Strengthening Customer Loyalty through Intimacy and Passion: Roles of Customer–Firm Affection and Customer–Staff Relations in Services

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Web Appendix

THE NETNOGRAPHY STUDY

Purposes of Study

This qualitative study serves two purposes: First, it collects empirical evidence to support the premise that customers can form "love-like" affectionate ties with service firms/stores and organizations and also express these "love-like" feelings. Second, it helps explore the feasibility of classifying customers' love-like affectionate ties with service firms/stores and organizations according to the three components of love (intimacy, passion, and commitment) proposed in Sternberg's (1986) love paradigm.

Data Collection and Sampling

The qualitative data for our netnography analysis come from a selected online community, *Lovemarks: The Future Beyond Brands* (http://www.lovemarks.com/), which encourages consumers to post and share stories of their inspirational, passionate experiences and relationships with consumption objects, such as brands and stores.[1] We choose this Web site for three reasons: (1) It has grown to a community of more than 10,000 consumers, published more than 9,000 nominations and comments, and attracted 15 million pageviews; (2) consumers in the community come from all over the world (e.g., United States, Germany, Italy, India, Hong Kong,

[1] As a marketing research technique, netnography uses publicly available information in online forums to identify and understand the needs and decision influences of relevant online consumer groups. Because it is conducted using the observations of consumers in a context that is not fabricated by marketing researchers, it is entirely unobtrusive. Netnography also provides a window into naturally occurring behaviors, such as searches for information by and communal word of mouth among consumers (Kozinets 2002). A growing number of marketing studies employ netnography to examine consumers' relationship and emotional bonds with firms (Kozinets 1998, 1999, 2002; Okazaki 2005; Ward and Ostrom 2003, 2006). For example, Ward and Ostrom (2006) use it to identify three types of protest framing of consumers' online complaining behaviors.

China, Australia, Japan, England, Spain), which means it provides a global view of consumers' love relationships with consumption objects; and (3) it includes 10 major categories of 2,858 brands/firms that include low to high involvement contexts.[2]

Because of the enormous number of postings (more than 10,000), we first exclude categories of people, sports, entertainment, media, and selected subcategories of places (e.g., cities, famous travel spots). Postings about people and sports, such as the following comments about *Christina Aguilera* and *Michael Jordon*, are mostly related to people and interpersonal love:

> *Christina is the definition of inspiration! She is talented, generous, kind and beautiful! She alone is awe-inspiring. … If she is not a person to be loyal to and to love, no one is! (Switzerland, 2006).*
>
> *The best there ever will be. Michael inspired me to practice the sport. An outstanding ICON, authority and above all a PERSONALITY…. Michael thank you for being a part of my life! (Poland, 2004).*

Postings within the entertainment and media categories relate mostly to television/radio programs (e.g., *Fear Factor*), magazines (e.g., *Cosmopolitan*), and songs and films (e.g., ABBA pop songs, *Batman*). We exclude them because they offer no or limited opportunity for customers to interact with the service staff and environment typical of service firms. Cities and famous travel spots within the places category are excluded because they are not firms or organizations.[3]

Several thousand postings still remain after this first cut. We therefore undertook a second cut by imposing a set of criteria to select those postings that are most relevant to customers' love for stores or service firms/organizations. The postings should (1) relate to a particular store or

[2] The ten major categories are (1) food and beverage (e.g., Nescafe, McDonald's, Burger King, Coca-Cola) with 536 brands; (2) people (e.g., pop singers and stars including Madonna and Jackie Chan) with 236 brands; (3) auto, marine, and aviation (e.g., BMW, Southwest Airlines) with 126 brands; (4) fashion and beauty (e.g., Abercrombie & Fitch clothing store, April Cornell) with 456 brands; (5) entertainment (e.g., *Fear Factor, Band of Brothers*, iTunes) with 290 brands; (6) places (e.g., Germany, Harvard Business School, Ritz-Carlton) with 210 brands; (7) sports (e.g., Fifa World Cup, As Roma, Boston Red Sox) with 164 brands; (8) technology (e.g., Sony, Nokia, Orange) with 170 brands; (9) media (e.g., BBC, *BusinessWeek*, alien series) with 298 brands; and (10) others (e.g., IKEA, 3M, LEGO) with 372 brands. The Web site has since been updated and split the "others" category into home & living, retail & shopping, and others.

