RESPONSE STRATEGIES IN PROBLEMATIC ALLIANCES:
AN EXPERIMENTAL STUDY

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Abstract
Building on Hirschman’s (1970) seminal work, we proposed and tested a circular model of seven response strategies in problematic alliances: exit propensity, opportunism, aggressive voice, creative voice, considerate voice, patience, and neglect. Previous alliance studies failed to theorize on the relationship between response strategies and examined responses to problematic situations in isolation. In contrast, in this study we focus on the interdependence between responses strategies and their antecedents. The response strategies studied are conceptually different, empirical distinct and can be represented as a circular system. Furthermore, the effect of four exchange variables: economic satisfaction, social satisfaction, transaction specific investments, and availability of alternatives are investigated. Using an experimental design empirical results support the hypotheses relating exchange variables and response strategies in problematic strategic alliances.

Keywords: response strategies, strategic alliances, exchange variables, circular structure.

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INTRODUCTION

Strategic alliances are dynamic inter-organizational relationships that allow partner firms to obtain or access resources which are needed to achieve their objectives. They entail long-term investments in a relationship and the initial agreement is only one component of a much broader challenge of achieving superior alliance performance. Strategic alliances cannot be completely specified or controlled by the parties in advance of their implementation (Ring & Van de Ven, 1994) and therefore they are surrounded by uncertainty, interdependence and vulnerability often leading to instability and problematic situations (Inkpen, 2001; Inkpen & Beamish, 1997).

To sustain an alliance performance, partners need to identify and respond the problematic situations occurring within the alliance as a result of changing external or internal circumstances; because these changes could turn an efficient and effective alliance into a second-best alternative (Koza & Lewin, 1998). For instance, a potential new partner could propose to collaborate with one of the partner firms, offering innovative technologies with better market opportunities than a partner has with its existing relationship. One of the partner firms could also change its strategy for reasons that are unrelated to an existing relationship, nevertheless this change can force it to reassess and reorganize its alliance portfolio (Parise & Casher, 2003). Developments endogenous to the relationship could also result in problematic situations. Current alliance performance may not meet initial expectations, because realized profits may be well below the initial projections. Similarly, a firm may perceive the quality the interactions with its partner as problematic. A lack of trust, willingness to adapt, or lack of commitment by a partner may negatively influence alliance development (Ariño & de la Torre, 1998). Research on strategic alliances has shown that partner firms’ responses to these emerging problematic situations may follow various trajectories.
Alliance partners may respond constructively or destructively (for the relationship) to these problematic situations. Constructive responses aim at adapting the alliance to solve the problematic situation. Partners can engage in renegotiations (Ariño & Reuer, 2004), change the governance structure (Reuer, Zollo, & Singh, 2002), or overcome the problems through mutual learning (Doz, 1996). In contrast, destructive responses lead to the further demise of the relationship. For instance, alliance partners may prematurely dissolve the relationship (Park & Ungson, 1997), let the relationship slowly deteriorate (Ariño et al., 1998), or decide to behave opportunistically (Ping, 1993). However, alliance research has only provided fragmented insights into firms’ possible responses to problematic situations.

Researchers have studied individual responses to relationship decline when others have examined related phenomena, such as opportunism, trust, and power. While the alliance literature has identified a variety of inter-firm behaviors and explored the characteristics and determinants of several responses to relationship decline, it mainly focused on single responses in isolation of one another. This fragmentation has undermined the development of theoretical typologies able to describe the full range of possible reactions to alliance dissatisfaction. In the absence of such typologies, it is difficult to develop a comprehensive theory-based understanding of the alliance decline process.

The objective of the paper is twofold. First, we aim at demonstrating that, contrary to prior alliance studies, response strategies are interdependent in a circular system. Second, we examine under which conditions a particular response strategy is most likely to occur. To achieve these objectives, we propose and empirically test a systematic model of response strategies, which encompasses: (1) a circular organization of response strategies, and (2) the impact of exchange variables.
The rest of the paper is organized as follow: First, based on a review of the relevant literature, we identified seven response strategies applicable within the strategic alliance context. Second, we hypothesize that these seven response strategies should be conceptualized as a circular system of interrelated strategies. Third, consistent with previous research on response strategies, which are likely to differently impact the likelihood of use a response strategy. Fourth, we present the experimental design we developed to test our hypothesis. Then, we present the results and conclude with a discussion of the academic and managerial implications of our results and propose directions for further research.

ALLIANCE DYNAMICS

An alliance is defined as a voluntarily long-term cooperative arrangement between firms (Gulati, Nohria, & Zaheer, 2000). A substantial part of alliance literature focuses on alliance dynamics and examines issues related to the changing patterns of strategies, resources, structures, and behavior of partners within alliances (Rond de & Bouchikhi, 2004). This literature can be organized around three themes: studies focusing on the alliance adaptability over time; studies which have investigated alliance termination; and finally studies which seek to better understand how alliances solve their problems.

Several studies have investigated the adaptability of alliance over time (Ariño et al., 1998; Doz, 1996; Ring et al., 1994; Zajac & Olsen, 1993). Zajac and Olson (1993) described how firms proceed through three stages, initializing, processing, and reconfiguring. During the first two stages, parties design and implement an alliance, while the third stage pertains to an assessment of outcomes which fuel changes in alliance strategy and exchange processes. Ring and Van de Ven (1993) noticed that negotiation, commitment, and execution affect each other and are influenced by partner’s assessment of the relationship’s efficiency and equity.
Doz (1996) explored ex-post learning processes and found that successful alliances are subject to adaptations in initial conditions, such as tasks, partner routines, interface structure, and expectations of performance, behavior, and motives. Ariño and De la Torre (1998) extended this work and detailed the importance of external changes, the role of relational quality, and the different adjustment trajectories parties could adopt. These alliance developmental studies show that strategic alliances adapt to changing internal and external conditions and could respond with destructive or constructive behaviors.

Some alliance studies have examined alliance termination and the trajectory towards relationship ending (Hennart, Kim, & Zeng, 1998; Park & Russo, 1996). Termination is an ultimate and destructive response to a problematic situation. Once the alliance is dissolved each party is forced to seek an alternative solution to achieve its objectives, which might include internal development, acquisition of the partner, or establishing a new alliance. Various causes of alliance dissolution have been identified. For instance, Steensma and Lyles (2000) found evidence that conflict between the parents of a joint venture decreased the likelihood for continuation and Park and Ungson (1997) found that opportunistic threat and rivalry between partners appeared to be a stronger indication of joint venture dissolution. Studies investigating relationship ending, found evidence that parties before dissolving an alliance might respond differently (Halinen & Tahtinen, 2002). A party could attempt to increase its benefits through opportunistic behavior (Parkhe, 1993), it could coerce its partner to comply with new demands (Inkpen et al., 1997), which would resolve the perceived problem, or it could let the alliance slowly deteriorate (Ping, 1993). In contrast to this type of destructive responses, parties could aim at resolving the problematic situation constructively.
Finally, other studies have identified various types of constructive responses including contractual renegotiations (Blodgett, 1992; Reuer et al., 2002), collaborative problem-solving (Doz, 1996), and strategic changes (Das & Teng, 2002). Doz (1996) concluded that as partners collaborate, they recognize how differences in structure and processes may need to be overcome or constructively combined to make cooperation efficient. Multiple factors have been examined to explain constructive responses to problematic situations. Ganesan (1994) found that mutual dependence and trust were positively related to parties’ long-term orientation. Arino and De la Torre (1998) found that when relational quality was high and parties perceived differences in regard to alliance outcomes, they were likely to initiate renegotiations to restore the equilibrium. Some other studies showed that transaction specific investments are a powerful incentive to preserve a relationship (Heide & John, 1990). Anderson and Weitz (1992) found within a buyer-supplier context that commitments to make specific investments increased the likelihood for relationship continuity. Thus, these studies reveal that constructive changes are possible before an alliance prematurely ends, while revealing different causes of specific response behaviors.

