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Cognitive and affective trust in service relationships

Devon Johnson[a,*], Kent Grayson[b]

[a]Goizueta Business School, Emory University, 1300 Clifton Road, Atlanta, GA 30322-2710, USA
[b]Kellogg School of Management, Northwestern University, USA

Abstract

Social psychologists conceptualize trust in a manner that differs from conceptualizations used by marketing researchers to date. Building from the social psychology literature, we posit that interpersonal trust in consumer-level service relationships has cognitive and affective dimensions. We examine the relative impact of service provider expertise, product performance, firm reputation, satisfaction, and similarity in influencing customer's perception of these dimensions of trust in a service provider. Using survey data from 349 customers of a firm of financial advisers in the United Kingdom, our results show that cognitive and affective dimensions of trust can be empirically distinguished and have both common and unique antecedents. The results also provide further clarification concerning the relationship between trust and sales effectiveness.

Keywords: Cognitive dimensions; Affective dimensions; Behavioral dimensions; Service relationships; Trust; Financial services

1. Introduction

Ever-increasing database management capabilities now allow companies to focus on mass-customization rather than mass marketing, share of customer rather than share of markets, and customer retention rather than customer recruitment (Peppers and Rogers, 1993). The objective is to "own" the customer by building high-trust relationships within which an increasing array of products and services can be sold. Although these developments have yielded significant benefits, they are falling short of achieving a "relationship" with the consumer due to their limited ability to stimulate emotional linkages necessary to consummate a relationship. Overcoming the emotional sterility that accompanies business-to-consumer relationships has been identified as an important challenge to relationship marketers (Fournier et al., 1998). Yet, a review of the literature reveals only three studies (Hawes et al., 1989; Swan et al., 1988; Swan et al., 1985) that have examined emotional trust; none of these studies has empirically assessed the unique role of emotional trust.

Accordingly, our study focuses on the role of emotional trust in building relationships at the consumer level. We draw on a well-established theoretical precedent for examining emotional aspects of trust from the social psychology literature that conceptualizes trust as having cognitive, affective, and behavioral dimensions (Lewis and Weigert, 1985). More specifically, we examine the proposition that consumer trust in service providers has distinct cognitive and affective dimensions with unique antecedents and consequences. We assess whether these dimensions are empirically supported, and what practical insights can be gained on managing interpersonal aspects of service relationships.

To make this assessment, we examine relationships between consumers and their financial advisers. Emotional trust is likely to be salient in this context because consumer-service firm relationships are characterized by credence qualities that reduce the ability of customers to make objective assessments of service quality (Alford and Sherrell, 1996). Customers may rely on affective signals from the service provider as an indicator of service quality. A patient may, for example, regard the personal courtesies of his/her surgeon as a predictor of the surgeon's commitment or even ability to conduct an operation successfully.

The remainder of this paper is organized as follows. First, we examine how cognitive and affective trust have been defined in the sociology and social psychology literatures. Second, we present a model of hypothesized antecedents and consequences of cognitive and affective trust. And, finally we report the results of the empirical test.

* Corresponding author. Tel.: +1-770-270-0035.
E-mail address: Devon_Johnson@bus.emory.edu (D. Johnson).

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2. Cognitive and affective trust

Cognitive trust is a customer's confidence or willingness to rely on a service provider's competence and reliability (Moorman et al., 1992; Rempel et al., 1985). It arises from an accumulated knowledge that allows one to make predictions, with some level of confidence, regarding the likelihood that a focal partner will live up to his/her obligations. It is what Rempel et al. (1985) call "predictability" and Johnson-George and Swap (1982) call "reliableness." Knowledge is accumulated from observation of partner behavior within the focal relationship and from reported reputation in other relationships. When reputation effects are strong, initial interactions may be merely an opportunity to confirm or disconfirm prior perceptions, and cognitive trust may become definitive in one or a few interactions.

Although cognitive trust is knowledge-driven, the need to trust presumes a state of incomplete knowledge. A state of complete certainty regarding a partner's future actions implies that risk is eliminated and trust is redundant. Williamson (1993) argues this perspective by suggesting that trust between firms is best labeled *calculative trust*, since firms can minimize uncertainty and opportunistic behavior through due diligence and contractual safeguards. Consumer transactions, however, involve less contractual safeguards, and knowledge asymmetry prevents comprehensive due diligence. A "leap of faith" is therefore a permanent feature of consumer service consumption.