[3] We retain 21 brands of hotels, education services, and so forth out of the 210 brands in the places category.

service firm/organization; (2) include both low and high involvement contexts for generalizing the findings; (3) cover customers' expressions of affection toward firms developed through interactions with not only products but also staff, services, and/or servicescapes, because we conceptualize customer–firm affection as enduring affectionate ties developed through successful interactions with staff, services, and/or servicescapes; (4) be positive, because customer–firm affection is a construct that precludes negative feelings; and (5) be posted by different respondents to avoid double-counting. On the basis of these criteria, we substantially reduce the number of qualified postings to 691. Most selected comments were posted between November 2002 and October 2006. We create our final sample for the classification analysis by selecting every third posting within each category (in alphabetic order of the firm/store name). The final sample therefore contains 230 comment postings.

Classification Procedures

We adopt a three-step procedure for "expert judging" (Kassarjian 1977; Krippendorff 2004), to content analyze the selected postings.

The first step requires developing judging instructions and coding schemes. One author developed the initial coding/judging instructions and coding schemes (i.e., absence versus presence of intimacy, passion, and commitment and their corresponding definitions) using adopted definitions of the love components in the literature and all postings collected from the Lovemarks.com forum. Then, this author and another author coded the sample of 230 postings independently using the initial coding instructions and schemes. We compared the coding results and modified the coding instructions and schemes as necessary. This coding pretest ensures that (1) the definitions of intimacy, passion, and commitment do not overlap and (2) the definitions of intimacy, passion, and commitment are clear and unambiguous enough to ensure independent

judges will achieve a high level of interrater agreement (Krippendorff 1980, 2004). In Table W1, we summarize the final judging instructions and coding schemes.

The second step entails recruiting and training a fresh set of independent judges for the classification exercise. Two graduate students who had no knowledge of our research or love literature were recruited and trained as judges. These judges received the judging instructions and a brief explanation of the definition of each of the three components of customer–firm affection (intimacy, passion, and commitment).[4] They then coded a sample of 20 postings independently. We checked their interrater reliability and asked them to discuss their coding discrepancies to clarify their understanding of the coding rules and schemes. We then repeated this training process with a new sample of 20 postings, in which all interrater reliability indicators reached the .80 cut-off point (Kassarjian 1977; Krippendorff 2004).

The final step of the classification exercise involves formal coding of the remaining 190 postings by the two judges independently. They reached a very high level of interrater reliability (> .90; see Table W2). The judges then discussed and resolved any disagreements to arrive at a single set of classification results. We deleted seven postings from the final classification result because the judges could not reach an agreement, so our useful sample consists of 183 postings.

Results

The percentage distribution of the three components (and their combinations) of customer–firm affection across all postings appears in Figure W1a. *Intimacy Only* accounts for the highest percentage, 31.1%, across all postings, followed by *Commitment Only* with 27.3%. *Passion Only* accounts for only 10.9% of all postings. Among the combinations, *Intimacy & Commitment* are expressed in 13.7% of the postings; followed by *Passion & Commitment* with

[4] We have originally used the term customer–firm love in the judging process of the netnography study. We subsequently rename customer–firm love customer–firm affection, as suggested by the Editor.

12.0% and *Intimacy & Passion* with 3.8%. Only 1.1% of the postings contain expressions of all three components.

