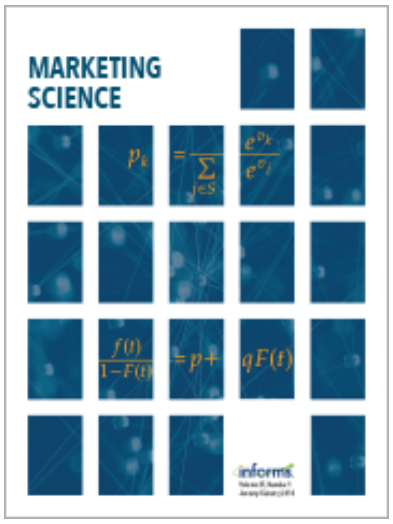

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Can Inaccurate Perceptions in Business-to-Business (B2B) Relationships Be Beneficial?

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The authors dedicate this paper in honor of the memory of their deceased co-author, Erin Anderson.

In dyadic business relationships, parties can be incorrect in reading their counterparts' relational closeness. For example, they can overestimate or underestimate the counterpart's commitment to their relationship. In the business-to-business (B2B) literature, the consequences of such inaccurate perceptions have not been empirically investigated. We advance and test the proposition that the impact of misreading the other party's relational closeness depends on the direction of the error. We propose that overestimating the counterpart's relational closeness (CRC) is beneficial, while underestimating the counterpart's relational closeness is detrimental for the relationship's functioning. Using original dyadic data in the service sector, we show that most companies underestimate their CRC, in which case becoming perceptually more accurate would improve their relationships. But the opposite holds for parties that overestimate their CRC, in which case becoming perceptually more accurate would actually make the relationship deteriorate. Furthermore, we show that even in long-standing relationships, companies do not know how accurate their perceptions are, even when they believe that they correctly perceive their CRC. We discuss managerial implications of our findings and encourage future research to determine why most decision makers underestimate their CRC, which can lead to impaired functioning of B2B relationships.

Key words: business-to-business marketing; organizational research; channels of distribution; services marketing; key informant approach; measurement
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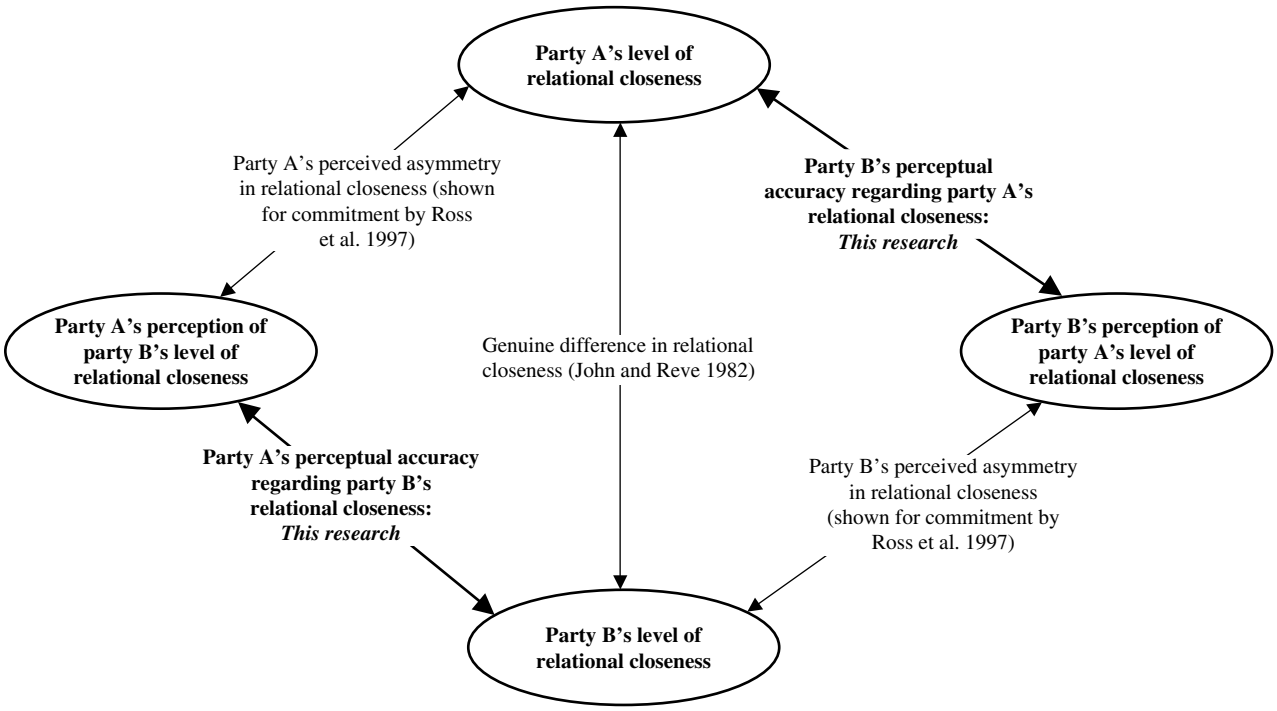
Business-to-business (B2B) relationships are described in terms of relational characteristics such as commitment and trust. In the modern contractual relations paradigm (Macneil 1980), in the buyer-seller relationship model (Dwyer et al. 1987), and in social exchange theory (Blau 1968), relational characteristics (also called relational norms (Macneil 1980), relationship connectors (Cannon and Perreault 1999), or relational capital (Kale et al. 2000)), are believed to evolve over time, leading to enhanced quality of the relationship, the absence of conflict, and ultimately, to increased performance outcomes (Dyer and Singh 1998). The relationship progressively develops toward more efficient and cooperating interaction, where the history of the relationship determines whether to engage in further exchange (Blau 1968, Dwyer et al. 1987).

These theories focus on factual relational characteristics; that is, how they are displayed by the two parties in the dyad. However, Dwyer et al. (1987, p. 26) noted that "periods of misperception are inevitable." In line with this notion, John and Reve (1982) found that parties greatly differ in their assessment of the relationship. Subsequent research has, consequently, focused on the *perceptions* of relational characteristics rather than how they are displayed by the two parties. Scheer and Stern (1992), for example, demonstrate that an influence attempt can result in greater satisfaction and trust when the identical message is framed positively as opposed to negatively. Ross et al. (1997) show that in insurance agent dyads, perceivers rate their performance outcomes from the dyad highest when they *believe* (rightly or wrongly) that they are less committed than their counterpart. Conversely, they rate their own performance outcome lowest when they believe that they are more committed than their counterpart. These beliefs about the parties' rela-

Figure 1 Perceived Asymmetry and Perceptual Accuracy Regarding Relational Closeness in a B2B Dyad (after Kenny and Albright 1987)



Note. Arrows denote difference scores between two focal concepts.

tive positions are called perceived asymmetry of commitment in a dyad (see Figure 1).

However, are decision makers accurate in perceiving such differences in commitment? More generally, how accurate are decision makers in perceiving their counterpart's relational closeness? Empirical investigations have found that business parties are accurate in their perceptions of their counterparts if the characteristics in question are objectively observable. For example, Porac et al. (1995) show that Scottish knitwear manufacturers are accurate in their perceptions of their competitors' product characteristics and generally agree on their understanding of rivalry in their market. Likewise, John and Reve (1982) show that key informants in a business dyad are accurate in their perceptions of objective "structural measures" such as centralization or formalization. However, when characteristics are subjective and less easy to observe, such as relational closeness (called "sentiment measures" in John and Reve's 1982 study), parties greatly differ in their perceptions of their relationship.

As shown in Figure 1, we investigate the accuracy of the overall perception of relational closeness and the impact of perceptual error in surmising relational closeness on how the relationship functions. A feature of our analysis, shown in Figure 1, is that a focal party cannot know its own perceptual accuracy because it cannot know the true state of its counterpart.

We focus on the accuracy of perceiving the level of two relational norms, commitment and mutuality, and the level of two relational behaviors, investments in the partner and nonconstructive criticizing. Specifically, we investigate (1) how frequent are misperceptions of relational closeness, (2) the effect of the *direction* of overall perceptual error (i.e., perceiving the counterpart in an overly optimistic or pessimistic way regarding relational closeness), and (3) the effect of the *extent* of overall perceptual error (i.e., how far off is the focal party's perception from the truth). We propose that perceptual error in assessing relational closeness affects a relationship in two ways: It determines (1) what image (appealing versus unfavorable) the focal party holds of the counterpart and (2) the degree to which the focal party believes it shares compatible business goals with the counterpart. We will call these two properties—the image the focal party holds of the counterpart and the degree to which it senses the parties pursue compatible business objectives—the "framing of the counterpart"; that is, how the focal party overall sees the counterpart.

We present a contingent model of how perceptual error impacts the way the focal party frames its counterpart. Key is the direction of the perceptual error. We propose that *under*stating the counterpart's relational closeness (CRC) leads the focal party to develop a negative frame of the counterpart (unfavorable image, divergent goals). The greater the extent of perceptual error, the more negative will be the effect leading to a more unfavorable frame of the counterpart. In contrast, *over*stating the CRC will lead the focal party to

frame the counterpart in a more encouraging light (favorable image, congruent goals). And the greater the extent of perceptual error is, in this case, the more favorably the focal party frames its counterpart. The framing of the counterpart in turn determines how much conflict it experiences in the relationship and, ultimately, how much profit the focal party derives from the relationship. Using primary data from 484 members of 242 standing insurance agency relationships, we test our two hypotheses.

The results show that the majority of companies in our sample err on the pessimistic side; that is, they understate their CRC. These companies frame their counterparts in an unfavorable manner, which in turn dampens their relationship's functioning. Companies that overestimate their CRC frame them in a favorable way, which is functional in that it reduces conflict, which in turn enhances profits for the focal party.

The paper is organized in four sections. In the first section, we define perceptual error and develop contingent hypotheses regarding the impact of the direction of perceptual error (under- and overstating the CRC) and the extent of perceptual error (EPE) (the extent to which a party over- or understates the CRC). The second section describes the dyadic data collection, the model specification, and the construction of measures, particularly the measures of the direction of perceptual error and the EPE. This section also presents evidence that informants do *not* have a good sense of how accurate they really are, even though they firmly believe themselves to be accurate. The third section presents the model estimation and results. The fourth and final section discusses the findings in the light of extant B2B relationship theories and offers managerial implications and suggestions for further research.

1. Theory Development

The Concept of Perceptual Accuracy

Perceptual accuracy as defined in social psychology is the degree to which a person correctly ascribes to another person a property such as a personality trait, an attitude, or a behavior. The challenge is to know what the truth is. In the typical research paradigm, a judge (the perceiver) estimates the level of a certain characteristic of a target person. For example, the judge might estimate how committed the target person is to their personal relationship. This judgment is called the perceived commitment on the part of the judge. The target person also rates his or her own level of commitment, which is taken to be the truth. The difference of these two ratings constitutes the accuracy of the judge's perception (Kenny and Albright 1987, cf. Figure 1). If this difference is positive (the judge overstates the target's commitment), perceptual error is positive, and the judge's inaccurate perception is called a positive illusion. If the difference in ratings is negative (the judge understates the target's commitment), perceptual error is negative, and the judge's inaccurate perception is called a negative illusion.