Affective trust is the confidence one places in a partner on the basis of feelings generated by the level of care and concern the partner demonstrates (Johnson-George and Swap, 1982; Rempel et al., 1985). It is characterized by feelings of security and perceived strength of the relationship. Reputation effects also influence affective trust, but affective trust is decidedly more confined to personal experiences with the focal partner than cognitive trust. The essence of affective trust is reliance on a partner based on emotions. As emotional connections deepen, trust in a partner may venture beyond that which is justified by available knowledge. This emotion-driven element of trust makes the relationship less transparent to objective risk assessments prescribed by economists.

Affective trust is closely related to the perception that a partner's actions are intrinsically motivated (Rempel et al., 1985). An example of this is provided by a financial advisers we interviewed who mentioned that a tactic use by advisers to gain the trust of first-time customers is to recommend a product that saves the customer transaction fees and earns little or no commission for the adviser. The adviser informs the customer of this act of benevolence, which elicits an emotional bond of trust in the financial adviser. According to the literature on customer participation, customers are not placid receivers of services but coproducers of the service and comakers of expressed emotions (Locke, 1996). As customers participate in the ongoing service delivery process, they become exposed to organizational socialization that generates positive affect and elicits customer commitment. Thus, we argue that emotional exchanges are a critical and ongoing part of consumer-level service relationships and form the basis for trusting bonds.

Our definitions of cognitive and affective trust are consistent with basic notions of cognition and affect discussed in the marketing literature, most notably the advertising literature. Just as Edell and Burke (1987) describe the cognitive element of attitude as consisting of a subject's judgment of the ad's characteristics, cognitive trust is a willingness to rely on a service provider based on specific instances of reliable conduct. And, just as an affective response to an ad is based on a subject's feelings during ad exposure (Edell and Burke, 1987), affective trust is based on affect experienced from interacting with the service provider.

There is a third component of trust, *behavioral* trust, which constitutes actions that flow from a state of cognitive and affective trust (Lewis and Weigert, 1985). This study treats behavior trust implicitly as the consequences of cognitive and affective trust.

3. Conceptual model and hypotheses

Using previous research findings as a foundation, we formulated a model of antecedents and consequences of cognitive and affective trust (Fig. 1). Next, we present the theory supporting the relationships detailed in the model.

3.1. Expertise

A customer's perception of a salesperson's expertise reflects the identification of relevant competencies associated with the goods or service transaction (Crosby et al., 1990). Expertise is typically assessed in terms of a service provider's level of knowledge and experience concerning the focal service. Research has demonstrated that an individual's perceived level of expertise enhances his/her source credibility and thereby trustworthiness (Busch and Wilson, 1976). We anticipate that perceived expertise should have a direct effect on cognitive, but not affective trust, because assessments of expertise and cognitive trust both employ an attribute evaluation process (Petty and Cacioppo, 1986), involving specific identifiable actions of the service provider.

H_1: Perceived service provider expertise is positively related to a customer's cognitive trust (but not affective trust) in a service provider.

3.2. Product performance

Product performance is defined as a customer's assessment of the performance of core service deliverables.

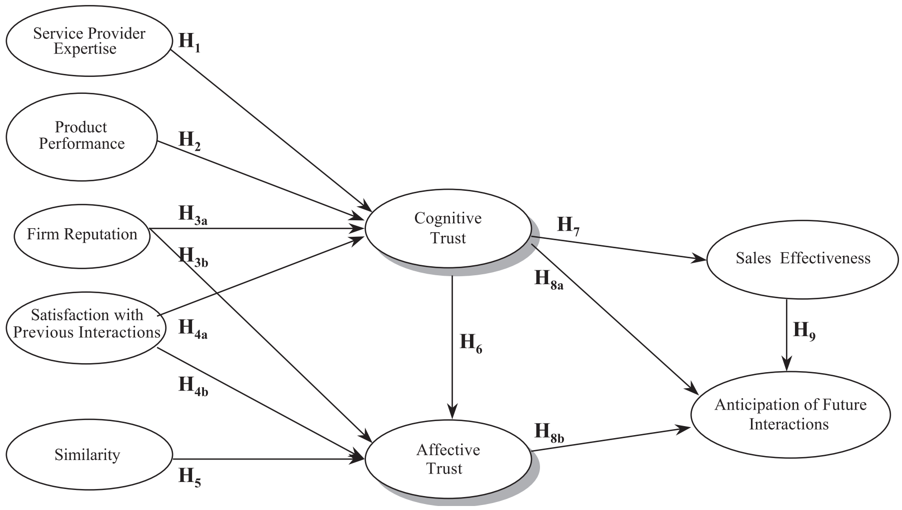

Fig. 1. A model of customer trust in service providers.

