

Supplementary Materials

Principal Component Analysis (PCA)

Supplementary Tables S1–4 show the Eigenvectors and principle components for the variables in each of the four trust dimensions (fidelity, integrity, competency, and global trust) used to measure system trust, as well as the results of the PCA after variable removal.

Table S1. Principle Component Analysis, Fidelity.

Fidelity								
All Variables			Reduced Set of Variables					
Component	Eigenvalue	Cumulative Proportion	Component	Eigenvalue	Cumulative Proportion	Component	Eigenvalue	Cumulative Proportion
Comp1	3.411	0.426	Comp1	2.293	0.382			
Comp2	1.152	0.571	Comp2	1.145	0.573			
Comp3	0.872	0.680	Comp3	0.865	0.717			
Comp4	0.710	0.768	Comp4	0.679	0.830			
Comp5	0.601	0.843	Comp5	0.590	0.929			
Comp6	0.462	0.901	Comp6	0.428	1.000			
Comp7	0.433	0.955						
Comp8	0.359	1.000						

Fidelity: All variables								
Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6	Comp7	Comp8
trust_fid1	0.420	0.084	-0.073	0.197	-0.128	-0.856	0.049	-0.145
trust_fid2	0.386	0.025	-0.060	-0.603	-0.472	0.063	0.209	0.463
trust_fid3	0.370	-0.450	0.180	0.087	0.223	0.008	-0.656	0.375
trust_fid4	0.349	-0.487	0.138	0.185	0.307	0.151	0.686	-0.023
trust_fid5	0.332	0.343	-0.053	0.676	-0.374	0.388	-0.010	0.149
trust_fid6	0.175	0.505	0.794	-0.138	0.254	0.001	0.033	-0.007
trust_fid7	0.442	-0.066	-0.059	-0.256	-0.118	0.291	-0.228	-0.762
trust_fid8	0.282	0.419	-0.551	-0.123	0.632	0.080	0.002	0.143

Fidelity: Reduced set of variables						
Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6
trust_fid2	0.468	0.042	-0.085	0.627	-0.613	0.065
trust_fid3	0.471	-0.448	0.138	-0.044	0.188	-0.722
trust_fid4	0.454	-0.487	0.089	-0.124	0.247	0.687
trust_fid5	0.417	0.336	-0.097	-0.737	-0.400	-0.014
trust_fid6	0.239	0.516	0.771	0.132	0.251	0.041
trust_fid8	0.349	0.426	-0.602	0.172	0.552	-0.018

Table S2. Principle Component Analysis, Integrity.

Integrity					
All Variables			Reduced Set of Variables		
Component	Eigenvalue	Cumulative Proportion	Component	Eigenvalue	Cumulative Proportion
Comp1	2.964	0.593	Comp1	2.335	0.584
Comp2	0.728	0.738	Comp2	0.723	0.765
Comp3	0.499	0.838	Comp3	0.492	0.887
Comp4	0.455	0.929	Comp4	0.450	1.000

Table S2. Cont.

Integrity						
All Variables			All Variables			
Component	Component	Component	Component	Component	Component	Component
Comp5	0.355	1.000				
Integrity: All variables						
Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp5
trust_int2	0.4688	-0.004	-0.563	0.5113	0.4492	
trust_int3	0.4952	-0.0449	-0.1466	0.1271	-0.8456	
trust_int4	0.373	0.8359	0.3884	-0.0014	0.1065	
trust_int5	0.4242	-0.53	0.6828	0.1943	0.1874	
trust_int6	0.4647	-0.1353	-0.2108	-0.8274	0.1915	
Integrity: Reduced set of variables						
Variable	Comp1	Comp2	Comp3	Comp4		
trust_int2	0.533	-0.012	-0.571	0.624		
trust_int4	0.438	0.819	0.370	-0.020		
trust_int5	0.488	-0.552	0.654	0.170		
trust_int6	0.535	-0.155	-0.331	-0.762		

Table S3. Principle Component Analysis, Competency.