We also divide the postings into low versus high involvement contexts and recompute the percentage distribution of the three dimensions (and their combinations) for each context separately (see Figures W1b and W1c).[5] The percentage distribution results for the low and high involvement contexts closely resemble those obtained across all postings, which offers qualitative support for the applicability of the three components (and their combinations) of Sternberg's (1986) love paradigm in conceptualizing customer–firm affection. A closer look at the results also suggests that the percentage of postings that contain expressions of commitment is relatively higher in the high involvement context than in the low involvement context (34.4% versus 23.5%). In contrast, the percentage of postings with expressions of passion is relatively higher in the low than in the high involvement context (13.4% versus 6.3%).

COMMON METHODS BIAS

We examine the impact of common methods bias by estimating our model with a "same-source" first-order factor added to the construct indicators (Podsakoff et al. 2003). For identification purposes, it was necessary to constrain several factor loadings within constructs (but never across constructs) to be equal when estimating the model controlling for common methods variance (MacKenzie, Podsakoff, and Paine 1999). The reestimated model shows insignificant improvement over the original model (i.e., incremental fit index is negligible: *fast food: increment in GFI = .023; hair salon: increment in GFI = .030*), and the factor loadings of all constructs remain significant. A comparison of the standardized estimates obtained when controlling versus not controlling for common method variance reveals that our hypothesized

[5] Low involvement contexts include convenience stores, fashion and beauty, and food and beverage; high involvement contexts include technology, financial services, hairstyling, education, and hospitality services.

relationships still hold in both service contexts. Of the 36 structural coefficients across the two services, only 4 show reduced significance. These results indicate common method variance is not a problem. Detailed results of the model comparison appear in Table W3.

MEDIATING ROLE OF CUSTOMER-FIRM AFFECTION

We test the mediating effect of customer–firm affection by adopting the procedures suggested by Baron and Kenny (1986). In Step 1, we test whether customer–firm affection has a significant influence on firm trust and firm loyalty. In Step 2, we assess the impact of antecedent predictors (i.e., service quality and customer satisfaction) on firm trust and firm loyalty. In Step 3, we regress the antecedent predictors on customer–firm affection. Finally, we test whether the influences of antecedent predictors lessen (or become insignificant) when we include customer–firm affection in the model. Complete (partial) mediation occurs when including the variable eliminates (reduces) the significant influence of the antecedent predictors from Step 2. Detailed results of mediation tests are presented in Table W4.

INCREMENTAL CONTRIBUTION OF INTIMACY AND PASSION

To demonstrate the additional explanatory power of passion and intimacy, after controlling for the effect of commitment, we conduct further nested model comparisons (Sapienza and Korsgaard 1996) to compare the chi-squares of models that differ in the number of paths hypothesized. A significant chi-square difference indicates that a more complex model provides a better fit. We compare two nested models: (1) a baseline model that posits only the mediating role of commitment linking two antecedent predictors (i.e., service quality and customer satisfaction) to firm trust and firm loyalty and (2) a saturated model that includes the additional mediating effects of passion and intimacy. We compare Model (2) with Model (1) to test whether the model with the additional effects of passion and intimacy fits better than the baseline model

with commitment only. Our results show a significant fit improvement with the additional effects of intimacy and passion. We present the detailed nested model comparisons results in Table W5.

We also conduct hierarchical regression analyses (with firm loyalty intentions as the dependent variable) to test the additional explanatory power of intimacy and passion, after controlling for the effect of commitment. Consistent with the results of the nested model comparisons, the model with the additional effects of intimacy and passion shows a significant positive R^2 change compared with the baseline model (commitment only) in both the fast food and hair salon contexts (fast food: $\Delta R^2 = .124, F(2, 354) = 40.177, p < .001;$ hair salon: $\Delta R^2 = .037, F(2, 354) = 16.731, p < .001$). Following Cohen (1988), we compute the f^2 index to assess the effect size of the set of variables comprised of intimacy and passion after accounting for the effect of commitment. We present the results of the R^2 change and effect size assessment in Table W6. Taken together, these findings demonstrate that all three constituent components of customer–firm affection contribute substantially to the improvement in the fit of our proposed model.