The services literature distinguishes between "process" or functional aspects and "outcome" or technical aspects (Gronroos, 1984). Process quality is determined by behavioral interactions, whereas outcome quality is determined by the performance of tangibles. Because customers have difficulty assessing intangibles, they pay particular attention to the performance of tangible deliverables (Shostack, 1977). For example, in the context of financial advisory services, where the core deliverable is financial advice, return on investment constitutes ultimate proof of service quality. Attribution theory holds that individuals will attribute the cause of an event if they can detect who is responsible (locus), who had control over the cause (control) and the likely reoccurrence of the event (stability) (Weiner, 1985). Since the service provider is often responsible for the service implementation and often has considerable control over its quality (Parasuraman et al., 1985), it is likely that performance of core aspects will be attributed to the service provider, and thus affect trust in the provider. Product performance assessment conforms to the widely accepted cognitive attribute evaluation process of multidimensional models of attitudes. Therefore, no direct link is anticipated between product performance and affective trust.

H_2: Perceived product performance is positively related to a customer's cognitive trust (but not affective trust) in a service provider.

3.3. Firm reputation

Perceived service firm reputation has been defined as the customer's belief that the firm is fair and honest (Doney and Cannon, 1997). Drumwright (1994) suggests that a firm can gain a good reputation by doing things not only because they are fair and balanced, but also because they are the "right thing" to do. Reputation is both a symbol of value reciprocation and an expression of empathy for the customer. We anticipate, therefore, that perceptions of firm reputation are sufficiently inclusive as to impact both cognitive and affective trust. A buyer's assessment of the reputation of a firm will positively impact his/her assessment of the trustworthiness of a service provider or salesperson through a process of transference (Doney and Cannon, 1997). For example, a customer who is not yet sufficiently familiar with a service provider may extrapolate his/her opinions directly from the reputation of the firm.

H_3: Perceived firm reputation is positively related to a customer's (a) cognitive trust and (b) affective trust in a service provider.

3.4. Satisfaction with previous interactions

Satisfaction refers to an emotional state arising from both a cognitive process of comparing customer's expectations with perceptions of service performance and an evaluation of emotions experienced during the consumption experience (Westbrook and Oliver, 1991). Customer satisfaction assessments involve tangible attributes as well as feelings of joy, fear and anger associated with the service experience. Satisfaction with past outcomes leads to a perception of equity in exchange process, which enhances confidence that a partner will continue to meet his/her obligations in the future (Ganesan, 1994). Given the general multidimensional nature of satisfaction evaluations, the experience of satisfaction or dissatisfaction potentially contributes to perceptions of both cognitive and affective trust.

H_4: Satisfaction with previous interactions is positively related to a customer's (a) cognitive trust and (b) affective trust in a service provider.

3.5. Similarity

Similarity between a service provider and a customer connotes the presence of common values and interests. Social psychology researchers have found that in social relationships individuals tend to display higher levels of attraction toward people they perceive to have attitudes similar to their own. Byrne (1969) suggests that this link occurs because the detection of similarity (attitudes) in others confirms an individual's interpretation of the environment. This process, he argues, elicits positive affect that becomes associated with the referent individual through conditioning. This affinity provides an environment conducive to trust development. Accordingly, we posit that when a customer detects elements of similarity in a service provider, an affective response may result that leads to the development of a cooperative and accommodating attitude towards the service provider. Thus, we hypothesize a link between similarity and affective trust.

H_5: Similarity is positively related to a customer's affective trust (but not cognitive trust) in a service provider.

3.6. Cognitive and affective trust

Cognitive trust provides a base for affective trust and should therefore exist before affective trust develops (Lewis and Weigert, 1985). But as affective trust matures, the potential for decoupling of trust dimensions and reverse causation increases (McAllister, 1995). Although we model cognitive trust as a positive antecedent of affective trust, attitude theory researchers have long argued that the relationship between cognition and affect in attitude formation is bidirectional. Our chosen direction of influence is consistent with previous theorization and empirical research (e.g., McAllister, 1995).

H_6: A customer's cognitive trust is positively related to a customer's affective trust in a service provider.