The review of this literature calls for two remarks. First, alliance studies examined partner firm’s responses to problems within an alliance mostly in isolation. The literature is fragmented and despite that some of these studies provide clues about the interrelatedness of response strategies (see e.g. Ariño et al., 1998; Doz, 1996) an in-depth understanding on post-formation decisions is till lacking. Second, the review also reveals that multiple causes of partner firms’ response behavior have been identified. However a comprehensive framework to understand what influences managers to choose between specific responses still needs to be developed. The development of a systematic model of response strategies and its antecedents will contribute to our better understanding of ex-post strategic alliance partner firms’ behaviors.
RESPONSE STRATEGIES

In order to develop a systematic model of response strategies, we build on Hirschman’s (1970) exit, voice, and loyalty and it later developments. Hirschman’s (1970) seminal framework is probably the most popular stream of research on response strategies over the past 35 years. A study of “Social Science Citation Index” listings finds more than 2300 citations from Hirschman (1970) during the period from March 1993 to August 2006. While Hirschman’s framework was developed to explain the responses of organizations to decline, its has been proved useful in understanding how individuals may act when things are not going well in a large range of relationship situations, such as romantic involvement (e.g. Rusbult, 1987; Rusbult, Johnson, & Morrow, 1986; Rusbult & Zembrodt, 1983; Withey & Cooper, 1989); employee-supervisor relationship (e.g Farrell, 1983; Saunders, Sheppard, Knight, & Roth, 1992); customer-complaint (e.g. Bove & Robertson, 2005; Singh, 1990); and business-to-business relationship (e.g. Geyskens & Steenkamp, 2000; Ping, 1993, 1997, 1999). However, before applying Hirschman’s model to the strategic alliance context, two issues need to be discussed: which and how many response strategy types should we use? How are these different response strategy types related to each other?

Response Strategy Types

Originally, Hirschman (1970) only identified three response strategies: exit, voice, and loyalty. Exit is the disinclination to continue a current relationship; voice, the expression of dissatisfaction (change a state of objectionable affairs); and loyalty has been depicted as willingness to trade-off the certainty of exit against the uncertainties of future improvements. Scholars have quickly started to refine this typology by adding new strategies. Farrell (1983) and Rusbult and Zembrodt (1983) found empirical support for a fourth strategy, neglect, which is passively allowing the relationship to deteriorate.
This strategy corresponds to the silence response strategy previously proposed by Kolarska and Aldrich (1980) and Rusult, Zembrot, and Gunn (1982). Silence referred to a “do nothing” option, in which a dissatisfied customer or organization member would stay without expressing themselves. Drawing from transaction cost theory (TCT) (Williamson, 1975), Ping (1993) introduced the concept of opportunism as an additional response strategy identified in the supply chain management context and defined opportunism as self-interest with guile (Williamson, 1975). Withey and Cooper (1989) experiencing measurement problems with voice concluded that voice should consist of multiple sub-components. They noticed that voice could regroup different type of behaviors ranging from intentions to improve the situation, encourage discussion of issues and problems, and propose new ways of doing things. Addressing these concerns, Hagedoorn et al. (1999) proposed and tested empirically two distinct forms of voice: considerate voice, which consists in attempts to solve problems by considering one’s own concerns as well as those of the alliance and aggressive voice, which consists in efforts to push one’s own solution, without consideration for the concerns of the partner. More recently, Zhou and George (in press) further identified creativity as a third expression of voice, which refers to the generation of novel and potentially useful ideas.

These seven responses to relationship problems can also be identified in the strategic alliance context. Exit propensity, the disinclination to continue the current relationship (Ping, 1999 p. 226), suggest that a party has an intention to terminate the alliance and actively searches for alternative solutions to achieve its objectives, including acquisition of the partner, internal development, or initiating new alliances (Dussauge, Garrette, & Mitchell, 2000). Opportunism refers to a party’s response in the form of an active intention to increase its benefits from the relationship in ways that are explicitly or implicitly prohibited within the relationship (Ping, 1993).
This type of response might include, shirking, the use circumstances to extract concessions
form the other party, the evasion of obligations, or the withholding of critical information
(Wathne & Heide, 2000). This definition is distinct from the TCT perspective as here
opportunistic behavior results from a condition external or internal to the alliance, while TCT
assumes that actors will act opportunistically when such behavior is feasible and profitable
(John, 1984). Aggressive voice represents a form of voice, which consists of persistent efforts
by a party to resolve a problematic situation consistent with its own ideas. For instance, a firm
might forcefully argue its solutions and actively seek conflicts with its partner in order to
resolve a problematic situation consistent with this party’s interests. In contrast, creative voice
refers to the generation of novel and potentially useful solutions to the problem (Zhou et al.,
In press). Within an alliance this suggest that partners overcome structural inertia through
mutual learning and subsequently implement innovative adaptations which allows each party
to achieve its objectives (Doz, 1996). Considerate voice refers to a form of voice which
consists of attempts to solve the problem considering ones own concerns as well of those of
the other party (Ping, 1999). A party might seek constructive solutions with the aim to
preserve the relationship, while considering the other party’s interests. The problematic
situation is discussed and mutual satisfactory solutions are developed. Patience is defined as
abiding the problems in silence with confidence that things will get better (Ping, 1999 p. 226).
This suggests that a firm might ignore the problem, assume it will go away, reduce its contact
with the partner, all with the idea that the problematic situation will resolve itself. Finally,
neglect means allowing the relationship to deteriorate (Ping, 1999 p. 226). Similarly, to
patience contact with the partner might be reduced, however a party spends little effort to
maintain the relationship. Efforts to solve the problem are intentionally ignored and the aim is
to let the relationship die.
From both the alliance dynamics’ literature and the literature on response strategies reviewed above, we hypothesize that the content of response strategies in problematic alliances can be classified in seven conceptually different and empirically distinct response types: exit, opportunism, aggressive voice, creative voice, considerate voice, patience, and neglect.

**Hypothesis 1:** The response strategies in a strategic alliance context should appear as seven distinct response strategy types.