The general finding is that people are amazingly *in*accurate in their perceptions of other people, even when judges and targets should know each other well (e.g., Davis et al. 1986). The same has been demonstrated in dyadic business relationships. In the already mentioned study by John and Reve (1982) on the reliability and validity of the key informant approach, key informants greatly diverge in their perceptions of relational closeness such as goal compatibility, evaluation of accomplishments, or norms of evaluation. The authors (ibid., p. 523) conclude: "We believe the major problem is in 'real' differences in perception between informants *across* the dyad in relation to these variables. The reason for the lack of convergence is thus a conceptual one rather than any problem associated with the key informant technique *per se*." We address this conceptual issue: While traditional key informant research treats diverging information as errors (because of insufficient knowledge or perceptual biases) of one true underlying construct, we take key informants' self-reported relational closeness as the truth and conceptualize diverging perceptions of the counterparts' relational closeness as perceptual inaccuracy.

The Impact of Perceptual Error

What are the consequences of perceiving a counterpart's relational closeness accurately or inaccurately? For example, if a company perceives its counterpart as highly committed to the relationship, the focal party will surely be better off by accurately perceiving the counterpart as highly committed than by misperceiving it as little committed. However, what happens if the counterpart is, in fact, little committed? Will the focal party be better off by accurately perceiving the counterpart as little committed, or does it pay to misperceive the counterpart as highly committed, thereby maintaining a positive illusion about its counterpart's commitment?

Two bodies of literature offer conflicting predictions. The behavioral decision literature presumes *any* inaccuracy—whether over- or underestimating the target—to be dysfunctional, yielding judgment biases that undermine effective forecasting (e.g., Kardes 2002). Likewise, in the analytical decision literature, inaccuracy is theorized to have negative effects independent of the direction of perceptual error (DPE). For example, in game-theoretic formalizations of relational contracts (e.g., Baker et al. 2002), relational contracts are feasible only if the downstream party knows

the upstream party's characteristics. In person perception, lack of accuracy is considered to lead to poor forecasting of the other party's behavior, attitudes, and reactions (Funder 1987) with deleterious consequences for interpersonal relationships (Swann 1984). Applying this reasoning to B2B relationships, any perceptual inaccuracy should impair the functioning of the relationship by degrading the focal party's framing of the counterpart (poorer image, less goal congruence (GOAL)). Consistent with this view, Weitz (1978) showed that a salesperson's ability to correctly read the buyer-firm perceptions of product attributes improves the salesperson's performance. Speaking in terms of the direction of perceptual error (over- or understating) and the EPE (the extent to which a target is over- or understated), these theories suggest that companies should always benefit from little perceptual error; the direction of error should not matter at all.

In contrast, social psychologists and researchers in organizational behavior have stressed the *beneficial* role of positive illusions; that is, the erroneous belief that things are better than they really are. For example, Taylor and Brown (1988) argue that overly optimistic views about oneself and the world help to maintain an illusory sense of control and foster mental well-being, a position that is supported by Weick (1995) in the organizational context. Likewise, Sutcliffe (1994, p. 1374) argues that "misperceptions may be beneficial if they enable managers to overcome inertial tendencies and propel them to pursue goals that might look unattainable in environments assessed in utter objectivity. Because environments are not seen accurately, managers may undertake potentially difficult courses of action with the enthusiasm, effort, and self-confidence necessary to bring about success." In short, unjustified optimism (positive illusions) encourages constructive action, which in turn improves the situation (a self-fulfilling prophecy). Interestingly, these authors do not address the potential negative effects of inaccurate perceptions; namely, negative illusions: the erroneous belief that things are worse than they really are.

Personification of Companies and the Framing of the Counterpart

We argue that inaccurate perceptions influence the overall image that a party holds of its counterpart. Business partners perceive each other in much the same way humans do, as exemplified in social perception theory. For example, people speak about companies in a human-like fashion. We have no difficulty in assigning moral attributes to a company by describing it as ethical or unethical. Personifying an organization is also reflected in the belief that organizations subscribe to norms, which in turn help them function without the need for elaborate contracts (Macneil 1980). If decision makers' images of companies are based on some of the same attributes as images of individuals, the psychological processes involved in human impression formation (and subsequent behavior) can be assumed to be similar to the processes involved in forming images about companies (Schneider 1987). In this respect, Staw and Sutton (1993, p. 367) argue that: "... given that organizations can magnify and blunt individual cognitive processes, it is important to conduct research on the effects of aggregated beliefs on organizational actions rather than to just assume that such effects will occur because they have been demonstrated in individuals or groups outside of the organizational context." Our research does so, demonstrating that individual behavior as per social perception theory is parallel to how upstream and downstream firms perceive each other.

We conceptualize the image a party holds of its counterpart in two ways. First, we ask each party to rate its counterpart along a number of *personality* characteristics, such as *trustworthiness* or *flexibility*. Second, we ask each party to which extent it pursues business goals that are congruent with those of the counterpart. Research in group dynamics and cooperation has shown that the more two groups share superordinate goals, the more favorably they perceive each other (Sherif 1966). Likewise, in the organizational literature, Pinto et al. (1993) and Xie et al. (2003) demonstrated that goal congruity among cross-functional teams (such as marketing, R&D, and manufacturing in new product development) causes teams to view other teams in a more positive way, leading to enhanced cooperation. At the same time, the more favorably a team views its counterpart, the more it is willing to take into account constraints that the counterpart is facing. When problems arise, acknowledging the constraints of the counterpart enables a team to focus on the commonly shared business goals rather than assuming that the counterpart is pursuing different objectives. So, the way a party frames its counterpart is reflected in the favourableness of its image of the counterpart (IMA) and the extent to which the party perceives it is pursuing the same business objectives as the counterpart.

Favorable IMA. When decision makers personify their counterpart organizations, they "frame" them by developing a shorthand description, a picture of their major features. Of particular interest is how favorable is the overall image they form. Positive (favorable) images could include such adjectives as *reasonable, trustworthy, consistent*, or *flexible*, while negative (unfavorable images) could include adjectives such as *obnoxious*.

GOAL. In a B2B relationship, each party has business goals, frequently conflicting. Even in marketing channels in which the suppliers and their channel members are interdependent, clashes of goals are inevitable, and suspicions are easily aroused (Coughlan et al. 2001). The more parties believe their goals are compatible, the more they are able to take the counterpart's side into account.

In line with the social psychology and the organizational literature, we propose that misreading one's CRC can be beneficial or harmful, depending on the situation. Key is the direction of the error; that is, the distinction between overestimating and underestimating the counterpart's relational closeness. When a company inaccurately perceives its counterpart to be highly relational (overstating relational closeness), this positive illusion is functional in that it should lead the focal party to hold a favorable impression of the counterpart and to believe it pursues the same objective as its counterpart. Holding positive illusions about relational closeness should improve framing. Likewise, when a company inaccurately perceives its counterpart to be relationally distant (understating relational closeness), this negative illusion is dysfunctional in that it should lead the focal party to hold an unfavorable impression of the counterpart and to believe it pursues different objectives as its counterpart. Holding negative illusions about relational closeness should impair framing.

Hypothesis 1A (H1A). *The DPE affects the IMA, such that overestimating a CRC will have a positive impact on the image the focal party holds of the counterpart, and underestimating will have a negative impact.*

Hypothesis 1B (H1B). *The DPE affects perceived GOAL, such that overestimating a CRC will have a positive impact on the focal party's perception that it is pursuing objectives congruent with those of the counterpart, and underestimating will have a negative impact.*

When a company overstates its CRC, it frames its counterpart in a more positive way. The greater the extent to which the focal party overstates its counterpart, the more favorable should be its framing of the counterpart. Likewise, the greater the extent to which a company understates its CRC, the more unfavorable will be the way the company frames its counterpart.

Hypothesis 2A (H2A). *The EPE moderates the impact of the DPE, such that the greater the extent to which a party overestimates its CRC, the more favorable will be the image it holds of the counterpart. And the greater the extent to which a party underestimates its counterpart's relational closeness, the more unfavorable will be the image it holds of the counterpart.*

Hypothesis 2B (H2B). *The EPE moderates the impact of the DPE, such that the greater the extent to which a party overestimates its CRC the more goal congruence will be experienced with the counterpart. And the greater the extent to which a party underestimates its CRC, the less GOAL will be experienced.*

In contrast, the decision literature predicts that only the EPE should have an effect on the framing of the counterpart; the DPE should not matter:

Hypothesis 2C (H2C). *Only the* extent *of perceptual error, but not the direction, affects the IMA, such that the greater the EPE, the less favorable will be the image the focal party holds of the counterpart.*

Hypothesis 2D (H2D). *Only the EPE, but not the direction, affects perceived GOAL, such that the greater the extent of perceptual error, the less the focal party will perceive pursuing objectives congruent with those of the counterpart.*

Note that the above hypotheses allow us to distinguish between the two competing predictions from the literature. While the decision literature predicts that only the EPE should have an effect on the framing of the counterpart (H2C and H2D), the social psychology and organizational behavior literature predicts two effects: (1) a general effect of the DPE (H1) and (2) a moderating effect of the EPE that magnifies the effect of the DPE (H2A and H2B).

Our hypotheses rest on the premise that decision makers do not know how accurate they are and that they update rather slowly, so that any misperceptions persist long enough to create effects. However, we would expect that over time parties get to know each other better and hence become more perceptually accurate.