3.7. Sales effectiveness

Sales effectiveness refers to the seller's success in achieving sales of "preferred solutions" (Weitz, 1981). Research findings have not consistently supported a link between trust and economic outcome of exchange relationships. Our hypothesis regarding sales effectiveness builds from our distinction between cognitive and affective trust and from the results of Crosby and Stephens (1987). Their study found that although relationship-marketing practices can affect some aspects of customer satisfaction, it is product performance that tends to drive the actual purchase decision. Given our previous argument that product performance is related to cognitive trust, we argue that once the variance associated with affective trust is explicitly modeled, the link between cognitive trust and sales effectiveness will emerge. However, we do not predict a link between affective trust and sales effectiveness, because although social bonds are important for continuity of a relationship, they do not constitute a prerequisite for achieving economic benefits from the relationship.

H_7: A customer's cognitive trust in a service provider is positively related to sales effectiveness.

3.8. Anticipation of future interactions

Anticipation of future interactions constitutes a partner's intention to continue the relationship and has been widely researched as a desirable outcome of both service marketing and marketing channel relationships. Previous research supports the link between trust and anticipation of future interactions (Crosby et al., 1990). Consistent with this previous work, we argue that anticipation of future interaction can be driven by more cognitive considerations (like product performance) as well as by emotional consideration (like enjoyment of the service relationship).

H_8: A customer's (a) cognitive and (b) affective trust in a service provider are positively related to a customer's anticipation of future interactions.

To the extent that the service provider is successful in achieving a sale, the customer has a vested interest in continuing the relationship. Theory and research findings from the relationship–commitment literature suggest that as investment in a relationship increases, commitment to the relationship also increases (Rusbult, 1983). Customer–salesperson interactions involve investments of time and emotional labor by customers and purchases constitute economic investments in the relationship. These investments create relational equity that reduces the risk customers perceive to be associated with future transactions.

H_9: Sales effectiveness is positively related to a customer's anticipation of future interactions.

4. Method

The model was assessed using survey data from customers of a large United Kingdom financial advisory service firm. A total of 334 responses were realized from mailings to 1880 randomly selected customers, constituting a 19% response rate. Respondents comprise 57% male and 43% female and have been with their advisers for an average of 15 months. Survey items are detailed in Appendix A. Established measures were used with minor modifications to suit the study context. Measures of service provider expertise and firm reputation were adapted from Doney and Cannon (1997). Satisfaction with previous interactions was measured using scales from Ganesan (1994). Similarity and anticipation of future interactions were measured using scales from Crosby et al. (1990). Sales effectiveness was operationalized as a formative construct comprising sales-value per account and cross-selling effectiveness (number of different products purchased from the financial adviser), which were then summed to form a single item.

New scales were developed for cognitive trust, affective trust and product performance in accordance with conventional procedures (Anderson and Gerbing, 1988; Churchill, 1979). Drawing from interviews with service providers and customers and measures of interpersonal trust from previous research (Johnson-George and Swap, 1982; McAllister, 1995; Rempel et al., 1985), 15 items each of cognitive and affective trust were developed. Next, four doctoral students, unconnected with the project, were provided with definitions of cognitive and affective trust and asked to classify each of the 30 items. Only items with 100% interrater reliability were retained, resulting in seven indicators of cognitive trust and seven indicators of affective trust. These items were then tested via a pilot study of 134 customers of a financial advisory service firm. Cognitive and affective trust demonstrated convergent and discriminant validity with composite reliabilities of 0.86 and 0.89, respectively. Items were further eliminated through refinement of construct definition, resulting in five items each of cognitive and affective trust.

5. Analysis and results

Model assessment involved first testing for unidimensionality and convergent and discriminant validity of latent constructs, and subsequently testing the predictive validity of trust dimensions using confirmatory and latent construct assessment procedures.

Maximum likelihood (ML) estimation was used to determine model parameters. The correlation matrix along with means and standard deviations are reported in Table 1.