**Response Strategy Structure**

The relationship between the different response strategies is one of the unsolved questions in response research (Leck & Saunders, 1992). Several different conceptualizations of the relationships between responses strategies have been adopted by the various strands of research: Response strategies have been conceptualized as independent from each other, they have been organized along a unidimensional continuum, two dimensions, and following a circular structure.

Some scholars have conceptualized response strategies as independent constructs. In the context of consumer complaint behaviors, Singh (1988) developed a taxonomy containing three independent dimensions: Voice, that is, responses directed toward objects directly involved in the dissatisfying relationship; Private, that is, negative word-of-mouth communication and exit from the relationship; and Third Party, that is, complain to formal agencies not involved in the exchange relationship. Studying customers’ behavioral intentions when service problems occur, Zeithaml, Berry, and Parasuraman (1996) identified three independent dimensions: propensity to switch, external response to problem, and internal response to problem.
A second set of studies, following with Hirschman (1970) initial representation of exit, voice, and loyalty along a constructive-destructive continuum, have conceptualized response strategies along a unidimensional continuum. For example, in his study of the antecedents of exiting a marketing channel relationship, Ping (1999) investigated the structural relationships between loyalty, voice, neglect, and exit propensity. The empirical results revealed a chain of relationships between the response strategies. Loyalty had a negative influence on voice, which in turn, decreased the propensity to engage in negligent behavior. Finally, neglect was positively related to exit propensity.

Building on Hirschman’s framework, Farrell (1983) and Rusbult and Zembrodt (1983) empirically identified a second active-passive dimension in addition to the initial constructive-destructive one. Each of the four response strategies is located in a quadrant formed by these two dimensions. Exit represents an active-destructive response strategy, voice represents an active-constructive strategy, loyalty (or patience) represents a passive-constructive response strategy, and finally, neglect represents a passive-destructive response strategy to dissatisfying relationships.

Later, Rusbult (1987) further argued that even if response strategy types are conceptually different and empirically distinct, they are also, to some extent, continuously related and overlapping. For example, weak forms of exit verge on neglect, strong forms of loyalty verge on voice, and so on. While responses frequently occur in their pure form, an organization’s response to problems may on some occasions be a blend of two or more categories. For instance, dissatisfied employees might quit their jobs, while expressing their complaints to their supervisors. Thus, although the response strategies are conceptually and empirically distinct the boundaries between the response strategies are imprecise (Withey et al., 1989).
This leads Hagedoorn et al. (1999) to argue that response strategies should be depicted along a circumplex structure, around the two constructive-destructive and active-passive dimensions. Research in several different contexts has further provided direct and indirect empirical support for the circular structure of response strategies. Indirect support can be found by examining correlation matrices in earlier studies, which did not explicitly hypothesize a circular structure. For example, Rusbult et al. (1988) (Rusbult, Farrell, Rogers, & Mainous, 1988) found in the context of declining job satisfaction that exit is positively correlated to a form of aggressive voice ($r = .21$) and neglect ($r = .31$), while in turn exit is negative correlated to loyalty ($r = -.33$). The results also indicated, that loyalty was negatively correlated to neglect ($r = -.18$). This pattern is consistent with a circular structure. Rusbult, Johnson and Morrow’s (Rusbult et al., 1986) study further confirmed that the four modes of response bear the predicted relations to each other. Their findings showed that theoretically opposed response strategies, such as exit and loyalty as well as voice and neglect were negative correlated ($r = -.15$ to $-.30$), while response strategies which were hypothesized in contiguous quadrants were weakly or not at all correlated ($r = $ between .00 and .03). Within the context of strategic alliances, empirical results also indirectly support the circular structure. For example, the inspection of the correlation matrix presented in Ping (1993) revealed that exit-propensity and neglect ($r = .70$), opportunism ($r = .41$), and loyalty ($r = .04$) had positive correlations, while a negative correlation was reported between exit-propensity and voice ($r = -.25$). Other correlations also showed that contiguous responses were positively correlated, for instance opportunism and neglect ($r = .45$), while opposite strategies were negatively related, for instance voice and opportunism ($r = -.28$) and voice and neglect ($r = -.39$). Similar intercorrelation patterns can be found in the studies by Ping (1999) and Geyskens and Steenkamp (2000).
Direct support is provided by Hagedoorn et al (1999), who conducted a second order factor analysis on five response strategies (exit, aggressive voice, considerate voice, patience, and neglect) in the employee-supervisor relationships, which resulted in two factors consistent with active-passive and constructive-destructive. The correlation pattern was furthermore consistent with a circular structure, although exit and aggressive voice were less active and neglect less passive than expected. The circular structure was also supported by the correlations between the response strategies. For instance, they found that exit was positively correlated to neglect \((r = 0.24)\) and aggressive voice \((r = 0.36)\), while negatively correlated to considerate voice \((r = -.10)\) and patience \((r = -.05)\). Other correlations supporting a circular structure were the negative relationships between aggressive voice and neglect \((r = -.26)\) and patience \((r = -.12)\).

Based on these conceptual and empirical findings, we hypothesize that in the strategic alliance context, the seven response strategies should be arranged along a continuum of related strategies in the following order: exit, opportunism, aggressive voice, creative voice, considerate, patience, and neglect, exhibiting a circular structure (see Figure 1). We expect that, for example, creative voice and considerate voice to be located next to each other, because both involve active and constructive propensities. Conversely, exit, which emphasizes active destruction, is likely to be located opposite to patience, which reflects a passive and constructive behavioral intention. Therefore, we hypothesize that:

**Hypothesis 2:** The seven response strategies are organized in a circular system of intercorrelations.
THE IMPACT OF THE EXCHANGE VARIABLES ON RESPONSE STRATEGIES

A circular structure of response strategies is an integrated structure, which imply that the association of one response strategy with an external variable, such as satisfaction with the alliance, has implication for the associations of this variable with the other response strategies as well (Gurtman, 1992; Gurtman & Balakrishnan, 1998; Hagedoorn et al., 1999). The associations with the external variable will first decrease from the most positively (or least negatively) associated response strategy and then increase again as one goes around the circular structure (Schwartz, 1992).

Across its various contexts of application, multiple causes impacting the likelihood of using a particular response strategy have been identified (Farrell & Rusbult, 1992; Ping, 1993, 1999, 2003; Rusbult et al., 1988; Rusbult et al., 1986). Based on the theoretical developments of social exchange theory (Blau, 1964; Homans, 1961) and interpersonal interdependence theory (Thibaut & Kelley, 1959) four of exchange variables have been identified as having a consistent effect of response strategies across contexts: economic satisfaction with the relationship, social satisfaction with the relationship, past investments in the relationship, and the presence of available alternatives.