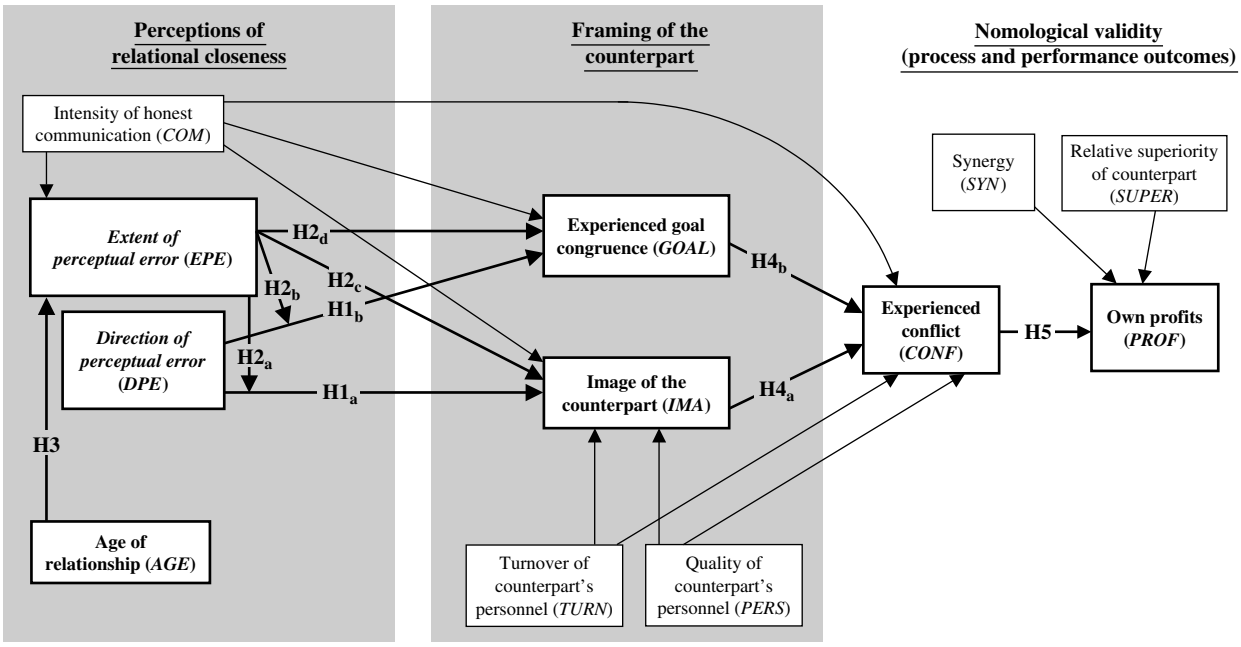
Hypothesis 3 (H3). *The older a relationship, the more perceptually accurate will be the two parties.*

To capture such dynamic effects, we would need cross-sectional data over several time periods. Given the tremendous difficulty to collect such longitudinal data in a dyad-matching survey, we rely on cross-sectional data, where we try to capture the dynamics by estimating the impact of reported relationship duration on perceptual accuracy. The constructs and hypotheses are displayed in Figure 2.

Consequences of Perceptual Error—Process and Performance Outcomes

We now turn to indirect consequences of perceptual error. Thus far, we have argued that A's perceptions of B's relational closeness impact A's image of B and its sense that their business goals are compatible. *The direct effects of perceptions are unlikely to go any further.* However, how a party frames its counterpart has economic consequences. A positive image and an experience of congruent goals enhance cooperation and

Figure 2 Conceptual Framework: Antecedents and Consequences of Perceptions, GOAL, and IMA



Notes. The effects of own (*ORC*) and counterpart's relational closeness (*CRC*), and of own (*OINV*) and counterpart's investments (*CINV*) are not displayed for clarity of exposition. Italics: constructs that are unknown to the focal company; boldface: principal constructs; otherwise: covariates.

decrease the level of conflict (Pinto et al. 1993, Xie et al. 2003). This will hold especially in service industries, because here the "product" is intangible and difficult to understand and the service provider's ability is crucial (Anderson et al. 1997, Zeithaml et al. 1990). That is, the service employee is part of the product (Kotler 2003), which should increase the importance of the image of the service provider for experienced conflict with the service provider. A company will be more ready to dispute if its image of its counterpart is negative, at the limit being quick to suspect the worst, sensitive to *another* transgression, easily aggrieved, and ready to believe the worst.

Hypothesis 4A (H4A). *The more positive party A's image is of B, the less conflict A experiences with B.*

Conflict is enhanced when parties believe they are pursuing different goals, which can put them at cross-purposes and reduce the motivation to coordinate (Tjosvold 1984).

Hypothesis 4B (H4B). *The more party A perceives goal congruence with B, the less conflict A experiences with B.*

As the large body of evidence on conflict and performance outcomes demonstrates (cf. Geyskens et al. 1999), absence of conflict is positively related to both economic and noneconomic satisfaction. Conflict creates alienation and suspicion and retards cooperation, reducing the mutual benefits from cooperation between the two parties (Frazier 1983).

Hypothesis 5 (H5). *The more conflict is experienced, the lower are own profits derived from the relationship.* H4A, H4B, *and* H5 *are included as a further test of the nomological validity of our model of the consequences of perceptual error.*

2. Model Specification and Data Collection

Data Collection

Dyadic data from two large insurance companies and their respective agents in the United States are used to test the model in Figure 2. Principal–agent relationships are of particular interest in the insurance industry because of potential moral hazard problems. Agents are much better informed than are insurers about the likely risk of prospects they recommend to the insurer, as well as the legitimacy of many of the claims filed by their customers. Because agents make their profits from commissions, there is an incentive to understate a true risk level to induce the insurer to write a policy at an acceptable price, as well as to overstate the extent and validity of claims to retain the customer's business. Such practices are of great concern to the insurer because they substantially impact the insurer's profitability in the years after a policy is issued. This motivates insurers to build close relationships with the agents (Ross et al. 1997). Agents, in turn, might be interested in relationships to differentiate their companies from other sellers (Galunic and Anderson 2000).

Table 1 Correlation Matrix of Measures

Constructs	*EPE*	*DPE*	*ORC*	*CRC*	*OINV*	*CINV*	*GOAL*	*IMA*	*COM*	*AGE*	*TURN*	*PERS*	*CONF*	*PROF*	*SYN*	*SUPER*
EPE	1															
DPE	−0.110	1														
ORC	−0.178	0.354	1													
CRC	−0.045	−0.385	0.243	1												
OINV	−0.133	0.165	0.458	0.241	1											
CINV	−0.029	−0.245	0.241	0.458	0.410	1										
GOAL	−0.283	0.416	0.660	0.267	0.440	0.222	1									
IMA	−0.264	0.344	0.580	0.270	0.232	0.125	0.655	1								
COM	−0.246	0.292	0.634	0.278	0.470	0.281	0.640	0.563	1							
AGE	−0.075	−0.063	0.010	0.079	0.021	−0.006	−0.001	0.145	0.006	1						
TURN	0.090	−0.168	−0.239	−0.097	−0.110	−0.085	−0.268	−0.417	−0.270	−0.204	1					
PERS	−0.027	0.254	0.387	0.126	0.140	0.008	0.417	0.516	0.378	−0.073	−0.297	1				
CONF	0.205	−0.343	−0.619	−0.223	−0.159	−0.074	−0.601	−0.655	−0.491	−0.048	0.297	−0.362	1			
PROF	−0.200	0.311	0.702	0.314	0.426	0.240	0.679	0.555	0.548	−0.061	−0.215	0.389	−0.570	1		
SYN	−0.183	0.255	0.367	0.116	0.286	0.074	0.380	0.276	0.303	−0.076	−0.113	0.218	−0.260	0.392	1	
SUPER	−0.186	0.306	0.547	0.157	0.305	0.087	0.514	0.560	0.469	−0.035	−0.195	0.497	−0.457	0.610	0.414	1
Range	0–24	−1, 0, 1	3–21	3–21	1–7	1–7	1–7	1–7	1–7	0–14	1–7	1–7	1–7	1–7	1–7	1–7
Mean	4.609	na	15.349	15.349	4.415	4.415	4.853	4.765	4.813	1.817	3.580	4.886	3.213	4.789	3.760	4.441
Std. dev.	2.190	na	2.548	2.548	1.391	1.391	1.413	1.161	1.258	1.272	1.898	1.31	1.321	1.341	1.489	1.212

Notes. Correlations greater than 0.08 in absolute value are significant at the 5% level.

Legend. EPE = Extent of Perceptual Error (formative indicator regarding commitment, investment in partner, mutuality, and nonconstructive criticizing). *DPE* = Direction of Perceptual Error (categorical variable based on formative indicator regarding commitment, investment in partner, mutuality, and nonconstructive criticizing; −1 = coherent negative illusion, 0 = absence of coherent illusion, 1 = coherent positive illusion). *ORC* = Own Relational Closeness: Level of Relational Closeness as exhibited by the Focal Party (without investment in partner). *CRC* = Counterpart's Relational Closeness: Level of Relational Closeness as exhibited by the Counterpart (without investment in partner). *OINV* = Own Investment in Partner: Level of Investment in Partner as exhibited by the Focal Party. *CINV* = Counterpart's Investment in Partner: Level of Investment in Partner as exhibited by the Counterpart. *AGE* = Age of Relationship. *COM* = Intensity of Honest Communication. *GOAL* = Goal Congruence. *IMA* = Image of the Counterpart. *TURN* = Turnover of Counterpart's Personnel. *PERS* = Quality of Counterpart's Personnel. *CONF* = Experienced Conflict. *PROF* = Profits (current and expected). *SYN* = Synergy. *SUPER* = Superiority of Counterpart relative to Competitors.

A survey instrument was developed through literature review and field interviews with selected agents and personnel from the two insurance writers. The two insurers provided a representative random sample of their agents with the name of the person most knowledgeable about the relationship with the insurer, both for the underwriter and the agent. Because these are typically small companies, the person identified was usually the agency's owner. Questionnaires were sent to matched pairs, asking the insurer about the named agent and the agent about the named insurer. Cooperation was requested by the researchers, with an accompanying letter from the insurer. Both letters guaranteed confidentiality to all participants. Respondents were promised a generalized summary of the findings; a followup mailing was made a month later.

The larger of the two insurance writers, a property/casualty insurer, provided lists of 452 pairs that generated a response rate of 54% among agents and 71% among company personnel. The lesser-known life insurer provided lists for 151 pairs that enjoyed a response rate of 53% for agents and 82% for company personnel. Ultimately, there are 255 dyads (matched insurer–agent pairs) for which both sides provided completed questionnaires. Of these 255 pairs representing 510 focal actors, 484 are complete on every measure invoked in Figure 2. Model estimation is based on these 484 observations; the measurement analyses are based on the full sample.

Measures and Measurement Analysis

Almost all items were measured on 7-point Likert scales, with the end points 1 = strongly disagree and 7 = strongly agree. Exceptions were the IMA and the quality of counterpart's personnel, which were measured on 7-point semantic differential scales, and the age of the relationship, measured in years/months. Items and the statistics of the measurement analyses are given in the appendix (scales are original to this research if not indicated otherwise). For all constructs invoked in Figure 1, principal component analyses were conducted to ensure unidimensionality. Cronbach alphas (based on the full sample) range from 0.70 to 0.91. Confirmatory factor analyses were conducted separately for the companies and agents samples to demonstrate the validity of the measures. Because large samples and many items per construct lead the chi-square statistic to reject valid models (Bagozzi and Yi 1988), we relied more on the adjusted goodness-of-fit index (AGFI). AGFIs ranged from 0.91 to 1.00. For all reflective measures, we assured discriminant and convergent validity following Bagozzi

et al. (1991) procedure. The correlation matrix of measures is displayed in Table 1. Complete details for each of the measures are shown in the appendix.