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Table W1: Judging Instructions and Coding Schemes

Judging Instructions:

(1) Please study the following coding scheme and the definition and examples of each of the three components of customer-firm love (intimacy, passion, and commitment) carefully.

(2) Please read through each posting of a customer's description of his/her "love" relationship with a store/firm. The description may include the customer's experience with products, services, staff, and/or store environment of the store/firm.

(3) Code each posting based on whether each of the three components of customer-firm love was expressed in the description (Yes = 1, No = 0). Each posting may not contain expression of any component of love or it may contain expressions of multiple components of love.

Coding Scheme:

Component 1 (C1): **Intimacy** (Coding: Yes = 1, No = 0)

Definition: Intimacy refers to the oneness, bondedness, and connectedness of a relationship. In the consumption context, intimacy is reflected in an expression of favorable attitude and a communication of positive affection. It is the feelings of closeness and connectedness developed in a relationship that lead to "the experience of warmth." This component is also characterized by joy, memories, and friend/family-like feelings. Some examples of an expression of intimacy may include:

- *I always enjoy my experiences at/with XYZ.*
- *I always have a warm and comfortable feeling when interacting with XYZ.*
- *I experience great happiness with XYZ.*

Component 2 (C2): **Passion** (Code: Yes = 1, No = 0)

Definition: Passion is the part of love that includes intense and aroused feelings of physical attraction and desire. In the consumption context, passion begins with a strong feeling of attraction and it is often fueled by distance or separation. This component is also characterized by an urge to stay, a fear of separation, and a "can't stop thinking" kind of feelings. Some examples of an expression of passion may include:

- *I never get bored of going to or visiting or interacting with XYZ.*
- *I find myself always thinking about XYZ and wanting to interact with XYZ.*
- *I really miss XYZ.*

Component 3 (C3): **Commitment** (Code: Yes = 1, No = 0)

Definition: Commitment refers to the part of love pertains to the motivation to go beyond the instantaneous, transactional nature and to maintain a strong and enduring relation with the other party. It is the more cognitive aspect of love. This component is also characterized by a high level of self identity and protection, and feelings of proud, trust, being taken care of, and respect. Some examples of an expression of commitment may include:

- *I care about maintaining my relationships with XYZ.*
- *I am proud of my relationship with XYZ; it is "my" firm/store that I can count on.*
- *I won't let anything get in the way of my commitment to XYZ.*

Table W2: Interrater Reliability Index

Content	# (K) of Categories	Percentage Agreement	Cohen's Kappa	Estimated Reliability (I_γ) [a]	95% Confidence of Lower Limit of I_γ [b]	Krippendorff's α_{binary} [c]	Krippendorff's $\alpha_{nominal}$ [c]
Intimacy	2	97.4	94.7***	97.3	95.0	0.937	0.948
Passion	2	97.9	94.9***	97.9	95.9	1	0.950
Commitment	2	97.4	94.7***	97.3	95.0	0.960	0.947

*** Significant at $p < .001$.

[a] $I_\gamma = \{[F_o/N - (1/k)][k/(k-1)]\}^{.5}$ for $F_o/N \geq 1/k$, $I_\gamma = 0$ for $F_o/N \leq 1/k$, where F_o is the observed frequency, N is the sample size, and F_o/N is the percentage agreement.

[b] $Limits_{(lower)} = I_\gamma - Zc[I_\gamma(1 - I_\gamma)/N]^{.5}$, where I_γ is the critical value for the c percent confidence interval (1.96 in this case), and N is the sample size (Perreault and Leigh 1989).

[c] Krippendorff's $\alpha = 1 - D_o/D_e$, where D_o is the measure of the observed disagreement, and D_e is the measure of the disagreement that can be expected by chance (Krippendorff 2004).