Alliance studies examining response strategies identified antecedents consistent with this relational exchange perspective. For instance, Ping (1993) examined the influence of relationship satisfaction, alternative attractiveness, investments, and switching costs on behavioral intentions. In a subsequent study, Ping (1999) introduced a higher order concept, cost of exit, which referred to perceived mobility barriers between a party and alternative relationships. In addition, Geyskens and Steenkamp (2000) demonstrated that economic satisfaction is conceptually and empirically distinct from social satisfaction within alliances.
Economic Satisfaction

In a strategic alliance context, economic satisfaction is a partner’s evaluation of the economic outcomes that flow from the relationship with its partner, such as effectiveness, productivity, and financial outcomes (Geyskens et al., 2000). Economic satisfaction implies that a manager considers the relationship with an alliance partner to be successful in regard to goal attainment (Geyskens, Steenkamp, & Kumar, 1999), and if the demand for quick and tangible results is satisfied (Das & Teng, 2000).

Studies in different contexts found empirical support for the effect of satisfaction on response strategies. Rusbult et al (1982) presented results of four studies examining dissatisfaction in romantic involvements, showing that subjects who were satisfied with their relationship were more likely to respond with constructive responses (e.g. voice and patience) and were less likely to respond with destructive responses (e.g. exit and neglect). Similar results were replicated in the context of employment relationship (Farrell and Rusbult, 1992; Rusbult et al., 1988). Hagedoorn et al. (1999) found that job satisfaction promotes constructive and suppresses destructive responses to a problematic event. In a supply chain context, Ping (1993) found that channel satisfaction is positively related to active and negatively to destructive responses. Geyskens and Steenkamp (2000) found that economic satisfaction is positively related to voice and loyalty and negatively related to exit-propensity and neglect.

Despite that alliance managers regularly monitor the alliance for efficiency (Doz, 1996), it often difficult to attribute a decrease in economic performance to a single specific cause. The reasons for poor economic performance could be internal to the relationship with the partner or external to this relationship (i.e., seasonal variations, economic downturn, etc.). Poor performance could be attributed to a temporary downturn in the external environment.
If the strategic alliance has been successful and valuable in the past, when the economic performance drops, managers may not be willing to use a response strategy that will be destructive to the relationship in order to preserve future revenue stream (Dwyer, Schurr, & Oh, 1987; Geyskens et al., 2000; Ping, 1993, 1997). There is therefore no reason to terminate the alliance. However, managers who are not satisfied with the economic performance of their alliance may engage into opportunistic behaviors in order to be compensated for the lack of economic outcomes, because these opportunistic behaviors may be less visible to the partner and therefore not too detrimental to the future of the alliance.

On the other hand, when an alliance is problematic, but managers are satisfied with the economic outcomes of the relationship, they are less likely to “rock the boat” and to endanger a source of future revenues (Dwyer et al., 1987; Geyskens et al., 2000; Hirschman, 1970; Ping, 1993, 1997). Managers will be more likely to be patient and not to use their voice, in order to reduce the likelihood of a worsening of the relationship (Ping, 1997). Therefore, in a problematic alliance, when a partner is satisfied with the economic performance of the alliance, it will be more likely respond with patience. Therefore, based on the circular structure of response strategies, we hypothesize that:

**Hypothesis 3:** Managers who are satisfied with the economic performance of the alliance should be the most likely to engage in patience and the least likely to engage in opportunism compared with managers who are dissatisfied with the economic performance of the alliance.
Social Satisfaction

In a strategic alliance context, social satisfaction is a partner’s evaluation of the psychosocial aspects of the relationship in that interactions with the alliance partner are fulfilling, gratifying, and facile (Geyskens et al., 2000). A partner who is satisfied with the social outcomes of the relationship appreciates the contacts with its partner (Geyskens et al., 1999). The relationship is then characterized by trust, respect, and commitment (Ariño, de la Torre, & Ring, 2001). An important aspect of social satisfaction is a party’s perception of the relational quality of the alliance, which refers to the working relationship, trustworthiness, and to the broader reputation the partners have for fair dealing (Ariño et al., 1998).

Empirical results from Geyskens and Steenkamp (2000) show that social satisfaction is positively related to creative voice and negatively related to exit, patience, and neglect. Furthermore, Dwyer and Oh (1987) also found that a high quality relationship is characterized by minimal opportunism and Hennig-Thurau, Gwinner and Gremler (2002) found that when relationship quality is good, partners are less likely to exit and more likely to use creative voice to maintain the relationship.

In the strategic alliance context, managers regularly monitor their partners for equity and adaptability (Ring et al., 1994). When an alliance becomes problematic, managers who are not satisfied with the quality of the relationship tend to attribute the causes of the problem to their partner (Frazier, 1983). Because, it is more difficult to solve relationship problems than economical ones (Geyskens et al., 2000), managers are more likely to disengage from the relationship and exit. Furthermore, when the social satisfaction is low, managers are not afraid to endanger an already bad relationship and therefore are more likely to act opportunistically to extract all benefits possible before the relationship ends.
Therefore, bad relationship quality reduces expectations about future benefits and result in increasing suspicion about the intentions of the partner managers tend to see no hope for the recovery of the alliance and thus reduce their level of commitment and cooperation, resulting in the likelihood of exit and opportunistic strategies (Withey et al., 1989).

On the other hand, when an alliance is problematic, but managers are satisfied with the quality of the relationship, they are less likely to blame their partner for the problems. Because of a good relationship, a partner believes that a recovery is possible (Geyskens et al., 2000; Withey et al., 1989) and it will be more likely to engage in constructive discussions (Hibbard, Kumar, & Stern, 2001). Cooperative relationships based on trust and commitment can deliver significant social benefits to the participating firms. Thus, high relationship quality is most likely to result in amicable and creative resolving of the problems (Anderson & Narus, 1990; Richins, 1983). Therefore, we hypothesize that:

**Hypothesis 4:** Managers who are satisfied with the relational quality of the alliance should be the most likely to engage in creative and considerate voices and the least likely to engage in exit and opportunism compared with managers who are dissatisfied with the relational quality of the alliance.

**Transaction Specific Investments**

Transaction specific investments are investments made to support a given relationship and cannot be easily redeployed to another relationship without some sacrifice in the productivity of the asset or some cost in adapting the asset to the new context. Firms are willing to make such investments to build and maintain a valuable relationship in anticipation of future economic and social outcomes {Dwyer, 1987 #1104}. 

When substantial investments in an alliance have been made and could be lost if the partners dissolve the alliance, these investments act as switching costs and exit barriers (Williamson, 1975). While such exit barriers do not increase dissatisfaction, they do increase the partners’ costs of terminating the alliance. By increasing these costs, transaction-specific investments reduce exit. Furthermore, when an alliance partner invests in specific assets, it puts itself in a vulnerable position as the other partner might hold it up and expropriate quasi-rents (Klein, Crawford, & Alchian, 1978). Therefore the existence of such investments is likely to trigger active and constructive response strategies, such as considerate and creative voices, when the alliance becomes problematic (Maute & Forrester, 1993; Ping, 1993). In other words, transaction-specific investments promote constructive response strategies, while the absence of them increases the likelihood for more destructive responses (Farrell et al., 1992; Ping, 1993; Rusbult et al., 1988). When costs of exits are high, less costly reactions to relationship problems, such as voice, become more attractive (Hirschman, 1970; Ping, 1997). Furthermore, a passive response, such as neglect, may be too risky a strategy as it might lead to premature ending of the alliance, thus loosing investments (Ping, 1997).