The Measures of Perceptual Error (Direction and Extent of Perceptual Error). Perceptual error measures how well party A "reads" party B's relational closeness, and thus concerns any of one party's characteristics that reflect how close is the relationship, or, in Macneil's (1980) terms, how strong and well developed is the "relational contract." In B2B relationships, relational closeness is manifested in relational norms and behaviors. Error and accuracy matter in perception of relational norms (such as commitment level or concern for the other's welfare, hereafter called *mutuality*) and relational behaviors (such as transaction-specific investment or continually blaming the other side when problems arise). However, a company that is accurate in its perception of the counterpart's commitment is not necessarily also accurate in its perception of the counterpart's level of transaction-specific investments. This suggests that perceptual error should be captured by a formative indicator rather than a reflective measure, indexing the *overall* level of how accurately a company reads its counterpart with respect to the different aspects of the relationship.

Our conceptualization of perceptual error as a formative indicator (a composite over multiple facets) differs from the psychological conceptualization (a single facet) in an important way: In social psychology, perceptual accuracy is assessed with respect to only one characteristic; say, commitment. Perceptual accuracy can thus be readily categorized into positive illusion (overstating commitment), no illusion (accurate perception), and negative illusion (understating commitment). One variable reflects both the extent and the DPE. In contrast, our perceptual error conceptualization captures several relationship aspects at the same time. This allows us to separate the *extent* to which a party is perceptually accurate (overall) from its *direction* of perceptual error (overall).

To see this, consider the following example: Party A overestimates party B's commitment level but underestimates party B's level of transaction-specific investments. The formative indicator of perceptual error sums up the absolute deviation of each estimation, yielding a high score of perceptual error. By removing the sign of the deviations, the measure captures the *extent* of misreading *irrespective of its direction*. We call this the EPE. Another variable can now be constructed to capture the *direction* of perceptual error *irrespective of its extent*. The direction of perceptual error is computed by summing up both estimations (party A's assessment of B's commitment and transaction-specific investments) and maintaining the direction of perceptual inaccuracy (i.e., over- or underestimation). This variable thus balances the overestimation of party B's commitment level by the underestimation of party B's level of transaction-specific investments. The resulting score would be zero, indicating that party A overall neither overstates nor understates party B. We call this state the *absence of a coherent illusion*.

In contrast, a *coherent positive illusion* would be indicated if party A overstates party B to a greater extent than it understates party B (a positive score for EPE). Similarly, a *coherent negative illusion* (party A understates party B to a greater extent than it understates party B) would be indicated by a negative score for extent of perceptual error. Furthermore, by categorizing the extent of perceptual error variable into -1 for negative scores, 0 for 0 scores, and $+1$ for positive scores, the resulting categorical variable captures the DPE and is almost insensitive to the *extent* of the error. A coherent negative illusion (-1) implies perceptual inaccuracy, as does a coherent positive illusion ($+1$). Absence of a coherent illusion (0) includes both inaccurate and accurate perceptions.

As argued above, it is appropriate to conceptualize the EPE as a formative measure. The validity of a formative indicator depends on the scope of the latent variable (Nunnally and Bernstein 1994). Failure to consider all facets of the construct will lead to an exclusion of relevant indicators, and thus exclude part of the construct itself (Bollen and Lennox 1991). Practically, however, it is impossible to consider all facets of relational closeness. We therefore focus on the four major aspects mentioned above. While our EPE measure might be incomplete, statistically significant effects would provide evidence that the aspects considered in the formative measure indeed tap important aspects of a B2B relationship.

EPE. For each of the four constructs (commitment, mutuality, specific investments in the partner, and nonconstructive criticizing), parties reported their own states, *which are unknown to the other side*, and their best estimate of the counterpart's state. Following the social perception literature, we treat each party's report (to us, in confidence) of its own state as truth. We consider as accurate perceivers those whose estimates match what their counterparts report (only to us and under assurance of confidentiality). Of course, a party cannot know its accuracy, as it does not have access to the other side's statements (see Figure 1). Thus we measure the focal party's EPE as its estimate of the other side's state minus the other side's report of its own state. To assess the overall extent of perceptual accuracy regardless of the direction of error (overstating or understating the counterpart), we remove the sign of the difference between perception (focal party's estimate of the counterpart's state) and truth (counterpart's self-reported state). We

now turn to the four constructs underlying our formative indicator.

Commitment is probably the most influential and agreed-upon relational characteristic in B2B relationships. Both sides—the insurance writer and the agent—are asked their level of commitment to their relationship (own commitment), and how committed they *think* the counterpart is to the relationship (perceived commitment). The EPE regarding commitment is computed as the focal party's perception of the counterpart's commitment minus the true commitment of the counterpart in absolute values. The composite scales' reliabilities are computed after Peter et al. (1993), yielding a Cronbach alpha for the extent of perceptual accuracy regarding the companies' commitment of $\alpha_{\text{Companies}} = 0.79$, and for the agents a Cronbach alpha of $\alpha_{\text{Agents}} = 0.85$. Six is the largest difference possible between two 7-point scales: this will apply to all four elements of perceptual accuracy.

Mutuality denotes the degree of perceived distributive fairness regarding the outcomes; that is, the absence of "...perceptions that one side constantly gets too good a deal" (Macneil 1980, p. 45). We operationalized mutuality as the focal party's concern for the counterparts' profitability, as opposed to just one's own profitability. Mutuality thus denotes how much a party *cares* about its counterparts financial well-doing, whereas GOAL denotes the degree to which both parties *share* the same business objectives. The EPE about mutuality is the absolute difference between the focal party's perception of the counterpart's mutuality and own mutuality as rated by the counterpart ($\alpha_{\text{Companies}} = 0.75$, $\alpha_{\text{Agents}} = 0.83$).

Investment in one's partner is a *transaction-specific investment* (Williamson 1985). The insurer's investment in an agent in terms of dedicating personnel and tuning methods of operation to the agent is one means to establish close relationships. From the agents' perspective, investing in personnel and special methods of operation geared toward the insurer provides protection from territorial competition (Anderson and Weitz 1992). For each side, the EPE regarding the investment in the partner is computed as one's perception of investment by the counterpart (perceived investment) minus actual investment in the partner as reported by the counterpart, in absolute value ($\alpha_{\text{Companies}} = 0.70$, $\alpha_{\text{Agents}} = 0.72$).

Nonconstructive Criticizing. Scheer and Stern (1992) argue that the effect of an influence attempt depends not on the explicit content of the attempt, but on perceptions of the influence attempt. Negatively framed influence attempts result in more damaging attitudes toward the influencer than do positively framed influence attempts. We measured each side's general tendency in this relationship to nag and criticize the counterpart. The extent of perceptual error about nonconstructive criticizing is computed as the focal party's perception of the counterpart's nonconstructive criticizing (perceived nonconstructive criticizing) minus the counterpart's actual nonconstructive criticizing, in absolute value ($\alpha_{\text{Companies}} = 0.73$, $\alpha_{\text{Agents}} = 0.80$).

Discriminant Validity. To ensure that the eight component scales (underwriter and agent for each of the four constructs of commitment, investment in partner, mutuality, and nonconstructive criticizing) indeed constitute eight different aspects of the relationship, discriminant validity was established following the procedure of Bagozzi et al. (1991). In combinations of two-construct models, a significant difference in model fit was obtained between models without constraints and models with the interconstruct correlation restricted either to one (discriminant validity) or to zero (convergent validity). Bollen and Ting (2000) propose the so-called tetrad test for the validity of formative indicators. Testing the four difference components (commitment, investment in partner, mutuality, and nonconstructive criticizing) with this test establishes the formative nature of the underlying construct, extent of perceptual accuracy. The formative indicator of EPE is constructed as the sum of the absolute values of the four components. It is coded such that higher scores reflect greater error: the scale ranges from 0 to 24.

Nomological Validity. As noted earlier, our conceptualization of perceptual error rests on two premises: (1) Actors do not know how accurate or inaccurate their perceptions are, and (2) they update rather slowly, so that any misperceptions persist long enough to create positive or negative effects. Table 2 presents evidence that this is so. Two single-item indicators index how well each company *thinks* it understands its counterpart. These subjective accuracy measures do not correlate with our objective measure of extent of perceptual error. Another item indicates the company tries to take the counterpart's perspective into account, but even these companies don't appear to be more accurate. In short, both insurers and agents appear, by our measure, to be fairly ignorant about how well they can read the relational closeness of their opposite numbers. This implies that our objective perceptual error measure has the desirable property of being unknown to the perceiver. At the same time, perceivers appear to be (erroneously) confident that they are accurate in their perceptions of their counterparts, as is indicated by the high means of the subjective perceptual accuracy measures (all three subjective accuracy means are significantly above 4.8; the scale midpoints are 4).

Another way to test our perceptual error measures for nomological validity is based on the self-serving attribution bias. According to the self-serving

Table 2 Correlation Matrix of Objective and Subjective Perceptual Error

Constructs	*EPE*	*FEEL*	*PERSP*	*KNOW*
EPE	1			
FEEL	−0.025	1		
PERSP	−0.025	0.334	1	
KNOW	−0.177	0.514	0.277	1
Range	0–24	1–7	1–7	1–7
Mean	4.609	5.510	4.951	5.185
Upper confidence interval ($\alpha = 5\%$)	4.801	5.611	5.056	5.317
Lower confidence interval ($\alpha = 5\%$)	4.416	5.409	4.845	5.053

Note. Correlations greater than 0.08 in absolute value are significant at the 5% level.

Legend. EPE = Objective Extent of Perceptual Error (formative indicator regarding commitment, investment in partner, mutuality, and nonconstructive criticizing). *FEEL* = We/I think we have a good idea about this agent's/company's feelings about us. *PERSP* = We/I consciously try to take the agent's/company's perspective when we make suggestions or develop new programs. *KNOW* = We/I really don't know what this agent/company thinks about our relationship (reversed coding).

attribution bias, people tend to attribute successes to internal causes (e.g., own skill and effort), and failures to external causes (e.g., lack of skill or effort of others in joint projects; Bettman and Weitz 1983). So, if the self-serving attribution bias holds, decision makers should be inclined to attribute successes in their relationship with a partner to their own commitment, concern for mutuality, investment in the partner, and absence of nonconstructive criticizing. Conversely, they should attribute failures in their relationship to the counterpart's lack of commitment, lower concern for mutuality, lower investments of the counterpart in the relationship, and greater nonconstructive criticizing by the partner. Thus, in general, parties will believe that they are more committed than their counterparts, show more mutuality than does their counterpart, have invested more in their counterpart than their counterpart has invested in them, and do less nonconstructive criticizing than do their counterparts. So we expect that parties, on average, will underestimate their counterpart's relational closeness rather than overestimate it. We tested this expectation for each of the four constructs: commitment, mutuality, investment in partner, and nonconstructive criticizing. Specifically, we computed the difference between the focal party's perception of the counterpart's characteristics/behaviors and the counterpart's own characteristics/behaviors. Testing these four scores against zero shows that three of them are significantly less than zero, indicating that parties indeed tend to believe they are relationally closer than their counterparts (see Table 3).