Table W3
Model Comparison With and Without Controlling for Common Method Variance

	Not Controlling for Common Method Variance		*Controlling for Common Method Variance*	
	Fast Food	**Hair Salon**	**Fast Food**	**Hair Salon**
Service quality→ Customer satisfaction	.423***	.545***	.428***	.545***
Service quality → Firm trust	.257***	.248***	.173***	.292***
Social rapport→ Service quality	.289***	.647***	.335***	.644***
Social rapport→ Customer satisfaction	.078^{+}	.080^{+}	.053	.080^{+}
Social rapport→ Staff trust	.547***	.566***	.572***	.321***
Social rapport→ Staff loyalty intentions	.538***	.159**	.036	.127**
Customer satisfaction → Firm trust	.309***	.115**	.267***	.124**
Customer satisfaction→ Firm loyalty intentions	.045	.155**	.052	.127**
Staff trust→ Firm trust	.283***	.476***	.318***	.633***
Firm trust→ Firm loyalty intentions	.242**	.282**	.219**	.103
Staff trust→ Staff loyalty intentions	.004	.435***	.084^{+}	.739***
Staff loyalty intentions→ Firm loyalty intentions	-.064	.207**	-.051	.187***
Staff loyalty intentions→ Share of Purchase intention	-.064	.116	-.036	-.094
Firm loyalty intentions→ Share of Purchase intention	.277***	.427**	.269***	.443***
Service quality → Customer-firm affection	.299***	.578***	.542***	.858***
Customer satisfaction → Customer-firm affection	.262***	.061	.260***	.112**
Customer-firm affection → Firm trust	.338***	.212***	.301***	.103
Customer-firm affection→ Firm loyalty intentions	.510***	.416***	.437***	.532***

Note: t-tests are one-tailed for hypothesized effects (*** $p < .001$; ** $p < .01$; * $p < .05$; $^{+}p < .10$.)

Table W4: Mediation Tests of Customer–Firm Affection in Fast Food Restaurant (FF) and Hair Salon (HS)

IVs: Service Quality and Customer Satisfaction DV: Firm Trust						
Contexts	**Predictors**	**Step 1**	**Step 2**	**Step 3**	**Step 4**	**Conclusion**
FF	SQ		0.473(9.80), *p*=.000	0.396(6.15), *p*=.000	0.324(7.38), *p*=.000	Partially mediated.
	SAT		0.167(8.25), *p*=.000	0.153(5.65), *p*=.000	0.110(2.99), *p*=.000	Partially mediated.
	Affection	0.576(16.69), *p*=.000			0.375(10.91),*p*=.000	
HS	SQ		0.667(12.26), *p*=.000	0.788(12.88), *p*=.000	0.352(5.97), *p*=.000	Partially mediated.
	SAT		0.066(2.98), *p*=.003	0.053(2.14), *p*=.033	0.044(2.24), *p*=.026	Partially mediated.
	Affection	0.629(18.95), *p*=.000			0.400(9.52), *p*=.000	
IVs: Service Quality and Customer Satisfaction DV: Firm Loyalty Intentions						
Contexts	**Predictors**	**Step 1**	**Step 2**	**Step 3**	**Step 4**	**Conclusion**
FF	SQ		0.388(5.04), *p*=.000	0.396(6.15), *p*=.000	0.125(1.85), *p*=.066	Partially mediated.
	SAT		0.147(4.55), *p*=.000	0.153(5.65), *p*=.000	0.045(1.62), *p*=.107	Fully mediated.
	Affection	0.746(16.30), *p*=.000			0.666(12.64), *p*=.000	
HS	SQ		0.800(9.79), *p*=.000	0.788(12.88), *p*=.000	0.202(2.47), *p*=.014	Partially mediated.
	SAT		0.111(3.36), *p*=.001	0.053(2.14), *p*=.033	0.071(2.59), *p*=.010	Partially mediated.
	Affection	0.932(21.37), *p*=.000			0.758(13.04), *p*=.000	

Notes: SQ = service quality, SAT = satisfaction, and Affection = customer–firm affection.