Studies have produced empirical support for the importance of relationship specific investments on the likelihood of response strategies. For example, Rusbult et al. (Rusbult et al., 1988; Rusbult et al., 1986; Rusbult et al., 1982) found that substantial investments encourage voice and loyalty, while they inhibited the destructive exit and neglect strategies. Similarly, within the context of supply chain management, Ping (1993) found that investments are positively related to voice and negatively to neglect, but not to exit, loyalty, or opportunism. Therefore, based on the circular structure of response strategies, we hypothesize that:
Hypothesis 5: Managers who have made substantial transaction specific investments should be the most likely to engage in considerate and creative voices and the least likely to engage in exit and neglect compared with managers who did not make substantial alliance-specific investments.

Available Alternatives

Available alternatives refer to extent to which a partner in a strategic alliance has attractive alternatives available to attain its objectives (Ping, 1999). The availability of alternatives provides a party with a source of power to improve the situation at its advantage because if the relationship would further decline, it has other possible solutions (Pfeffer & Salancik, 1978). Available alternatives permit alliance partners to advance their interests by terminating the current alliance and should, for this reason, lead to greater propensity to exit.

However, the interests of a partner who are disinclined to exit are best served by closing the gap between the current, problematic alliance and more attractive available alternative partners. Aggressive voice serves a purpose in this regard and should increase as the availability of attractive alternative increases (Maute et al., 1993). Furthermore, the presence of alternatives should result in reduced patience as managers become increasingly skeptical about whether their interests are served by the current alliance and less prepared to overlook the shortcomings of their current partner (Maute et al., 1993).

On the one hand, decreased alternatives increased perception of dependence (Emerson, 1962). Partners that are relatively dependent on their counterpart feel they need to maintain the relationship to achieve their goals (Buchanan, 1992). They are unlikely to use responses that may result in escalation, or ultimately in the dissolution of the alliance.
In addition, aggressive voice is perceived as ineffective mechanism, because of the dependence imbalance, which allows the other partner to ignore the voice of the dependent party (Hibbard et al., 2001). The lack of alternatives can also reduce the credibility of voice, thereby reducing its efficacy, and hence its use, because partners who are in demand have greater power and are less threatened by the possibility of retaliation (Withey et al., 1989). Thus, response is more likely to be passive in the absence of alternatives (Ping, 1997). But, forced to make the relationship work, considerate voice could be used to find a consensus (Hagedoorn et al., 1999). On the other hand, an alliance partner with attractive alternatives may feel less positive about its present relationship and be less willing to act on the alliance behalf. Such partners are more likely to exit or to be neglectful (Withey et al., 1989). Termination for relationship may not be problematic for partners having better alternatives.

Empirical research produced extant support for the relationship between alternative availability and responses to problematic situations. Rusbult et al. (1986, 1988, 1992) found that the higher the quality of alternatives the higher likelihood for active responses, such as exit and voice, while inhibiting loyalty and Farrell and Rusbult (1992) (Farrell et al., 1992) found that superior alternatives were associated with greater tendencies toward exit and voice, and in a lesser extent with neglect. Moreover, Withey and Cooper (1989) also found that having alternatives increased exit and neglect. In a supply channel context, Ping (1993) found that alternative attractiveness is positively related to exit-propensity, opportunism and unexpectedly with neglect. However, the relationships with voice and loyalty were non-significant. In a subsequent study, however, Ping (1997) found that alternative attractiveness was positively related to considerate voice. Therefore, based on the circular structure of response strategies, we hypothesize:
Hypothesis 6: Managers who have alternative partners available should be the most likely to engage in exit and opportunism and the least likely to engage in creative and considerate voices and patience compared with managers who do not have alternative partners available.

METHODOLOGY

To empirically test these hypotheses, we designed an experimental scenario-based study. An experimental design was more suitable than other empirical studies, such as surveys, because it allows us to control the strategic alliance context and to manipulate the exchange variables. The use of scenarios rather than real situations was deemed necessary, because of the alliance setting. Indeed, managers are less likely to honestly answer questions about problematic situations. A survey of alliance managers would have most likely resulted in biased data.

Scenario Design

The research instrument consisted in four sections. The first section presented a hypothetical scenario introducing a problematic relationship between two organizations in a strategic alliance context. The second section contained the items pertaining to the evaluation of the response strategies. The third section contained control items to assess the extent to which the respondents understood the manipulations in the scenarios. The final section contained questions pertaining with the respondent characteristics, such as age and gender.

Four manipulations were incorporated in each scenario. Each of them referred to either a positive or a negative condition. The first two manipulations referred to economic and social satisfaction (Geyskens et al., 2000). Economic satisfaction was manipulated through variations in the focal firm’s evaluation of the financial outcomes of the alliance.
That is, the alliance either produced financial benefits beyond or below the focal firm’s expectations. Social satisfaction was manipulated through the focal firm’s evaluation of relationship quality with its partner firm (Ariño et al., 2001; Das & Teng, 2001; Ring et al., 1994). A good relationship referred to the extent to which the firms developed a relationship characterized by trust, commitment, and adaptability eliminating the need for substantial monitoring costs (Ring et al., 1994). Transaction-specific investment was manipulated through variations in the extent to which the focal firm had made substantial investments into the alliance and could expect large switching costs (Ping, 1999). The focal firm either invested little or substantially and could expect additional costs due to penalty fees to be paid to the partner firm if the alliance prematurely ends. The availability of alternatives was manipulated through the extent to which the focal firm had other ways to realize its objectives. The focal firm had either many alliance partners available or it only had a few other potential alliance partners (see Appendix).

**Response Strategy Measures**

The operationalization of the seven response strategies were based on prior literature and adapted to the context of our study. Exit propensity refers to the disinclination to continue the relationship. The items deal with considering ending the relationship, stop doing business, and having an intention to end the relationship. Measures and scales for opportunism were similar to those of Ping (1993) and involved items such as, withholding information, exaggeration of the problematic nature of the situation, and escaping from contractual obligations. Aggressive voice refers to extent to which an actor engages in efforts to win without consideration for the concerns of the partner firm and items referred for instance to forcefully push a solution and being persistent (Hagedoorn et al., 1999). Creative voice refers to a party’s behavioral intention aiming at adopting new and fresh approaches to solve the problematic situation.
As a consequence items were dealing with creation of innovative solutions, fresh ideas, and creative solutions (Zhou et al., In press). Considerate voice referred to seeking a mutual satisfactory solution and items deal with working to create a consensus, finding a solution satisfactory for everyone, and finding acceptable solutions (Ping, 1993). Patience, being confident that the problem will solve itself, was operationalized with items such as optimistically, I wait for better times and I trust that the situation will solve itself (Ping, 1993). Neglect was measured as the intention to let the relationship slowly deteriorate. Items referred to not dealing with the problem, no additional effort, and presenting initiatives to improve the situation (Ping, 1993). All items were measures with 7-point Likert scales ranging from “I would definitely not react in this way” [1] to “I would definitely react in this way” [7].