DPE: Coherent Positive and Negative Illusions. The measure of coherent illusions is intended to capture the *overall* DPE regardless of a specific error level. To this end, we summed the previous four difference scores of truth (the counterpart's self-reported states) and perception (the focal party's estimates of the counterpart's states), but this time keeping the sign. The resulting illusion score ranges from −24 (maximum negative illusion) over 0 (no illusion) to +24 (maximum positive illusion). We then categorized this illusion score into −1 (negative illusions), 0 (no illusions), and +1 (positive illusions). A party was classified as coherently underestimating its CRC (coherent negative illusion) when its illusion score was significantly lower than 0 at the 0.001% level, and was classified as coherently overestimating its CRC (coherent positive illusion) when its illusion score was significantly higher than 0 at the 0.001% level. In line with the self-serving attribution bias (i.e., the tendency to attribute successes to own effort and failures to lack of effort of the counterpart), we find 55.6 % coherent negative illusions, 10.3% absence of coherent illusions, and 34.0% coherent positive illusions.

Other Key Constructs

ORC and CRC. It is possible that a highly relational focal organization finds it comforting simply to impute congruent goals and a favorable image to the counterpart, without verification. While this would hardly constitute sound business practice, it cannot

Table 3 Self-Serving Attribution Bias in Perceptions of Relational Closeness

	Focal party's perception of CRC − counterpart's ORC as reported to these investigators			
Statistics	Regarding commitment	Regarding mutuality	Regarding investment in partner	Regarding nonconstructive criticizing (reverse coded)
Mean	−0.222	−0.538	−0.294	0.0522
t-test against 0	3.838	8.078	4.077	0.743
p	<0.0001	<0.0001	<0.0001	n.s.

Note. Negative mean values indicate that focal parties believe they are relationally closer to their counterpart than their counterpart is to them.

be ruled out. Therefore, we include as a covariate the level of *ORC* and the level of the *CRC*. The former is the sum of the four indicators of relational closeness except investment in partner, i.e., own commitment, own mutuality, and own nonconstructive criticizing. The tetrad test on this formative indicator establishes the formative nature of this scale. The *CRC* is constructed from the counterpart's indicators (again, all indicators except investment in partner), which also pass the tetrad test. *ORC* and *CRC* are expected to have a positive effect on the image a focal party holds of *IMA*, on perceived *GOAL*, and on *PROF* derived from the relationship, and a negative effect on *CONF* in the relationship. The level of *OINV* and *CINV* were entered as separate covariates. This is because as Anderson and Weitz (1992) have shown, investments in partner are used as pledges in a relationship, and hence the level of OINV has different effects on the relationship than do the other relational aspects.

AGE. Because the agencies are typically small companies, we expected agents to provide more reliable information regarding relationship age, and therefore asked agents how many years and months they had been working with the insurer.

GOAL is the belief that the counterpart shares the focal party's objectives (John and Reve 1982) and was measured on the overall level. The *image the focal party holds about the counterpart* (*IMA*) was measured on six semantic differentials regarding interest in the focal party, flexibility, consistency, reasonableness, forgivingness, and trustworthiness. A low value (disinterested, inflexible, unforgiving, inconsistent, not trusting, and unreasonable) is a negative image of a company that could be personified by adjectives such as *obnoxious*.

CONF means disagreeing frequently and intensely over important issues (Brown and Day 1981). Because perceived conflict has considerable inertia (Pinkley and Northcraft 1994), two items about past conflict were included in this measure.

PROF. Unfortunately, the insurance companies and their agencies did not assent to reveal specific numerical data on their profits. Thus we had to rely on a proxy measure for profits that was operationalized as current and expected future profits measured on 7-point Likert scales. As a validation measure, the insurer provided an estimate of the sales volume generated in the relationship, which correlates with the profits measure at the 10% level ($p < 0.05$). Because profits and sales-volume are not synonymous (especially in the insurance industry), it is not surprising that this correlation is not higher.

Model Specification: Other Factors Influencing Key Variables of Interest

So far, we have considered how the consequences of perceptual error lead to an impact on conflict and on a company's profits. The principal variables are represented in Figure 1 in boldface. To minimize estimation bias because of model misspecification, we include covariates likely to be correlated with the variables of interest. All variables that the focal party cannot know are italicized.

The COM. Given that parties cannot know how accurate they are in their perceptions of their counterpart, one of the most effective means to enhance perceptual accuracy is intensive communication. However, communication is effective only if the parties involved act honestly. Hence, we expect the degree of honest communication (i.e., free of attempts to deceive the other party) between the two parties to be negatively associated with the *EPE* of either party. Furthermore, the more one interacts with the other party, the more likely misunderstandings are to be clarified and potential disagreement over goals to be resolved (Mohr and Nevin 1990). Hence, the more two parties A and B engage in honest communication, the more positive will be A's image of B (*IMA*), and the higher will be perceived *GOAL*. Finally, we expect the intensity of honest communication to have its own influence on the level of *CONF* experienced by both parties (Dwyer et al. 1987, Macneil 1980). Honest communication is regarded as the most effective remedy for conflict between parties. Hence, the more two parties engage in honest communication, the less conflict they will experience. The *COM* was measured by asking each side to rate how much the parties engage in open information exchange.

The Counterpart's Personnel (*PERS*). In the services sector, service personnel "create the product" (Zeithaml et al. 1990), so the quality of party B's personnel will be critical, particularly for party A's image of B (*IMA*). The higher the counterpart personnel's quality in terms of experience and training, the more positive A's image will be of B. *Quality of partner's personnel* (*PERS*) is indexed by ratings of perceived experience, training, knowledge, and communication skills of the counterpart's personnel.

A related factor is the *TURN*. When the other party frequently changes faces, it is difficult for the focal party to develop personal bonds in the relationship. This should have a negative impact on the image the perceiver holds of the counterpart (*IMA*). Turnover rate of the counterpart's personnel was measured on a single item reflecting change in the people who deal with the focal party.

Turnover rate and personnel quality should also influence the level of perceived conflict for similar reasons (Thomas 1992). We expect turnover rate of the

counterpart's personnel to positively impact conflict, and the counterpart's personnel quality to negatively influence perceived level of conflict.

Competitive Endowments (*SYN and SUPER*). The performance of a relationship will significantly determine the *PROF* enjoyed by the parties involved. Performance depends on the counterpart's endowments, regardless of the state of the relationship. In distribution channels, a critical factor is *SYN* achieved through complementarity of products, territories, and operations between the parties. Both parties—companies and agents—report to what extent synergies are created by the counterpart's products (for the company, this means the agent's other brands). Synergies should have a positive impact on profits derived from the relationship.

Competitive advantages create superior performance outcomes. We include a general measure of competitive advantage, *relative superiority* (*SUPER*) of the counterpart compared to other potential partners, which should impact profits positively. The insurance companies are asked about the sales effort of the agent relative to other agents (territorial coverage and sales force), whereas the agent reports on the company's products and management superiority relative to other insurance companies.

3. Model Estimation and Hypothesis Testing Results

We formulated a system five equations based on Figure 2:

$$EPE_i = \beta_{1,0} + \beta_{1,1}AGE_i + \beta_{1,2}COM_i + \varepsilon_{1,i}$$

$$\begin{aligned} GOAL_i = {} & \beta_{2,0} + \beta_{2,1}EPE_i + \beta_{2,2}DPE_i + \beta_{2,3}EPE_i * DPE_i \\ & + \beta_{2,4}COM_i + \beta_{2,5}ORC_i + \beta_{2,6}CRC_i \\ & + \beta_{2,7}OINV_i + \beta_{2,8}CINV_i + \varepsilon_{2,i} \end{aligned}$$

$$\begin{aligned} IMA_i = {} & \beta_{3,0} + \beta_{3,1}EPE_i + \beta_{3,2}DPE_i + \beta_{3,3}EPE_i * DPE_i \\ & + \beta_{3,4}TURN_i + \beta_{3,5}PERS_i + \beta_{3,6}COM_i \\ & + \beta_{3,7}ORC_i + \beta_{3,8}CRC_i + \beta_{3,9}OINV_i \\ & + \beta_{3,10}CINV_i + \varepsilon_{3,i} \end{aligned}$$

$$\begin{aligned} CONF_i = {} & \beta_{4,0} + \beta_{4,1}GOAL_i + \beta_{4,2}IMA_i + \beta_{4,3}PERS_i \\ & + \beta_{4,4}COM_i + \beta_{4,5}TURN_i + \beta_{4,6}ORC_i \\ & + \beta_{4,7}CRC_i + \beta_{4,8}OINV_i + \beta_{4,9}CINV_i + \varepsilon_{4,i} \end{aligned}$$

$$\begin{aligned} PROF_i = {} & \beta_{5,0} + \beta_{5,1}SYN_i + \beta_{5,2}SUPER_i + \beta_{5,3}CONF_i \\ & + \beta_{5,4}ORC_i + \beta_{5,5}CRC_i + \beta_{5,6}OINV_i \\ & + \beta_{5,7}CINV + \varepsilon_{5,i} \end{aligned}$$

To ensure that the data from the two insurance companies could be combined, and that the insurance companies and their agents could be pooled, Chow tests were performed separately on each of the equations for each of the four data sets (insurers and agents for each of the two companies). The results indicate that the four data sets do not differ with respect to intercepts and slopes; hence the four data sets were pooled for further analysis. The entire system was estimated simultaneously using two stage least squares. Because the measurement scales differ in terms of their ranges, we report standardized estimates in Table 4 to allow for direct comparisons of the magnitudes of effects.

Antecedents and Consequences of Perceptual Error

The effect of the direction of perceptual error (*DPE*, i.e. coherent illusions) on the image of the counterpart (*IMA*) is $\beta_{3,2} = 0.320$, and on goal congruence (*GOAL*) is $\beta_{2,2} = 0.426$ (estimated at the mean of perceptual error), indicating that overstating the counterpart's relational closeness positively impacts the image a party holds of the counterpart and experienced GOAL. Likewise, underestimating the CRC has a strong negative impact. H1A and H1B are thus supported. The moderator variable *EPE* itself has a negative effect on the image of the counterpart ($\beta_{3,1} = -0.484$) but not on GOAL, demonstrating that the greater the perceptual error (regardless of direction of error), the more unfavorable the image the focal party holds of its counterpart. The effect of the DPE is moderated by the EPE, for favorability of image (*IMA* $\beta_{3,3} = 0.262$) and for goal congruence (*GOAL* $\beta_{2,3} = 0.296$). These estimates support H2A and H2B, which state that the more parties over- or underestimate their CRC, the more favorable or unfavorable is the image they hold of their counterpart and the more or less GOAL they experience with their counterpart. H2C and H2D, which state that only the EPE should have an influence on the framing of the counterpart, are thus rejected.