5.1. Dimensionality of consumer trust

Discriminant validity of cognitive and affective trust was assessed by pooling construct measures and estimating a measurement model with the phi coefficient (ϕ_{ij}) unconstrained. We then estimated a second model with phi constrained to unity (i.e., $\phi_{ij}=1$) and compared the chi-square measures of model fit (Anderson and Gerbing, 1988). The constrained model tests the null hypothesis that trust is unidimensional with all measures loading on a single construct. During CFA, measures demonstrating poor discriminant validity were eliminated, resulting in four measures of cognitive trust and three measures of affective trust. All remaining measures load significantly ($P<.01$) on intended trust dimensions. The results provide a first step towards support for the proposition that trust has identifiable cognitive and affective dimensions. The fit statistics indicate that the unconstrained model cannot be rejected since it is not significantly different from the model of best-fit [$\chi^2(12)=12.38$, P=.22], and that these are significantly different from the constrained model ($P<.00$). The estimate of ϕ_{12} between cognitive and affective trust is 0.75. While this is significantly different from zero ($P<.01$), it is significantly less than one (P=.05), thus supporting the proposition that the dimensions are distinct.

5.2. Measurement model and structural model fit

We observed the two-stage procedure for assessing structural models (Anderson and Gerbing, 1988). Composite reliabilities and variances extracted are detailed in Table 1. The composite reliability (Bagozzi and Yi, 1988) of indicators of each construct is acceptable, ranging from 0.80 for cognitive trust to 0.95 for satisfaction with previous interactions. Average variances extracted are all above the recommended 0.5 level, supporting the discriminant validity of measurement scales (Fornell and Larcker, 1981). Each of the 24 observable indicators load significantly (α=.001) on its intended factor, supporting the convergent validity of scale items. Item loadings and measurement errors (listed in Appendix A) are also acceptable. The adjusted goodness-of-fit index (AGFI) and the comparative fit index (CFI) of 0.90 and 0.97, respectively, are above the 0.90 thresholds, indicating acceptable fit. In addition, a root mean square error approximation (RMSEA) of 0.040 is below the threshold level of 0.05, indicating a close fit of the model with the

Table 1
Means, standard deviations and correlation matrix

	Mean	S.D.	ρ_v^a	1	2	3	4	5	6	7	8	9
1. Service provider expertise	5.60	1.21	.81	.93								
2. Product performance	4.40	0.95	.58	.37	.87							
3. Firm reputation	5.08	1.00	.60	.31	.28	.81						
4. Satisfaction with previous interactions	5.55	1.35	.87	.50	.41	.32	95					
5. Similarity	4.26	0.85	.71	.34	.21	.21	.32	.87				
6. Cognitive trust	5.49	1.14	.52	.56	.41	.25	.59	.37	.80			
7. Affective trust	4.76	1.31	.74	.48	.37	.35	.49	.48	.58	.90		
8. Sales effectiveness	5.60	1.06	.85	**.03**	.11	− **.04**	**.05**	− **.03**	.14	**.02**	.85	
9. Anticipation of future instruction	5.32	1.61	.75	.46	.41	.22	.54	.32	.60	.52	.20	.91

Note correlations in bold are not significant at $\alpha=0.05$.

Composite reliability on diagonals (Bagozzi and Yi, 1988).

[a] ρ_v Percent of variance extracted (Fornell and Larcker, 1981).

data. In summary, these results confirm the tenability of the proposed measurement model.

5.3. Examination of hypothesized relationships

The standardized solution was used for interpreting the causal relationships supported by the structural model. All but two hypothesized relationships are supported, and all supported hypothesized relationships are in the predicted direction (Table 2).

Expertise (H_1: $\gamma = 0.40$, $t = 7.11$), product performance (H_2: $\gamma = 0.14$, $t = 2.77$) and satisfaction with previous interactions (H_{4a}: $\gamma = 0.39$, $t = 7.01$) are significantly associated with cognitive trust. However, the relationship between firm reputation and cognitive trust is only marginally supported (H_{3a}: $\gamma = 0.09$, $t = 1.93$). In terms of affective trust, the antecedent role of firm reputation (H_{3a}: $\gamma = 0.15$, $t = 3.66$), similarity (H_5: $\gamma = 0.24$, $t = 5.53$) and cognitive trust (H_6: $\beta = 0.58$, $t = 7.16$) are supported. However, the relationship between satisfaction with previous interactions and affective trust is not supported (H_{4b}: $\gamma = 0.02$, $t = 0.01$).

Predicted consequences of both cognitive and affective trust are supported. Cognitive trust contributes significantly to both sales effectiveness (H_7: $\beta = 0.18$, $t = 3.02$) and anticipation of future interactions (H_{8a}: $\beta = 0.64$, $t = 8.39$), while affective trust contributes significantly to anticipation of future interactions (H_{8b}: $\beta = 0.15$, $t = 2.66$). Lastly, sales effectiveness increases anticipation of future interactions (H_9: $\beta = 0.17$, $t = 4.10$).