Pretest of the Scenarios and Items’ Development

To ensure the validity and the reliability of the scenarios and the response strategy measures, we used a two-stage procedure. First, we discussed the scenarios and initial items with strategic alliance experts to ensure face validity. Second, we conducted two rounds of pre-tests to evaluate the effectiveness of the manipulations and to refine the set of items to measure the seven response strategies. The first pre-test, with 87 students, resulted in some modifications to the scenario script due to increase the magnitude of the manipulation and to avoid some confounding effects. Several items were also either modified or dropped because of problems of reliability of discriminant validity and a few new ones were developed. The second pre-test, with 107 students, only led to minor modifications in the script and in the wording of a few items. This procedure resulted in the scenarios presented in the Appendix and in a total of 35 items to measure the seven response strategies (5 items for each strategy).
Data Collection

The data for the study were collected among Dutch MBA students in their final year in business administration. During class hours, they were asked to participate in an experiment and only students with a positive reaction were provided with a one-page questionnaire. They were asked to read the instructions and scenario carefully and respond to the questions. The final sample consisted of 124 students, with an average age of 24.5 years and 68.1% were male and 31.9% female.

Manipulation Checks

The manipulation check items were subjected to a four-factor multiple analysis of variance (MANOVA). Subjects in the low economic performance condition reported lower satisfaction with the benefits derived from the alliance than did those in the high economic performance condition (\( \bar{x} = 3.34 \) and 5.15, respectively; \( F_{1, 119} = 48.73, p \)-value < .001). Low relationship quality participants reported lower satisfaction with the working relationship than did their high relationship quality counterparts (\( \bar{x} = 3.09 \) and 5.38, respectively; \( F_{1, 119} = 87.58, p \)-value < .001). Participants in the small investments condition reported that there would be easier to terminate the alliance without suffering substantial loss than did those in the large investments condition (\( \bar{x} = 2.31 \) and 4.24, respectively; \( F_{1, 119} = 62.46, p \)-value < .001). And participants in the few alternatives condition reported having fewer partners available in order to achieve their objectives than did their plentiful alternatives counterparts (\( \bar{x} = 3.39 \) and 5.72, respectively; \( F_{1, 119} = 82.61, p \)-value < .001). We further examined interaction terms to assess the stability of our manipulations. No sizable interaction effects were observed: the next largest \( F \) value was 9.09, which is small in comparison to those listed above.
RESULTS

Reliability and Validity of the Seven Response Strategies

To ensure unidimensionality, we submitted the items measuring each of the response strategy to factor analysis. This resulted in the dropping of several items loading on a second factor or with small loadings. Reliability coefficients were then calculated for the remaining items measuring the seven response strategies. Table 1 presents Cronbach’s alpha coefficients for each strategy on the diagonal of the correlation matrix. All the coefficients are satisfactory. The coefficients for aggressive voice, considerate voice, and neglect are however slightly lower than desired, which could be due to the fact that these strategies are more heterogeneous than the others due to a higher level of complexity (Rusbult et al., 1988).

In addition, we assessed the discriminant validity by examining if the correlation between one scale and another is not as high as each scale’s Cronbach’s alpha coefficient (Gaski & Nevin, 1985). We acknowledge that this is a much weaker form of discrimination than the conventional comparison of between-construct and within-construct-alternate measure correlations in MTMM format (Gaski, 1986). However, this procedure is adequate to test the discriminant validity of the seven response strategies which are conceptually related to each other in a circular system, and therefore may have some level of domain overlap. Furthermore, this procedure is consonant with the essential discriminant validity requirement that a measure should not correlate to highly with measures which it is supposed to differ. The results of Table 1 show that for the seven response strategies, the alpha coefficients are systematically higher than the correlation between the response strategies. Overall, the psychometric properties (i.e., convergent validity, reliability, and discriminant validity) of the response strategies provide support for hypothesis one. The seven response strategies are conceptually different and empirical distinct.
The Circular Structure of the Response Strategies

In line with previous research (Farrell, 1983; Rusbult & Zembrodt, 1983), the response strategy data were analyzed on the basis of the correlation matrix derived from the likelihood rating of the response strategy items using a nonmetric multidimensional scaling (MDS) technique. MDS is a data reduction method similar to factor analysis, which is common for the structural analysis of similarity data (Davison, 1983; Schiffman, Reynolds, & Young, 1981), which helps to visualize the data structure. Because, MDS is an exploratory method, an overall assessment of the fit between theory and empirical data can be achieved using a “configurational verification” approach (Gurtman, 1994; Schwartz, 1992).

Hypothesis 2, which stated that the seven response strategies should be organized in a circular system, was tested by examining whether the points in a two-dimensional space could be partitioned into distinct regions that reflect the seven response strategies and whether the regions obtained form the suggested circular structure (Grunert & Juhl, 1995; Schwartz, 1992). Two goodness-of-fit measures, stress, a measure of “badness of fit” which represents the difficulty of arraying responses in a configuration of a specified dimensionality (Kruskal, 1964) and the total variance accounted for (squared multiple correlation or RSQ) (Borg & Lingoes, 1987), where used to assess the solution. For the two-dimensional solution postulated, stress is .127 and RSQ is .919, which are acceptable (Kruskal & Wish, 1978). Figure 1 shows the results of the two-dimensional MDS solution representing the seven response strategies. The results strongly support Hypotheses 1 and 2. Each response strategy forms a separate domain with only one item (Exit 1), which is slightly misplaced (Hypothesis 1). Furthermore, the seven response strategies are placed along the circular structure in the expected order (Hypothesis 2). At the same time, the distinction between active, passive, constructive, and destructive strategies is supported.
The Impact of the Exchange Variables on Response Strategies

The logic of the organization of the response strategy structure implies that the predicted association between response strategies and any outside variable (antecedent or consequence) can be represented graphically with a sinusoid (Gurtman, 1992; Gurtman et al., 1998; Schwartz, 1992). To draw such a curve, response strategies should be arrayed on the axis according to their order around the circular response structure. The strength of association with the outside variable is then plotted on the vertical axis.

As a preliminary test of the impact of the antecedent variables on the likelihood of a response strategy, we first computed response strategy indices by averaging their item scores and then used correlation coefficient as measures of association between response strategies and economic satisfaction, relational quality, investments, alternatives. Figure 2 presents the sinusoid curves reflecting the patterns of association between the response strategies and the four exchange variables.

To formally test the hypotheses regarding the influences on response strategies, a multiple analysis of covariance (MANCOVA) was conducted in which the dependent variables were the average scores for each of the seven response strategies, the independent variables were dummy variables from the scenario manipulations for economic and social satisfaction, transaction-specific investments, and alternatives, and gender and age (birth year) were incorporated in the model as the covariates. Interaction effects between the independent variables were also tested, and then removed due to non-significance.