Taken together, these results indicate that the direction of perceptual error impacts the framing of the counterpart. When a party overall understates its CRC (55.6% suffer from such a coherent negative illusion), it frames its counterpart in an unfavorable way. When the focal party overall overstates its CRC (34.0% hold such a coherent positive illusion), it frames its counterpart in a favorable way. And the greater the EPE, the stronger the effects. So, a party is better off erroneously believing the counterpart to be highly relational than to accurately perceive the counterpart as moderately or little relational.

In terms of the antecedents of perceptual error, the older the relationship becomes (*AGE*), the less parties misread their CRC (*EPE* $\beta_{1,1} = -0.073$), supporting H3. Although parties do not update their perceptions of the counterpart immediately, they do improve their perceptual accuracy over time. Also as expected, the

Table 4 The Impact of Perceptual Error on GOAL, IMA, and Process and Performance Outcomes; Standardized SUR Estimates

Predictor Variables	Extent of perceptual error (*EPE*)	Image of the counterpart (*IMA*)	Goal congruence (*GOAL*)	Experienced conflict (*CONF*)	Own profits (*PROF*)
Intensity of honest communication (*COM*)	−0.269***	0.028	0.121**	−0.057	
Age of relationship (*AGE*)	−0.073*				
Extent of perceptual error (*EPE*)		−0.484*	−0.044		
Direction of perceptual error (*DPE*): Coherent illusion		0.320***	0.426***		
Interaction *EPE* × *DPE*		0.262***	0.296***		
Own relational closeness (*ORC*)		0.121**	0.246***	−0.234***	0.246***
Counterpart's relational closeness (*CRC*)		0.332***	0.340***	0.036	0.080*
Own investment in partner (*OINV*)		−0.115**	0.024	0.208***	0.124**
Counterpart's investment in partner (*CINV*)		0.090*	0.120***	0.036	0.027
Turnover of counterpart's personnel (*TURN*)		−0.162***		0.002	
Quality of counterpart's personnel (*PERS*)		0.261***		0.064	
Image of the counterpart (*IMA*)				−0.344*	
Goal congruence (*GOAL*)				−0.505**	
Experienced conflict (*CONF*)					−0.364**
Synergy (SYN)					0.075*
Counterpart's relative superiority (*SUPER*)					0.224***
Degrees of freedom	2,481	10,473	8,475	9,474	7,476
Adjusted R^2	7.8%	52.1%	66.1%	49.4%	59.2%

*$p < 0.05$ (one tailed); **$p < 0.01$ (one tailed); ***$p < 0.001$ (one tailed).

more the two parties engage in honest communication (*COM*), the more accurate is one party's perception of the counterpart (*EPE* $\beta_{1,2} = -0.269$).

Later Stages in the Causal Chain

How one frames the counterpart (*GOAL* and *IMA*) impacts the level of CONF. In accordance with H4A, the more positive the *IMA*, the less conflict (*CONF*) is experienced in the relationship ($\beta_{4,2} = -0.344$). Consistent with H4B, the greater is perceived *GOAL*, the less conflict is experienced ($\beta_{4,1} = -0.505$). In turn, the intensity of *COM* leads parties to share the same business objectives ($\beta_{2,4} = 0.121$). However, the COM has no impact on the IMA or the level of CONF. While communication has some impact on GOAL, it apparently loses its impact on conflict once the influence of the framing of the counterpart on conflict is taken into account. This pattern is replicated by two other variables, *TURN* and *PERS*. While, as predicted, turnover has a negative impact on the image of the counterpart ($\beta_{3,4} = -0.162$), and quality of the personnel has a positive impact ($\beta_{3,5} = 0.261$), both variables lose their impact on conflict when accounting for the influence of IMA on conflict.

As per H5, conflict (*CONF*) dampens perceived profitability (*PROF* $\beta_{5,3} = -0.364$). Furthermore, each party sees the relationship as more profitable to itself (*PROF*) the more it perceives SYN between insurers' products and agents' portfolios (*SYN* $\beta_{5,1} = 0.075$), and the more its sees the counterpart as being superior relative to competitors (*SUPER* $\beta_{5,2} = 0.224$).

The control variables of the actual level of relational closeness as exhibited by the involved parties impact the functioning of the relationship. Specifically, the focal party's *ORC* positively impacts the image of the counterpart ($\beta_{3,7} = 0.121$), perceived GOAL ($\beta_{2,5} = 0.246$) and profits derived from the relationship ($\beta_{5,4} = 0.246$) and negatively impacts experienced conflict ($\beta_{4,6} = -0.234$). Likewise, the counterpart's relational closeness (*CRC*) positively impacts the IMA ($\beta_{3.8} = 0.332$), perceived goal congruence ($\beta_{2.6} = 0.340$), and profits derived from the relationship ($\beta_{5.5} = 0.080$). The level of investments in the partner shows a different pattern, though. In accordance with Anderson and Weitz' findings (1992) that investments in a partner serve as pledges, the level of *OINV* has a negative impact on the IMA ($\beta_{3.9} = -0.115$), indicating that the more the focal party makes itself dependent on the counterpart, the less favorably it views the counterpart. Similarly, *OINV* has a positive impact on experienced conflict ($\beta_{4.8} = 0.208$), but also increases profits ($\beta_{5.6} = 0.124$). The counterpart's level of investment in the focal party (*CINV*) has a positive impact on the image the focal party holds of the counterpart ($\beta_{3.10} = 0.090$) and on how much the focal party experiences GOAL with the counterpart ($\beta_{2.8} = 0.120$).

4. Discussion

In accordance with the social perception view, adapted to standing B2B relationships, we find that

the perception of relational closeness largely determines the functioning of a business relationship. How a focal party perceives the CRC influences how the focal party frames the other company. When a focal party neither overstates nor understates its CRC on an overall basis (which can happen merely because the errors are in opposite directions), the extent of perceptual error only slightly worsens how the focal party frames the counterpart, in line with the assumption in the behavioral and analytic decision literature that perceptual error should always be detrimental. However, when a party overstates or understates its CRC overall, the situation changes dramatically. In line with the social psychology view and Weick's (1995) position that positive illusions can be functional, erroneously overstating the CRC strongly improves the image the focal party holds of the counterpart and its perception of GOAL. And erroneously understating the CRC has a strong negative effect on these factors. Given that most companies understate their CRC (55.6%), which hurts their relationship, Weick's (1995) focus on the benefits of positive illusions provides a distorted picture of the effects of perceptual error.

Furthermore, the greater the EPE, the stronger are the effects of coherent illusions. When a party misperceives the counterpart as relationally closer than it actually is (a coherent positive illusion), its positive illusion is functional. Therefore, becoming perceptually more accurate (that is, perceiving the counterpart correctly as less relational) worsens one's framing of the counterpart, resulting in inferior functioning of the relationship. The focal party is better off maintaining its illusion. We find this to be the case for 34% of all examined relationships. In contrast, misperceiving the counterpart as relationally more distant than it actually is, a coherent negative illusion, is dysfunctional. In this pessimistic zone, correctly perceiving the counterpart would benefit the relationship's functioning. We find this to be the case for 55.6% of all examined relationships. The focal party is better off correcting its errors. These effects occur outside a company's awareness because decision makers erroneously believe that they accurately understand their counterparts. It might even be difficult to convince them otherwise, given that decision makers are also very confident in their erroneous belief that they accurately perceive their business partner. This argument is also in accordance with our speculation that a self-serving attributional style is partly responsible for coherent negative illusions being more frequent than coherent positive illusions.

It should be noted that positive illusions are not always beneficial. Positive illusions about specific objectives such as debt service, cash flow, and meeting the payroll are without doubt detrimental because a manager must have an accurate understanding of his or her organization's financial performance (Weick 1995). But when characteristics are less easily observable, such as relational closeness of the business partner, positive illusions do have a beneficial effect on the functioning of the relationship.

Framing is not simply a matter of politeness or social niceties. Both the image a firm holds about the counterpart and the GOAL it experiences in the relationship influence how frequently and intensely the focal firm will disagree with the other party. Conflict, in turn, drives how profitable the relationship will be for the focal party. Whether the firm considers it important or not to know its business partner well, perceptual error in reading the counterpart has powerful consequences for the economic success of the relationship. Perceptual error can be decreased by communicating frankly and intensely. Firms also become more accurate over time, suggesting they use the time to learn to read each other better.

Our results also point to other ways to improve relationship functioning. One way to improve one's image is to employ highly competent liaison personnel and keep them in the relationship (low turnover). It is noteworthy that personnel turnover and personnel quality (as well as candid communication) have no direct effect on experienced conflict in the relationship. Conflict is determined by the image (favorable versus negative) of the counterpart and by experienced GOAL. Apparently, the framing effect of the firm's image of the counterpart is so strong that it dominates any other factor. Stated differently, when focal firms think their business partner is obnoxious (disinterested, inflexible, unforgiving, inconsistent, not trusting, and unreasonable), conflict is preprogrammed.

Of course, there are limitations of our study. Our model is an as-if model of processes that unfold slowly. Directly testing the causal links would require longitudinal dyadic data, a daunting task. Furthermore, the empirical test is limited to one type of B2B relationship (distribution channels) in one industry (insurance). Personification processes might be more likely to occur in services than in products, and inaccurate perceptions of relational closeness might be more likely in the insurance industry because of moral hazard problems than in other industries. In addition, the domain of perceptual accuracy is the entire relationship: By sampling four elements (two norms, two behaviors), this research might have overlooked other types of perceptual accuracy. Finally, the proposed psychological mechanisms are not directly measured but are inferred from state variables; hence, any causal interpretation can only be preliminary. For example, a reversed causality interpretation would suggest that outcomes cause the framing of the counterpart, which in turn drives perceptions and the degree of candid communication (Geyskens et al. 1999).

However, there are several reasons to believe that perceptions and expectations drive behavior, rather than the other way round. First, if outcomes drove performance, which in turn drove perceptions, perceptions should always be accurate because parties are accurate in assessing their outcomes. Also, it could not be the case that parties believe they are accurate when, in fact, most of them are underestimating their counterparts' relational closeness. Second, apart from many laboratory demonstrations of the perceptions—behavior link (e.g., Zanna and Pack 1975, Snyder and Swann 1978), such mechanisms have also been demonstrated in a quasi-experimental longitudinal field study (Seaver 1973). Similarly, that candid communication causes an increase in perceptual accuracy has been shown by Swann and Ely (1984) in the laboratory. Finally, the effects of over- and underestimation of the CRC, as well as the effects of the framing of the counterpart, are not merely the result of simply imputing a favorable image and GOAL to the counterpart based on high levels of ORC, as these effects are controlled for.