Overall, the model explains a substantial portion of the variance of the endogenous variables: cognitive trust 70%, affective trust 61% and anticipation of future interactions 64%. It explains 3% of the variance of sales effectiveness, which is reasonable given the multiplicity of factors outside of the relationship that affect the purchase decision.

Next, we undertook additional investigation to determine the unique contribution of affective trust to these relationships. To do this, we estimated an alternative model with all constructs except affective trust and similarity (Anderson and Gerbing, 1988). Results of a chi-square difference test comparing both models indicate that the full model has a superior fit. The $\chi^2(97)$ (difference) value of 131.46 exceeds the critical value of 120.98 (P=.05). However, other tests, which like the χ^2 test adjust for parsimony, suggest a more moderate difference between the two models. The parsimonious goodness of fit index (PGFI) of 0.67 for the full model is not significantly different from 0.66 for the reduced model. However, an RMSEA of 0.040 for the full model compared with 0.046 for the reduced model supports the marginal superiority of the full model.

Table 2
Structural model results

Hypothesis	Proposed path	ML parameter estimate		Standard error
		Coefficient	t Value	
H_1	Expertise → cognitive trust	0.40	7.11	0.057
H_2	Product performance → cognitive trust	0.14	2.77	0.049
H_{3a}	Firm reputation → cognitive trust	0.09	1.93	0.05
H_{3b}	Firm reputation → affective trust	0.15	3.66	0.049
H_{4a}	Satisfaction → cognitive trust	0.39	7.01	0.056
H_{4b}	Satisfaction → affective trust	0.02	0.01	0.069
H_5	Similarity → affective trust	0.24	5.53	0.042
H_6	Cognitive trust → affective trust	0.58	7.16	0.082
H_7	Cognitive trust → sales effectiveness	0.18	3.02	0.060
H_{8a}	Cognitive trust → AFI	0.64	8.39	0.076
H_{8b}	Affective trust → AFI	0.15	2.66	0.067
H_9	Sales effective → AFI	0.17	4.10	0.041
	R^2 cognitive trust	0.70		
	R^2 affective trust	0.61		
	R^2 sales effectiveness	0.03		
	R^2 AFI	0.64		

6. Discussion

6.1. Research and managerial implications

Our study has produced moderate evidence in favor of conceptualizing trust as having cognitive and affective dimensions in financial service exchanges. Though the two dimensions are highly correlated, they are empirically distinguishable, and both dimensions of trust have unique antecedents. Service provider expertise and product performance are antecedents of cognitive but not affective trust, and sales effectiveness is a consequence of cognitive trust but not affective trust. Also, similarity is an antecedent of affective trust but not cognitive trust.

The finding that satisfaction with previous interactions contributes to cognitive trust and not affective trust, suggests that customer satisfaction in the financial services industry is primarily based on core aspects of service delivery. Unlike some previous studies of trust in marketing, our study found support for a relationship between (cognitive) trust and sales effectiveness, indicating that a multidimensional conceptualization may be fruitful for exploring the managerial benefits of trust. Although we found that affective trust contributes significantly to a customer's willingness to meet with a service provider in the future, our study suggests that affective trust has a modest impact on financial service relationships. Researchers have suggested that trust facilitates relationship processes, which have a direct impact on economic outcomes (Anderson and Narus, 1990). Perhaps affective trust has a direct impact on processes such as customers' listening behavior (Ramsey and Sohi, 1997) and response to persuasive attempts, which in turn directly affect sales effectiveness.

6.2. Directions for future research

The proposed model of customer trust in service providers was developed to explore the multidimensionality of the trust construct and was not intended to be comprehensive. Therefore, several opportunities exist for further research on the antecedents and consequences of affective trust. A potentially fruitful avenue of research is the impact of dissatisfying events on the different dimensions of trust. Lewis and Weigert (1985) suggest that affective trust is particularly strongly affected when trust is broken. Is affective trust more likely than cognitive trust to be affected by dissatisfying events? Are customers with high affective trust more likely to voice their dissatisfaction and experience service recovery than customers with low affective trust?

In conclusion, we have provided a multidimensional perspective on trust in business–consumer relationships that incorporates affective noneconomic aspects of these relationships. We hope that this work provides an impetus for more research on emotional aspects of business—consumer relationships.