The MANCOVA results showed a significant Wilks’ lambda effect for the four dependent variables: financial performance ($\lambda = .869, F = 2.398, p<.05$), relational performance ($\lambda_2$...
=.865, \( F = 2.480, p<.05 \), investments (\( \lambda = .875, \ F = 2.268, p<.05 \)), and alternatives (\( \lambda = .683, \ F = 7.350, p<.001 \)). None of the covariates were significant (see Table 2).

**Economic Satisfaction**

Managers who are satisfied with the financial performance of the alliance were hypothesized to be the most likely to engage in patience and the least likely to engage in opportunism than managers which are dissatisfied with the economic performance of the alliance (Hypothesis 3). The differences between low and high financial performance were significant for opportunism (\( F = 6.112, p < .01 \)) and patience (\( F = 6.450, p < .01 \)). The differences for the other response strategies are not significant. The results of post-hoc one-way ANOVAs presented in Table 2 support the hypothesis for opportunism and patience. Opportunism, an active-destructive strategy, is more likely to be used by managers who are dissatisfied with the financial performance of the alliance and patience, a passive-constructive strategy, is more likely to be used by managers who are satisfied with the financial performance of the alliance.

**Social Satisfaction**

Managers who are satisfied with the relational quality of the alliance were hypothesized to be the most likely to engage in creative and considerate voices and the least likely to engage in exit and opportunism than managers which are dissatisfied with the relational quality of the alliance (Hypothesis 4). The differences between low and high relational quality were significant for exit (\( F = 9.283, p < .01 \)) and opportunism (\( F = 4.013, p < .05 \)), but not for creative or considerate voice. The differences are also not significant for the other response strategies.

The results of post-hoc one-way ANOVAs support the hypothesis for exit and opportunism. Exit and opportunism, two active-destructive strategies, are more likely to be used by
managers who are dissatisfied the relational performance of the alliance. The fact that the effects are not significant for considerate and creative voices shows that the effect of relational quality is asymmetric, when there is a problem within an alliance, a bad relationship quality is likely to lead to a destructive behavior. On the other hand, in a problematic alliance, good relationship quality is not enough to ensure a constructive behavior, other factors, such as the severity of the problem, may also come into play to influence the choice of response strategy.

**Transaction-Specific Investments**

Managers who have not made substantial alliance-specific investments were hypothesized to be the most likely to engage in exit and neglect and the least likely to engage in considerate and creative voices than managers who have made substantial alliance-specific investments (Hypothesis 5). The differences between small and large investments were significant for neglect ($F = 4.421, p < .01$) and exit ($F = 8.093, p < .01$), but not for considerate or creative voices. Furthermore the difference was also significant for aggressive voice ($F = 3.915, p < .05$), which was not hypothesized. The results of post-hoc one-way ANOVAs support the hypothesis for neglect and exit. Neglect, a passive-destructive strategy, and exit, a active-destructive strategy, are more likely to be used by managers who did not make significant transaction-specific investments and less likely to be used by managers who made significant transaction-specific investments. Aggressive voice is also more likely to be used by managers who did not make significant transaction-specific investments. In the case of a problematic alliance, managers who did not make significant transaction-specific investments are not afraid to be aggressive because they do not have much to lose if the relationship ends.
Alternatives

Managers who have alternative partners available were hypothesized to be the most likely to engage in exit and opportunism and the least likely to engage in creative and considerate voices and patience than managers who do not have alternative partners available (Hypothesis 6). The differences between alternative availability and non-availability were significant for exit ($F = 2.399, p < .01$), considerate voice ($F = 5.819, p < .001$), and patience ($F = 1.977, p < .001$). The relationship between alternatives and creative voice was weaker, although statistically significant at the .10-level. Hypothesis 6 was supported by the results of post-hoc one-way ANOVAs as the likelihood of exit decreased and the likelihood of considerate voice and patience increased when managers have alternatives available.

DISCUSSION

Empirical findings support the hypotheses to a large extent. The response strategies are conceptually different, empirically distinct, and can be represented as a circular system: exit, opportunism, aggressive voice, creative voice, considerate voice, patience, and neglect. Findings also reveal that the four exchange variables, economic and social satisfaction, investments, and alternatives have different effects on the seven response strategies.

Conceptualization and measurement of response strategies has been an obstacle to the development of a more extensive understanding of how alliance managers respond to dissatisfaction and what factors influence these responses. This study offers strong empirical support for the validity of a seven strategy circular structure. A circular structure offers a number of advantages over other ad-hoc typologies, because it distinguishes between active-passive and constructive-destructive dissatisfaction responses and is based on the degree of similarity and conflict between the different strategies.
The empirical validation of a circular response strategy model as well as the development of reliable measures for the seven strategies could serve as a basis for integrating the results of research on alliance dynamics around an accepted classification of responses to alliance problems.

Findings substantiate the predictive and explanatory power of the investment model of dissatisfaction responses and affirm the influence of exchange variables on response strategies in problematic strategic alliances. The strong and consistent effect of a comprehensive group of predictors on a validated response strategy typology is encouraging given the tendency of past research to select predictor variables unsystematically and to examine the effect of these variables on only a limited number of response strategies. The use of a conceptual framework to guide the selection of exchange variables and the testing of their effects of response strategies consolidates research findings from diverse literatures on relationship management and contribute to the systematic development of alliance management knowledge and theory.

Studying the effects of managerially relevant exchange variables on response strategies suggests ways in which alliance managers can select response strategies in order to manage their partner own responses to maximize the potential for mutually beneficial long-term relationships. It is to be noted that economic satisfaction is not the sole driver of a partner firm’s behavior. Alliance managers may therefore seek to improve the alliance’s efficiency by managing its partner’s behavior through adaptations in relational quality, transaction-specific investments, or the perception of the non-availability of better alternatives.
CONCLUSION

The results of this study should be interpreted cautiously for several reasons. First, although findings suggest that participants were knowledgeable about alliance management, data were collected in a laboratory setting and MBA students rather than alliance managers participated in the study. Debriefing after the experiment about the purpose of the study discounted the likelihood of hypothesis guessing by participants. Nevertheless, business students could be more sensitized to active responses than practicing alliance managers and more likely to respond to the unambiguous dissatisfaction problems represented in the study as rational and conscientious managers. Future research should seek to replicate our results with practicing alliance managers.

Second, behavioral intentions rather than actual behaviors were measured. While intentions are not always flawless predictors of behavior, our approach was based on the desire to assess the intensity of the likelihood of response strategies, an objective achieved more readily by measuring behavioral intention than behaviors (e.g., ‘did exit’ or ‘did not exit’). Survey studies of alliance managers may be used in future research to investigate real behaviors.

