

IMPACT OF USER SATISFACTION WITH MANDATED CRM USE ON EMPLOYEE SERVICE QUALITY

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Appendix A

Item Loadings and Cross-Loadings

Construct	Items	1	2	3	4	6
1. User Satisfaction with CRM Use	UserSat1	0.93	-0.04	0.08	0.18	0.03
	UserSat2	0.94	-0.04	0.08	0.18	0.04
	UserSat3	0.95	-0.08	0.10	0.19	0.00
2. Embodied Service Knowledge	ESK	-0.06	1.00	0.19	0.24	0.19
3. Job Dedication	JD	0.09	0.19	1.00	0.28	0.26
4. Employee Service Quality	ESQ	0.19	0.24	0.28	1.00	0.48
5. Customer Satisfaction with Customer Serv. Emp.	CSWCSE	0.00	0.18	0.24	0.49	1.00

Appendix B

Item Zero-Order Correlation Matrix

	Usat1	Usat2	Usat3	ESK	JD	ESQ	CSWCSE	Gender	Edu	Age	TExp	SExp
Usat1	1.00											
Usat2	0.82	1.00										
Usat3	0.82	0.83	1.00									
ESK	-0.04	-0.04	-0.08	1.00								
JD	0.08	0.08	0.10	0.20	1.00							
ESQ	0.18	0.18	0.19	0.24	0.28	1.00						
CSWCSE	0.02	0.02	-0.03	0.19	0.26	0.48	1.00					
Gender	0.05	0.01	0.12	-0.09	-0.09	0.09	0.14	1.00				
Edu	-0.17	-0.13	-0.21	0.02	-0.02	0.06	0.14	-0.14	1.00			
Age	-0.14	-0.18	-0.11	0.11	0.03	0.13	0.09	0.12	0.12	1.00		
TExp	-0.17	-0.17	-0.18	0.01	0.00	0.05	0.15	0.06	-0.11	0.31	1.00	
SExp	-0.14	-0.17	-0.13	0.12	0.03	0.10	0.14	0.23	-0.28	0.42	0.56	1.00

*Shaded areas indicate significant correlations ($p < 0.05$).

**ESQ = Employee Service Quality; CSWCSE = Customer Satisfaction with Customer Service Employee; ESK = Embodied Service Knowledge; JD = Job Dedication; TExp = CRM Use Experience; SExp = Service Experience

Appendix C

Additional Mediation Analyses

Since the proposed model (Figure 1) implies that ESQ mediates the impact of (1) UserSat, (2) ESK, (3) their interaction, and (4) JD on CSWCSE, we conducted two additional analyses to test these mediation effects. First, we compared the research model (*a full mediation model* proposing that the relationship, for example, between UserSat and CSWCSE is completely mediated by ESQ) against a competing model (*a partially mediated model* which, for example, incorporates a direct link from UserSat to CSWCSE). Since the models are nested, they can be compared statistically using PLS results (Chin et al. 1996; Subramani 2004). The significance of the added direct path is assessed using a procedure similar to that applied to test nested models in hierarchical regression. The f^2 statistic is computed based on difference in R^2 ; the significance of the f^2 is assessed based on a pseudo F test (Chin et al. 1996). The results of these tests (Table C1) suggest that although the additions of direct links from UserSat, ESK, and UserSat * ESK to CSWCSE did not significantly increase R^2 in CSWCSE, the direct link from JD to CSWCSE marginally increased the explained variance in CSWCSE.

Table C1. Nested Model Comparison

Direct Path	R ² in Fully Mediated Model	R ² in Partially Mediated Model	f ² Statistic	Pseudo F	Significance of the Direct Path
UserSat → CSWCSE	0.230	0.235	0.006	0.309	Not Significant
ESK → CSWCSE	0.230	0.236	0.001	0.266	Not Significant
UserSat * ESK → CSWCSE	0.230	0.230	0.000	1.000	Not Significant
JD → CSWCSE	0.230	0.247	0.022	0.062	Marginally Significant

Table C2. Significance Test of Mediated Paths

Mediated Path	Path Magnitude	Z Statistic	Significance of Mediation Effect
UserSat → ESQ → CSWCSE	0.0934	2.80 **	Significant
ESK → ESQ → CSWCSE	0.0912	2.58 **	Significant
UserSat * ESK → ESQ → CSWCSE	-0.0854	-2.75 **	Significant
JD → ESQ → CSWCSE	0.0966	3.02 **	Significant

*p < 0.05 **p < 0.01

In addition, we applied the bootstrapping procedure (Edwards and Lambert 2007; Mackinnon 2002) together with mediation analysis techniques (Hoyle and Kenny 1999; Subramani 2004) to assess the significance of the above four mediation effects. Specifically, we used bootstrapping results derived from PLS to calculate the extent to which a construct mediates the relationship between the independent variable (IV) and the dependent variable (DV) under consideration (Hoyle and Kenny 1999). For example, the magnitude of the mediation effect between UserSat (IV) and CSWCSE (DV) mediated by ESQ (mediating variable, or MV) is the product of the paths between IV and MV and between MV and DV. The standard error of the mediated path can be computed based on the magnitudes and the variance of the paths among IV, MV, and DV.¹ The computations yield a z-statistic for evaluating the significance of the mediated path. Similar to those in the previous analysis, the results of this procedure (Table C2) also reveal four significant mediating effects. The above evidence, as a whole, suggests that ESQ (1) fully mediated the impacts from UserSat, ESK, and their interaction on CSWCSE, and (2) partially mediated the impact of JD on CSWCSE.

References

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¹The standard error of the mediated path can be computed using the formula $\sqrt{p_1^2 s_2^2 + p_2^2 s_1^2 + s_1^2 s_2^2}$ where p_1 is the path coefficient of the path from IV to MV, p_2 is the path coefficient from MV to DV, and s_1 and s_2 are the corresponding standard deviations (Hoyle and Kenny 1999).