .068, SRMR .173, $\chi^2(662) = 1823.810$, SCF = .86.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$. β = standardized coefficients.

*** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$; ns = not significant.

Tab. F.5: Study 2: Results of the alternative model (total repurchase intention)

		Model 1: Online RPI	Model 2: Offline RPI
		β p	β p
<i>Direct effects</i>			
Online trust (1)	→ Brand equity (2)	.065 **	.069 **
Brand equity (1)	→ Online trust (2)	.092 **	.090 ***
Online trust (1)	→ RPI (2)	.042 ns	.088 ***
Brand equity (1)	→ RPI (2)	.094 **	.121 ***
Online trust (1)	→ Online trust (2)	.613 ***	.608 ***
Brand equity (1)	→ Brand equity (2)	.676 ***	.680 ***
RPI (1)	→ RPI (2)	.678 ***	.652 ***
Online trust (2)	→ Brand equity (3)	.069 **	.073 **
Brand equity (2)	→ Online trust (3)	.096 **	.095 ***
Online trust (2)	→ RPI (3)	.046 ns	.095 ***
Brand equity (2)	→ RPI (3)	.101 **	.127 ***
Online trust (2)	→ Online trust (3)	.643 ***	.658 ***
Brand equity (2)	→ Brand equity (3)	.713 ***	.704 ***
RPI (2)	→ RPI (3)	.654 ***	.626 ***
R ² RPI (3)		.526 ***	.563 ***
<i>Total effects</i>			
Online trust (1)	→ RPI (3)	.062 ns	.121 ***
Brand equity (1)	→ RPI (3)	.134 **	.170 ***
<i>Diff. in total effects</i>		4.025 **	4.202 **
<i>Covariates</i>			
Gender (1)	→ RPI (1)	.056 **	.087 ***
Gender (2)	→ RPI (2)	.062 **	.097 ***
Gender (3)	→ RPI (3)	.065 **	.094 ***
Age (1)	→ RPI (1)	-.057 **	-.063 **
Age (2)	→ RPI (2)	-.063 **	-.068 **
Age (3)	→ RPI (3)	-.067 **	-.071 **
Internet expertise (1)	→ RPI (1)	-.009 ns	-.018 ns
Internet expertise (2)	→ RPI (2)	-.009 ns	-.018 ns
Internet expertise (3)	→ RPI (3)	-.010 ns	-.019 ns

Structural model fits:

Model 1: CFI .837, TLI .830, RMSEA .091, SRMR .183, $\chi^2(1188) = 4863.598$, SCF = .89.

Model 2: CFI .828, TLI .821; RMSEA .094, SRMR .184, $\chi^2(1188) = 5114.794$, SCF = .89.

Notes: RPI = Repurchase intention, (1, 2, 3) = Time points, SCF = Scaling correction factor for MLM, $N = 377$. β = standardized coefficients.

*** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$; ns = not significant.

Tab. F.6: Study 2: Results of the alternative model (brand equity)

References

- Allison, P. D., Williams, R., & Moral-Benito, E. (2017). Maximum Likelihood for Cross-Lagged Panel Models with Fixed Effects. *Socius*, 3(June), 1-17.
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On Making Causal Claims: A Review and Recommendations. *The Leadership Quarterly*, 21(6), 1086-1120.
- Bock, G.-W., Lee, J., Kuan, H.-H., & Kim, J.-H. (2012). The Progression of Online Trust in the Multi-Channel Retailer Context and the Role of Product Uncertainty. *Decision Support Systems*, 53(1), 97-107.
- Burkholder, G. J., & Harlow, L. L. (2003). An Illustration of a Longitudinal Cross-Lagged Design for Larger Structural Equation Models. *Structural Equation Modeling*, 10(3), 465-486.
- Chang, S.-J., Van Witteloostuijn, A., & Eden, L. (2010). From the Editors: Common Method Variance in International Business Research. *Journal of International Business Studies*, 41(2), 178-184.
- Chen, F. F. (2007). Sensitivity of Goodness of Fit Indexes to Lack of Measurement Invariance. *Structural Equation Modeling*, 14(3), 464-504.
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common Methods Variance Detection in Business Research. *Journal of Business Research*, 69(8), 3192-3198.
- Hausman, J. A. (1978). Specification Tests in Econometrics. *Econometrica*, 46(6), 1251-1271.
- Keller, K. L. (2010). Brand Equity Management in a Multichannel, Multimedia Retail Environment. *Journal of Interactive Marketing*, 24(2), 58-70.
- Montoya-Weiss, M. M., Voss, G. B., & Grewal, D. (2003). Determinants of Online Channel Use and Overall Satisfaction With a Relational, Multichannel Service Provider. *Journal of the Academy of Marketing Science*, 31(4), 448-458.
- Oh, L.-B., Teo, H.-H., & Sambamurthy, V. (2012). The Effects of Retail Channel Integration Through the Use of Information Technologies on Firm Performance. *Journal of Operations Management*, 30(5), 368-381.
- Park, C. W., Macinnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers. *Journal of Marketing*, 74(6), 1-17.
- Zyphur, M. J., Allison, P. D., Tay, L., Voelkle, M. C., Preacher, K. J., Zhang, Z., Hamaker, E. L., Shamsollahi, A., Pierides, D. C., Koval, P., & Diener, E. (2019). From Data to Causes I: Building A General Cross-Lagged Panel Model (GCLM). *Organizational Research Methods*, 23(4), 651-687.