Future Research

Our results confirm findings from previous research that perceptions are a strong determinant of the functioning of B2B relationships. Perceptions matter not only in terms of how accurately a party perceives its CRC, but also how it frames its counterpart in terms of the image it holds of the counterpart and perceived GOAL. How a focal party frames its partner is a strong determinant for how much conflict is experienced in the relationship and thus, ultimately, how much profit is realized. This is exemplified by the fact that, once the impact of how a focal party frames its counterpart is taken into account, other factors such as candid communication, quality, and turnover of liaison personnel lose their impact. Taken together, these findings suggest that theories of B2B relationships ought to put more emphasis on the perceptual mechanisms that influence how business parties interact.

Given the importance of perceptions in the development of B2B relationships, it is still unclear what drives these perceptions. For example, why do the majority of companies understate the relational closeness of their business partners? We speculated that one factor is self-serving attributions; that is, a party's tendency to attribute successes to own effort and failure to the lack of effort of the counterpart. How can these attributional tendencies be counteracted? And, apart from honest communication and time, are there other factors that determine how accurately a party perceives its counterpart? What economic factors drive the image a party holds of its counterpart? In short, we believe there is considerable potential for future research to uncover the perceptual mechanisms in B2B relationships.

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Appendix. Items and Measurement Analyses

Measurement Characteristics	Companies	Agents
	Own Commitment (after Anderson and Weitz 1992)	
	1. We have a strong sense of loyalty to this agent/ producer. 2. We are continually on the lookout for another agent/ producer to replace this agent/producer. (reverse) 3. We expect to be working with this agent/producer for some time. 4. We are willing to dedicate whatever people and resources it takes to grow sales for this agent/ producer. 5. Any concessions we make to help out this agent/ producer will even out in the long run.* 6. We are quite willing to make sacrifices to help out this agent/ producer from time to time.*	1. I have a strong sense of loyalty to this company. 2. I am continually on the lookout for another company to replace this company's products. (reverse) 3. I expect to be working with this company for some time. 4. I am willing to dedicate whatever people and resources it takes to grow sales for this company. 5. Any concessions I make to help out this company will even out in the long run.* 6. I am quite willing to make sacrifices to help out this company from time to time.*
Range	1 = strongly disagree	7 = strongly agree
Total α	0.90	
α	0.92	0.88
χ^2(df)	37.35 (8) $p < 0.05$	13.66 (8) $p > 0.05$
AGFI	0.91	0.96

Appendix. (Cont'd.)

Measurement Characteristics	Companies	Agents
	Perceived Commitment (after Anderson and Weitz 1992)	
	1. This agent/producer has a strong sense of loyalty to us. 2. This agent/producer is continually on the lookout for a company to replace us. (reversed) 3. This agent/producer expects us to be working with them for a long time. 4. This agent/producer is willing to dedicate whatever people and resources it takes to grow our sales. 5. This agent/producer feels that any concessions they make to help us will even out in the long run.* 6. This agent/producer is quite willing to make sacrifices to help us out from time to time.*	1. This company has a strong sense of loyalty to me. 2. This company is continually on the lookout for other agents to replace me. (reversed) 3. This company expects me to be working with them for a long time. 4. This company is willing to dedicate whatever people and resources it takes to grow my sales. 5. This company feels that any concessions they make to help me out will even out in the long run.* 6. This company is quite willing to make sacrifices to help me out from time to time.*
Range	1 = strongly disagree	7 = strongly agree
Total α	0.90	
α	0.91	0.89
χ^2(df)	37.99 (8) $p < 0.05$	16.49 (8) $p < 0.05$
AGFI	0.91	0.95
	Own Investment in Partner	
	1. We have made a substantial investment in personnel dedicated to this agent/producer. 2. We have gone out of our way to align ourselves with this agent/producer in the insured's mind. 3. If we switched to a competing agent/producer, we would lose a lot of the investment we have made in this agent/producer.* 4. We have invested a great deal in building up this agent/producer's business. 5. If we decided to stop working with this agent/producer, we would be wasting a lot of knowledge regarding their method of operation.*	1. I have made a substantial investment in personnel dedicated to this company. 2. I have gone out of my way to align myself with this company in the customer's mind. 3. If I switched to a competing company, I would lose a lot of the investment I have made in this company.* 4. I have invested a great deal in building up this company's business. 5. If I decided to stop working with this company, I would have a lot of trouble redeploying those of my people who are presently serving this company.*
Range	1 = strongly disagree	7 = strongly agree
Total α	0.84	
α	0.88	0.84
χ^2(df)	6.62 (4) $p > 0.05$	1.96 (4) $p > 0.05$
AGFI	0.97	0.99
	Perceived Investment in Partner	
	1. This agent/producer has made a substantial investment in personnel dedicated to our company. 2. This agent/producer has gone out of his way to link us with their business. 3. It would be difficult for this agent/producer to recoup his investment in us if they switched to another insurance company for our products.* 4. This agent/producer has invested a great deal in building up our products. 5. If this agent/producer decided to stop representing us/, they would be wasting a lot of knowledge tailored to our method of operation.*	1. This company has made a substantial investment in personnel dedicated to my agency. 2. This company has gone out of its way to link me with their business. 3. It would be difficult for this company to recoup its investment in me if they switched to another agent/producer in this territory.* 4. This company has invested a great deal in building up my business. 5. If this company decided to stop working with me, they would be wasting a lot of knowledge regarding my method of operations.*
Range	1 = strongly disagree	7 = strongly agree
Total α	0.86	
α	0.91	0.80
χ^2(df)	10.99 (4) $p < 0.05$	2.88 (4) $p > 0.05$
AGFI	0.96	0.99

Appendix. (Cont'd.)

Measurement Characteristics	Companies	Agents
	Own Mutuality	
	1. We would feel badly if this agent/producer did not do well financially. 2. We are basically concerned with maximizing our company's profits, not the agent/producer's profits. (reversed) 3. We want to make sure that both our company and the agent/producer make money. 4. We both take responsibility for the health of the relationship.	1. We would feel badly if this company did not do well financially. 2. We are basically concerned with maximizing our agency's profits, not the company's profits. (reversed) 3. We want to make sure that both our agency and the company make money. 4. We both take responsibility for the health of the relationship.
Range	1 = strongly disagree	7 = strongly agree
Total α	0.70	
α	0.77	0.59
χ^2(df)	0.29 (2) $p > 0.05$	1.34 (2) $p > 0.05$
AGFI	1.00	0.99
	Perceived Mutuality	
	1. This agent/producer cares about how well our company does financially. 2. This agent/producer is concerned with maximizing our profits, not just their profits. 3. This agent/producer wants to make sure we both make money. 4. This agent/producer works to make things go well for us.	1. This company cares about how well I do financially. 2. This company is concerned with maximizing my profits, not just their profits. 3. This company wants to make sure we both make money. 4. This company works to make things go well for me.
Range	1 = strongly disagree	7 = strongly agree
Total α	0.91	
α	0.93	0.90
χ^2(df)	15.07 (2) $p < 0.05$	3.92 (2) $p > 0.05$
AGFI	0.94	0.97
	Own Nonconstructive Criticizing	
	1. We often criticize this agent/producer for things that they do that aren't right. (reversed) 2. It seems as if we are always nagging this agent/producer to do something. (reversed) 3. Whenever we talk to this agent/producer, we always seem to focus on their shortcomings. (reversed)	1. I often criticize this company for things that they do that aren't right. (reversed) 2. It seems as if I am always nagging this company to do something. (reversed) 3. Whenever I talk to this company, I always seem to focus on their shortcomings. (reversed)
Range	1 = strongly disagree	7 = strongly agree
Total α	0.73	
α	0.77	0.72
χ^2(df)	Nonapplicable	Nonapplicable
	Perceived Nonconstructive Criticizing	
	1. This agent/producer often criticizes us for things that they think we do that aren't right. (reversed) 2. It seems as if this agent/producer is always nagging us to do something. (reversed) 3. Whenever this agent/producer talks to us, they always seem to focus on what they think are our shortcomings. (reversed)	1. This company often criticizes me for things that they think I do that aren't right. (reversed) 2. It seems as if this company is always nagging me to do something. (reversed) 3. Whenever this company talks to me, they always seem to focus on what they think are my shortcomings. (reversed)
Range	1 = strongly disagree	7 = strongly agree
Total α	0.85	
α	0.83	0.86
χ^2(df)	Nonapplicable	Nonapplicable

Appendix. (Cont'd.)

Measurement Characteristics	Companies	Agents
	Intensity of Honest Communication	
	1. Our company and this agent/producer make it a point to keep each other well informed. 2. We hesitate to give this agent/producer too much information. (reversed) 3. Our relationship with this agent/producer is like a open book.	1. My agency and this company make it a point to keep each other well informed. 2. I hesitate to give this company too much information. (reversed) 3. My relationship with this company is like a open book.
Range	1 = strongly disagree	7 = strongly agree
Total α	0.77	
α	0.84	0.69
χ^2(df)	Nonapplicable	Nonapplicable
	Goal Congruence	
	1. This agent/producer shares our goals for this business. 2. Considering all aspects of this relationship, this agent/producer supports our objectives.	1. This company shares my goals for this business. 2. Considering all aspects of this relationship, this company supports my objectives.
Range	1 = strongly disagree	7 = strongly agree
Total α	0.90	
α	0.92	0.90
χ^2(df)	Nonapplicable	Nonapplicable
	Synergy	
	1. This agent/producer's other product lines help to generate sales of our products.	1. This company's products help to generate sales of my products.
Range	1 = strongly disagree	7 = strongly agree
	Age of Relationship	
		1. How long have you personally been working with this company? ____ years ____ months
	Image of the Counterpart	
	This agent/producer in general is 1. Interested in us ____ disinterested in us (reversed) 2. Flexible ____ inflexible (reversed) 3. Forgiving ____ unforgiving (reversed) 4. Consistent ____ inconsistent (reversed)* 5. Trusting ____ not trusting (reversed) 6. Reasonable ____ unreasonable (reversed)*	This company in general is 1. Interested in us ____ disinterested in us (reversed) 2. Flexible ____ inflexible (reversed) 3. Forgiving ____ unforgiving (reversed) 4. Consistent ____ inconsistent (reversed)* 5. Trusting ____ not trusting (reversed) 6. Reasonable ____ unreasonable (reversed)*
Range	1 to 7	
Total α	0.89	
α	0.89	0.87
χ^2(df)	29.12 (8) $p < 0.05$	17.65 (8) $p < 0.05$
AGFI	0.93	0.95
	Profits (current and expected)	
	1. This agent/producer is very profitable for us. 2. This agent/producer is likely to generate substantial benefits to our company over the next three years. 3. In the foreseeable future, we would not be surprised if our relationship with this agent/producer proved less rewarding than it has been in the past. (reversed)	1. This company's products are very profitable for me. 2. This company is likely to generate substantial benefits to me over the next three years. 3. In the foreseeable future, I would not be surprised if my relationship with this company proved less rewarding than it has been in the past. (reversed)
Range	1 = strongly disagree	7 = strongly agree
Total α	0.76	
α	0.77	0.75
χ^2(df)	Nonapplicable	Nonapplicable

Appendix. (Cont'd.)