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Appendix A. Construct measures

	Scales	Item loading	Error
Expertise (1. Strongly disagree–7. Strongly agree)			
Exp1	My financial adviser is knowledgeable.	0.95	0.042
Exp2	My financial adviser knows his or her products very well.	0.92	0.042
Exp3[a]	My financial adviser is not an expert. *reversed*		
Product performance			
Perf1	(1. Much worse than expected–7. Much better than expected) In comparison to your expectations, how would you rate the performance of investments bought on the advice of your financial adviser?	0.80	0.051
Perf2	(1. Much worse than the general market–7. Much better than the general market) In comparison to the general market, how would you rate the performance of investments bought on the advice of your financial adviser?	0.94	0.050
Firm reputation (1. Strongly disagree–7. Strongly agree)			
Rep1	Firm XYZ is highly regarded in the financial industry.	0.67	0.051
Rep2[a]	Firm XYZ has a bad reputation in the market. *Reversed*		
Rep3	Firm XYZ is known to be concerned about customers.	0.65	0.051
Rep4	Firm XYZ is one of the most capable firms in the industry.	0.96	0.048
Satisfaction with previous interactions			
Taking everything into consideration, how do you feel about the service you have received from your financial adviser so far?			
Satisf1[a]	1. Pleased–7. Displeased *reversed*		
Satisf2	1. Sad–7. Happy	0.93	0.041
Satisf3	1. Contented–7. Disgusted *reversed*	0.91	0.042
Satisf4	1. Dissatisfied–7. Satisfied	0.96	0.040
Similarity			
Sim1	My financial adviser and I have similar interests	0.57	0.06
Sim2	My financial adviser and I have similar values	0.92	0.04
Sim3	My financial adviser and I are similar in many ways	0.98	0.07
Cognitive trust (1. Strongly disagree–7. Strongly agree)			
CogT1	Given by financial adviser's track record, I have *no* reservations about acting on his or her advice.	0.82	0.061
CogT2	Given my financial adviser's track record, I have good reason to *doubt* his or her competence. (*reversed*)	0.49	0.055
CogT3[a]	I can rely on my financial adviser to undertake a thorough analysis of the situation before advising me.		
CogT4	I have to be cautious about acting on the advice of my financial adviser because his or her opinions are questionable. (*reversed*)	0.76	0.050
CogT5	I can *not* confidently depend on my financial adviser since he/she may complicate my affairs by careless work. (*reversed*)	0.76	0.050
Affective trust			
AffT1[a]	I would feel a sense of personal loss if I could no longer use my financial adviser.		
AffT2	If I share my problems with my financial adviser, I feel he or she would respond caringly.	0.93	0.050

(*continued on next page*)

Appendix A (*continued*)

	Scales	Item loading	Error
Affective trust			
AffT3	My financial adviser displays a warm and caring attitude towards me.	0.87	0.050
AffT4	I can talk freely with my financial adviser about my problems at work and know that he or she will want to listen.	0.77	0.051
AffT5[a]	My financial adviser is *only* interested in selling me products. *reversed*		
Sales effectiveness			
	Cross-selling index: Which of the following product have you bought from your financial adviser? (items added as formative construct) Pension/top-up pension; Life Assurance (term or whole life); Endowment policy linked to your mortgage; Investment/income/guaranteed bond; Unit trust or PEP	0.98	0.045
	Total product sales (Sterling)		
Anticipated future interactions			
	Please indicate how likely you are to engage in the following activities sometime in the next 18 months. (1. Not at all likely–7. Extremely likely)		
Fut1[a]	Purchase from your financial adviser again.		
Fut2	Continue doing business with your financial adviser.	0.87	0.066
Fut3	Use your financial adviser if you need to make further investments.	0.94	0.039
Fut4	Use your financial adviser to manage your investments to better suit your needs.	0.85	0.042

[a]Items deleted after confirmatory factor analysis.

References

Alford BL, Sherrell DL. The role of affect in consumer satisfaction judgments of credence-based services. J Bus Res 1996;37:71–84.

Anderson JC, Gerbing DW. Structural equation modeling in practice: a review and recommended two-step approach. Psychol Bull 1988; 103(3):411–23.

Anderson JC, Narus JA. A model of the distributor's perspective of distributors–manufacturer working relationships. J Mark 1990;48(Fall): 62–74.

Bagozzi RP, Yi Y. On the evaluation of structural equation models. Acad Mark Sci 1988;16(1):74–94.