Table W5
Nested Model Comparisons for Testing the Incremental Contribution of Intimacy and Passion (Controlling for the Effect of Commitment)

Fast Food Restaurant

Model	χ^2	df	CFI	GFI	Comparison	χ^2_{diff}	Conclusion
M1	243.50	50	0.910	0.904	M2 vs. M1	165.82, $p<.001$	Retain M2
M2	77.68	42	0.982	0.966			

Hair Salon

Model	χ^2	df	CFI	GFI	Comparison	χ^2_{diff}	Conclusion
M1	244.30	50	0.920	0.904	M2 vs. M1	149.41, $p<.001$	Retain M2
M2	94.89	42	0.977	0.958			

Notes:

Model 1 (M1) is a baseline model that posits only the mediating role of commitment linking two antecedent predictors (i.e., service quality and customer satisfaction) to firm trust and firm loyalty intentions, and Model 2 (M2) is a saturated model that includes the additional mediating effects of passion and intimacy.

Table W6
Incremental Contribution of Intimacy and Passion: R^2 Change and Effect Size

Fast Food Restaurant

	Model 1	**Model 2**
Variable	Unstandardized Estimate (Sig.)	Unstandardized Estimate (Sig.)
Service Quality	.264 (.000)	.109 (.115)
Customer Satisfaction	.108 (.000)	.034 (.240)
Commitment	.364 (.000)	.137 (.003)
Intimacy		.293 (.000)
Passion		.263 (.000)
R^2	.332	.456
Adjusted R^2	.326	.448
R^2 *Change*		.124, F(2, 354) = 40.177, p < .001
f^2		.228

Hair Salon

	Model 1	**Model 2**
Variable	Unstandardized Estimate (Sig.)	Unstandardized Estimate (Sig.)
Service Quality	.369 (.000)	.171 (.037)
Customer Satisfaction	.070 (.013)	.059 (.028)
Commitment	.547 (.000)	.394 (.000)
Intimacy		.240 (.000)
Passion		.163 (.003)
R^2	.575	.612
Adjusted R^2	.571	.606
R^2 *Change*		.037, F(2, 354) = 16.731, p < .001
f^2		.095

Note:
$f^2 = (R^2_{\text{Model 2}} - R^2_{\text{Model 1}}) / (1 - R^2_{\text{Model 2}})$. f^2 values of .02, .15, and .35 are considered small, medium, and large effect sizes, respectively (Cohen 1988).

Figure W1a
Percentage Distribution of Customer–Firm Affection Components (All Postings)

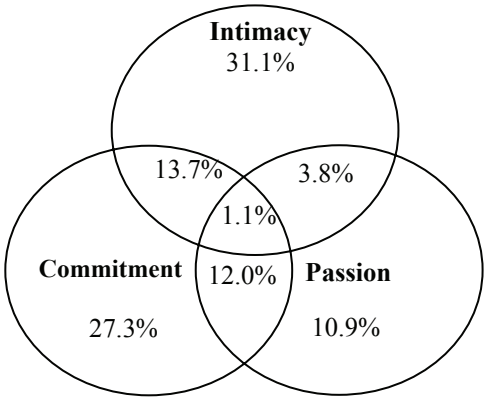

Figure W1b
Percentage Distribution of Customer–Firm Affection Components (Low Involvement)

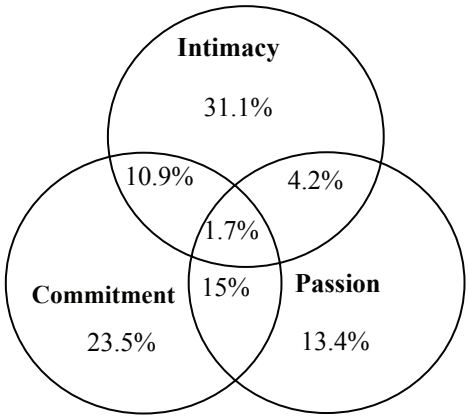

Figure W1c
Percentage Distribution of Customer–Firm Affection Components (High Involvement)