Measurement Characteristics	Companies	Agents
	Turnover of counterpart's personnel	
	1. This agent/producer has little turnover of people dealing with us. (reversed)	1. This company has little turnover of people dealing with me. (reversed)
Range	1 = strongly disagree	7 = strongly agree
	Quality of Counterpart's Personnel	
	This agent/producer's personnel are 1. Not knowledgeable —— knowledgeable* 2. Inexperienced —— experienced* 3. Good communicators —— poor communicators (reversed) 4. Well trained —— poorly trained (reversed)	This company's personnel are 1. Not knowledgeable —— knowledgeable* 2. Inexperienced —— experienced* 3. Good communicators —— poor communicators (reversed) 4. Well trained —— poorly trained (reversed)
Range	1 to 7	
Total α	0.78	
α	0.78	0.79
χ^2(df)	0.28 (1) $p > 0.05$	3.30 (1) $p > 0.05$
AGFI	1.00	0.94
	Conflict	
	1. We disagree frequently and intensely with this agent/producer. 2. We tend to agree with this agent/producer on important issues. (reversed) 3. At one point, we came close to terminating our relationship with this agent/producer.* 4. We have had more than the usual amount of ups and downs in our relationship with this agent/producer.*	1. I disagree frequently and intensely with this company. 2. I tend to agree with this company on important issues. (reversed) 3. At one point, I came close to terminating my relationship with this company.* 4. I have had more than the usual amount of ups and downs in my relationship with this company.*
Range	1 = strongly disagree	7 = strongly agree
Total α	0.76	
α	0.73	0.78
χ^2(df)	1.79 (1) $p > 0.05$	1.77 (1) $p > 0.05$
AGFI	0.97	0.97
	Superiority of Counterpart Relative to Competitors	
	1. Relative to other agents/producers in their territory, this agent/producer offers better territorial coverage. 2. Relative to other agents/producers offering these products, this agent/producer has a better sales force. 3. This agent/producer in general is well managed —— not well managed. (reversed)	1. Relative to other insurance companies, this company offers better products. 2. Relative to other companies offering these products, this company has a better management. 3. This company in general is well managed —— not well managed. (reversed)
Range	1 = strongly disagree	7 = strongly agree
Total α	0.73	
α	0.75	0.70
χ^2(df)	Nonapplicable	Nonapplicable

*Asterisks indicate freed measurement error covariation in the confirmatory factor analysis.

References

Anderson, E., B. Weitz. 1992. The use of pledges to build and sustain commitment in distribution channels. *J. Marketing Res.* **24**(February) 18–34.

Anderson, E. W., C. Fornell, R. T. Rust. 1997. Customer satisfaction, productivity, and profitability: Differences between goods and services. *Marketing Sci.* **16**(2) 129–145.

Bagozzi, R. P., Y. Yi. 1988. On the evaluation of structural equation models. *J. Acad. Marketing Sci.* **16**(1) 74–94.

Bagozzi, R. P., Y. Yi, L. W. Phillips. 1991. Assessing construct validity in organizational research. *Admin. Sci. Quart.* **36**(3) 421–458.

Baker, G., R. Gibbons, K. J. Murphy. 2002. Relational contracts and the theory of the company. *Quart. J. Econom.* **117**(1) 39–84.

Bettman, J. R., B. A. Weitz. 1983. Attributions in the board room: Causal reasoning in corporate annual reports. *Admin. Sci. Quart.* **28**(2) 165–183.

Blau, P. M. 1968. The hierarchy of authority in organizations. *Amer. J. Sociol.* **73**(4) 453–467.

Bollen, K. A., R. Lennox. 1991. Conventional wisdom on measurement: A structural equation perspective. *Psych. Bull.* **110**(2) 305–314.

Bollen, K. A., K.-F. Ting. 2000. A tetrad test for causal indicators. *Psych. Methods* **5**(1) 3–22.

Brown, J. R., R. L. Day. 1981. Measures of manifest conflict in distribution channels. *J. Marketing Res.* **18**(August) 263–274.

Cannon, J. P., W. D. Perreault. 1999. Buyer-seller relationships in business markets. *J. Marketing Res.* **36** 439–460.

Coughlan, A. T., E. Anderson, L. W. Stern, A. I. El-Ansary. 2001. *Marketing Channels*, 6th ed. Prentice-Hall, Upper Saddle River, NJ.

Davis, H. L., S. J. Hoch, E. K. E. Ragsdale. 1986. An anchoring and adjustment model of spousal predictions. *J. Consumer Res.* **13** 25–37.

Dwyer, F. R., P. H. Schurr, S. Oh. 1987. Developing buyer-seller relationships. *J. Marketing* **51**(April) 11–27.

Dyer, J. H., H. Singh. 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Acad. Management Rev.* **23**(4) 660–679.

Frazier, G. L. 1983. Interorganizational exchange behavior in marketing channels: A broadened perspective. *J. Marketing* **47**(Fall) 68–78.

Funder, D. C. 1987. Errors and mistakes: Evaluating the accuracy of social judgment. *Psych. Bull.* **101**(1) 75–90.

Galunic, D. C., E. Anderson. 2000. From security to mobility: Generalized investments in human capital and agent commitment. *Company Sci.* **11**(1) 1–20.

Geyskens, I., J.-B. E. M. Steenkamp, N. Kumar. 1999. A meta-analysis of satisfaction in marketing channel relationships. *J. Marketing Res.* **36**(2) 223–238.

John, G., T. Reve. 1982. The reliability and validity of key informant data from dyadic relationships in marketing channels. *J. Marketing Res.* **19**(4) 517–524.

Kale, P., H. Singh, H. Perlmutter. 2000. Learning and protection of proprietary assets in strategic alliances: Building relational capital. *Strategic Management J.* **21** 217–237.

Kardes, F. R. 2002. *Consumer Behavior and Managerial Decision Making*, 2nd ed. Prentice-Hall, Upper Saddle River, NJ.

Kenny, D. A., L. Albright. 1987. Accuracy in interpersonal perception: A social relations analysis. *Psych. Bull.* **102**(3) 390–402.

Kotler, P. 2003. *Marketing Management*, 11th ed. Prentice-Hall, Upper Saddle River, NJ.

Macneil, I. R. 1980. *The New Social Contract: An Inquiry into Modern Contractual Relations*. Yale University Press, New Haven, CI.

Mohr, J., J. R. Nevin. 1990. Communication strategies in marketing channels: A theoretical perspective. *J. Marketing* **54**(4) 36–51.

Nunnally, J. C., I. H. Bernstein. 1994. *Psychometric Theory*, 3rd ed. McGraw-Hill, New York.

Peter, J. P., G. A. Churchill, Jr., T. J. Brown. 1993. Caution in the use of difference scores in consumer research. *J. Consumer Res.* **19**(4) 655–662.

Pinkley, R. L., G. B. Northcraft. 1994. Conflict frames of reference: Implications for dispute processes and outcomes. *Acad. Management J.* **27**(1) 193–205.

Pinto, M. B., J. K. Pinto, J. E. Prescott. 1993. Antecedents and consequences of project team cross-functional cooperation. *Management Sci.* **39**(10) 1281–1297.

Porac, J. F., H. Thomas, F. Wilson, D. Paton, A. Kanfer. 1995. Rivalry and the industry model of Scottish knitwear producers. *Admin. Sci. Quart.* **40**(2) 203–227.

Ross, Jr., W. T., E. Anderson, B. Weitz. 1997. Performance in principal-agent dyads: The causes and consequences of perceived asymmetry of commitment to the relationship. *Management Sci.* **43**(May) 680–704.

Scheer, L. K., L. W. Stern. 1992. The effect of influence type and performance outcomes on attitude toward the influencer. *J. Marketing Res.* **29**(1) 128–142.

Schneider, B. 1987. The people make the place. *Personal Psych.* **40** 437–453.

Seaver, W. B. 1973. Effects of naturally induced teacher expectancies. *J. Personality Soc. Psych.* **28**(3) 333–342.

Sherif, M. 1966. *In Common Predicament: Social Psychology of Intergroup Conflict and Cooperation*. Houghton Mifflin, Boston, MA.

Snyder, M., W. B. Swann. 1978. Behavioral confirmation in social interaction: From social perception to social reality. *J. Experiment. Soc. Psych.* **14**(2) 148–162.

Staw, B. M., R. I. Sutton. 1993. Macro organizational psychology. J. K. Murnighan, ed. *Social Psychology in Organizations: Advances in Theory and Research*. Prentice-Hall, Englewood Cliffs, NJ.

Sutcliffe, K. M. 1994. What executives notice: Accurate perceptions in top management teams. *Acad. Management J.* **37**(5) 1360–1378.

Swann, W. B. 1984. Quest for accuracy in person perception: A matter of pragmatics. *Psych. Rev.* **91**(4) 457–477.

Swann, W. B., R. J. Ely. 1984. A battle of wills: Self-verification versus behavioral confirmation. *J. Personality Soc. Psych.* **46**(6) 1287–1302.

Taylor, S. E., J. D. Brown. 1988. Illusion and well-being: A social psychological perspective on mental health. *Psych. Bull.* **103**(2) 193–210.

Thomas, K. W. 1992. Conflict and conflict management: Reflections and update. *J. Organ. Behav.* **13** 265–274.

Tjosvold, D. 1984. Cooperation theory and organizations. *Human Relations* **37**(9) 743–767.

Weick, K. E. 1995. *Sensemaking in Organizations.* Sage Publications, Thousand Oaks, CA.

Weitz, B. A. 1978. Relationship between salesperson performance and understanding of customer decision making. *J. Marketing Res.* **15**(4) 501–516.

Williamson, O. E. 1985. *The Economic Institutions of Capitalism*. The Free Press, New York.

Xie, J., M. Song, A. Stringfellow. 2003. Antecedents and consequences of goal incongruity on new product development in five countries: A marketing view. *J. Product Innovation Management* **20**(May) 233–250.

Zanna, M. P., S. J. Pack. 1975. On the self-fulfilling nature of apparent sex differences in behavior. *J. Experiment. Soc. Psych.* **11**(6) 583–591.

Zeithaml, V. A., A. Parasuraman, L. L. Berry. 1990. *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. Free Press, New York.