Competency									
All Variables			Reduced Set of Variables						
Component	Eigenvalue	Cumulative Proportion	Component	Eigenvalue	Cumulative Proportion				
Comp1	3.708	0.412	Comp1	2.439	0.407				
Comp2	1.637	0.594	Comp2	1.100	0.590				
Comp3	1.036	0.709	Comp3	0.927	0.744				
Comp4	0.737	0.791	Comp4	0.615	0.847				
Comp5	0.565	0.854	Comp5	0.528	0.935				
Comp6	0.533	0.913	Comp6	0.392	1.000				
Comp7	0.337	0.950							
Comp8	0.271	0.980							
Comp9	0.177	1.000							
Competency: All variables									
Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6	Comp7	Comp8	Comp9
trust_comp1	0.4036	0.0174	-0.2979	-0.2727	-0.2123	0.4502	0.0134	0.6515	-0.036
trust_comp2	0.3504	-0.3958	-0.0319	0.1796	-0.2751	-0.2754	0.7285	-0.0579	0.0403
trust_comp3	0.4227	-0.0189	-0.2062	-0.3316	-0.2026	0.2508	-0.182	-0.7285	0.0279
trust_comp4	0.3617	-0.3451	0.0913	0.0305	-0.1459	-0.5484	-0.6161	0.1872	0.0643
trust_comp5	0.2976	-0.3007	-0.2467	0.4632	0.6857	0.2518	-0.0778	-0.0475	-0.061
trust_comp6	0.3137	0.5334	0.005	0.2843	-0.0893	-0.1834	0.0026	-0.0286	-0.7027
trust_comp7	0.2926	0.5653	-0.0313	0.3012	0.0048	-0.0885	0.0215	0.0166	0.7033
trust_comp8	0.1862	-0.1078	0.8135	0.2345	-0.1672	0.4526	-0.0633	-0.0079	0.0052
trust_comp9	0.3124	0.1322	0.3683	-0.5843	0.5575	-0.2194	0.2142	0.0552	-0.009
Competency: Reduced set of variables									
Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6			
trust_comp2	0.457	-0.447	0.101	0.001	-0.496	0.579			
trust_comp3	0.509	0.000	-0.302	-0.195	-0.386	-0.680			

Table S3. *Cont.*

Competency: Reduced set of variables						
Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6
trust_comp5	0.396	−0.542	−0.103	0.170	0.706	−0.108
trust_comp6	0.347	0.524	−0.374	0.644	0.032	0.223
trust_comp8	0.288	0.178	0.862	0.286	−0.006	−0.246
trust_comp9	0.415	0.447	0.072	−0.661	0.324	0.284

Table S4. Principle Component Analysis, Global Trust.

Global Trust					
All Variables			Reduced Set of Variables (NO CHANGE)		
Component	Eigenvalue	Cumulative Proportion	Component	Eigenvalue	Cumulative Proportion
Comp1	3.203	0.801	Comp1	3.203	0.801
Comp2	0.356	0.890	Comp2	0.356	0.890
Comp3	0.293	0.963	Comp3	0.293	0.963
Comp4	0.147	1.000	Comp4	0.147	1.000

Global trust: All variables				
Variable	Comp1	Comp2	Comp3	Comp4
trust_glob1	0.5134	−0.015	−0.5683	0.6428
trust_glob2	0.5194	−0.2018	−0.3676	−0.7446
trust_glob3	0.4786	0.8043	0.3479	−0.0559
trust_glob4	0.4875	−0.5588	0.6487	0.1712
trust_glob1	0.5134	−0.015	−0.5683	0.6428

Global trust: Reduced set of variables (NO CHANGE)				
Variable	Comp1	Comp2	Comp3	Comp4
trust_glob1	0.5134	−0.015	−0.5683	0.6428
trust_glob2	0.5194	−0.2018	−0.3676	−0.7446
trust_glob3	0.4786	0.8043	0.3479	−0.0559
trust_glob4	0.4875	−0.5588	0.6487	0.1712

© 2015 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).