Busch P, Wilson DT. An experimental analysis of salesman's expert and referent bases of social power in the buyer–seller dyad. J Mark Res 1976;13(February):3–11.

Byrne D. Attitudes and attraction. In: Berkowitz L, editor. Advances in Experimental Social Psychology, vol. 4. New York: Academic Press; 1969. p. 36–86.

Churchill Jr GA. A paradigm for developing better measures of marketing constructs. J Mark Res 1979;16(February):64–73.

Crosby L, Stephens N. Effects of relationship marketing on satisfaction retention, and prices in the life insurance industry. J Mark Res 1987; 24:404–11.

Crosby L, Evans KR, Cowles D. Relationship quality in services selling: an interpersonal influence perspective. J Mark 1990;54(July): 68–81.

Doney PM, Cannon JP. An examination of the nature of trust in buyer–seller relationships. J Mark 1997;61(April):35–51.

Drumwright ME. Socially responsible organizational buying: environmental concern as a non-economic buying criterion. J Mark 1994;58(July): 1–19.

Edell JA, Burke MC. The power of feelings in understanding advertising effects. J Consum Res 1987;14(December):421–33.

Fornell C, Larcker D. Evaluating structural equation models with unobservable variables and measurement error. J Mark Res 1981;18(February): 39–50.

Fournier S, Dobscha S, Mick DG. Preventing the premature death of relationship marketing. Harvard Bus Rev 1998;42–51 [January–February].

Ganesan S. Determinants of long-term orientation in buyer–seller relationships. J Mark 1994;58(April):1–19.

Gronroos C. A service quality model and its marketing implications. Eur J Mark 1984;18(4):36–44.

Hawes JM, Mast KE, Swan JE. Trust earning perceptions of sellers and buyers. J Pers Sell Sales Manage 1989;9(Spring):1–8.

Johnson-George C, Swap WC. Measurement of specific interpersonal trust: construction and validation of a scale to assess trust in a specific other. J Pers Soc Psychol 1982;43(6):1306–17.

Lewis JD, Weigert A. Trust as a social reality. Soc Forces 1985;63(June): 967–85.

Locke K. A funny thing happened! The management of consumer emotions in service encounters. Organ Sci 1996;7(1):40–59 [January–February].

McAllister DJ. Affect- and cognition-based trust as foundations for interpersonal co-operation in organizations. Acad Manage J 1995;38(1): 24–59.

Moorman C, Zaltman G, Deshpandé R. Relationship between providers and users of marketing research: the dynamics of trust within and between organizations. J Mark Res 1992;29(August):314–28.

Parasuraman A, Zeithaml VA, Berry L. A conceptual model of service quality and its implications for future research. J Mark 1985;49(Fall): 41–50.

Peppers D, Rogers M. The one to one future: building relationships one customer at a time. New York: Bantam Doubleday Dell Publishing; 1993.

Petty RE, Cacioppo JT. Elaboration likelihood model of persuasion. In: Berkowitz L, editor. Advances in Experimental Social Psychology, vol. 19. New York: Academic Press; 1986. p. 123–205.

Ramsey RP, Sohi RS. Listening to your customers: the impact of perceived salesperson listening behavior on relationship outcomes. J Acad Mark Sci 1997;25(2):127–37.

Rempel JK, Holmes JG, Zanna MP. Trust in close relationships. J Pers Soc Psychol 1985;49(1):95–112.

Rusbult CE. A longitudinal test of the investment model: the development (and deterioration) of satisfaction and commitment in heterosexual involvements. J Pers Soc Psychol 1983;45(July):101–17.

Shostack LG. Breaking free from product marketing. J Mark 1977; 41(April):73–80.

Swan JE, Trawick Jr FI, Silva DW. How industrial salespeople gain customer trust. Ind Mark Manage 1985;14:203–11.

Swan JE, Trawick Jr FI, Rink DR, Roberts JJ. Measuring dimensions of purchaser trust of industrial salespeople. J Pers Sell Sales Management 1988;8(May):1–9.

Weiner B. An attributional theory of achievement, motivation and emotion. Psychol Rev 1985;92(4):548–73.

Weitz B. Effectiveness in sales interactions: a contingency framework. J Mark 1981;45(Winter):85–103.

Westbrook RA, Oliver RL. The dimensionality of consumption emotion patterns and consumer satisfaction. J Cons Res 1991;18(June): 84–91.

Williamson O. Calculativeness, trust, and economic organizations. J Law Econ 1993;36(April):453–86.