Third, response strategies were examined from a static perspective that considered the effect of exchange variables on the likelihood of a particular strategy following a single problematic experience. Although exchange variables demonstrably affected response strategies, the study did not investigate the evolution of dissatisfaction responses over time by examining whether and how constructive and passive responses, such as patience and considerate voice were influenced by recurring problems. Determining the manner in which the likelihood of choosing a particular response strategy evolve temporally over a series of problem is an important research priority. This calls for longitudinal designs.
From a managerial perspective, there is considerable value in identifying threshold points for exchange variables below which response strategies are not activated. If for example, alliance managers understood the sensitivity of response strategies to the magnitude of dissatisfying problems as opposed to exit barriers (transaction specific investments and availability of alternatives), alliance managers could make highly informed decisions about the relative effectiveness of committing scarce resources to improving the alliance financial performance or relational quality as opposed to increasing its partner’s switching costs.

These limitations notwithstanding, the study makes a number of important contributions by providing a systematic model of response strategies and proposing a framework to assess the impact of exchange variables. Further research may seek to corroborate these findings with different research design and in different application contexts.

REFERENCES


Table 1. Descriptive Statistics and Correlation Matrix

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<th>8</th>
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n = 124, † = p < .10; * = p < .05; ** = p < .01; *** = p < .001

"Values in italic on the diagonal are Cronbach’s alpha coefficients
Table 2. MANCOVA Results

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<th></th>
<th>Exit Opinnis</th>
<th>Opportunism</th>
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<th>Patience</th>
<th>Neglect</th>
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<td>(6.112)**</td>
<td>(.882)</td>
<td>(.445)</td>
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<td>(6.450)**</td>
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<td>(14.554)***</td>
<td>(7.922)**</td>
<td>(7.350)</td>
<td>(7.044)</td>
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<td>4.87</td>
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<td>5.63</td>
<td>1.88</td>
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<td>Y 3.11</td>
<td>3.34</td>
<td>4.46</td>
<td>5.66</td>
<td>5.49</td>
<td>1.82</td>
<td>2.04</td>
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<td>(F) (2.847)†</td>
<td>(2.63)†</td>
<td>(3.101)†</td>
<td>(5.026)*</td>
<td>(1.318)</td>
<td>(0.21)</td>
<td>(4.774)†</td>
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<tr>
<td>Gender</td>
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<td>2.99</td>
<td>4.73</td>
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<td>5.55</td>
<td>1.85</td>
<td>1.95</td>
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<td></td>
<td>F 2.89</td>
<td>3.60</td>
<td>4.59</td>
<td>5.93</td>
<td>5.55</td>
<td>1.83</td>
<td>2.05</td>
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<tr>
<td></td>
<td>(F) (6.00)</td>
<td>(7.346)**</td>
<td>(.097)</td>
<td>(5.006)*</td>
<td>(.013)</td>
<td>(.052)</td>
<td>(.108)</td>
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n = 124

* Values are the mean level of each response, each of which had a possible range from 1 to 7

b The F value in the rows list the univariate effect of each dependent variable

c The multivariate column list the multivariate effect of each independent variable on the seven response strategies

d † p < .10; * p < .05; ** p < .01; *** p < .001

Figure 1. Response Strategies Circular Structure

- Aggressive Voice
- Opportunism
- Exit
- Neglect
- Patience
- Considerate Voice
- Creative Voice

ACTIVE

DESTRUCTIVE

CONSTRUCTIVE

PASSIVE
Figure 2. MDS Results
Figure 3. Sinusoid Curves Representing the Associations between Response Strategies and their Antecedents

- Financial Performance
- Relational Quality
- Investment
- Alternatives

Response Strategies in Problematic Alliances: An Experimental Study
Appendix: Scenario Design

General Introduction
Imagine that you are an alliance manager at a firm called BIOPHARM. As an alliance manager you are responsible for all of the strategic alliances BIOPHARM is engaged in. It is your job to assure that the performance of each alliance meets BIOPHARM’s expectations. You have the authority and power to make any necessary decisions concerning the future of these alliances. In BIOPHARM’s portfolio of alliances, one of the alliances is an alliance with STARTECH. This alliance was established five years ago and is equally important for both companies.

Manipulations

<table>
<thead>
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<th>Positive</th>
<th>Economical satisfaction</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the past year, the benefits BIOPHARM derived through the STARTECH alliance met the firm’s expectations. The financial objectives BIOPHARM had set were fully attained. More specifically, the alliance generated more revenues for BIOPHARM than it had initially expected.</td>
<td>During the past year BIOPHARM’s benefits from the STARTECH alliance did not meet the firm’s expectations. The financial objectives BIOPHARM had set were not fully attained. More specifically, the alliance generated fewer revenues for BIOPHARM than it had initially expected.</td>
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<table>
<thead>
<tr>
<th>Positive</th>
<th>Social satisfaction</th>
<th>Negative</th>
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<tbody>
<tr>
<td>Up until now, STARTECH has been very cooperative and flexible when making necessary adjustments to the alliance. For example, necessary renegotiations to change contractual clauses were usually settled quickly. Consequently, the working relationship with STARTECH went very smoothly as both partners trusted one another completely and BIOPHARM did not need to allocate additional resources to monitor the alliance.</td>
<td>Up until now, STARTECH has not been very cooperative and flexible when making necessary adjustments to the alliance. For example, on one occasion it took extensive renegotiations to change some minor contractual clauses. Consequently, the working relationship with STARTECH became more troublesome since both partners started to distrust one another and BIOPHARM had to allocate additional resources to monitor the alliance.</td>
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<thead>
<tr>
<th>Positive</th>
<th>Transaction specific investments</th>
<th>Negative</th>
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<tr>
<td>In the past, BIOPHARM made some minor reusable investments to make the alliance with STARTECH work. For example, BIOPHARM has invested into a database, which is useful with or without the STARTECH alliance. In addition, only few additional costs are to be expected if BIOPHARM should terminate the STARTECH alliance. For example, no penalty fee would have to be paid to STARTECH if BIOPHARM prematurely ends the alliance.</td>
<td>In the past, BIOPHARM made substantial specialized investments that would be lost if the STARTECH alliance were to be terminated. For example, BIOPHARM has invested into a tailor-made database, which is only useful, if exploited together with STARTECH. In addition, substantial costs can be expected if BIOPHARM should end the STARTECH alliance. For example, a high penalty fee has to be paid to STARTECH if BIOPHARM prematurely ends the alliance.</td>
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<th>Positive</th>
<th>Alternatives availability</th>
<th>Negative</th>
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<tr>
<td>At this moment, BIOPHARM has plentiful alternatives available. For example, launching a new product without STARTECH can be considered as a serious alternative. Moreover, developing new products without STARTECH’s help is possible with only a few additional investments. In addition, various other firms can be viewed as potential partners to replace STARTECH and these firms are interested in forming an alliance with BIOPHARM.</td>
<td>At this moment, BIOPHARM has few serious alternatives available. For example, launching a new product without STARTECH is too risky. Moreover, developing new products without STARTECH’s help is too costly, as substantial investments would be required. In addition, only a few other firms can be viewed as potential partners to replace STARTECH. In addition, most of these firms are already engaged in other alliances with BIOPHARM’s competitors.</td>
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Question
Please indicate how you would most likely respond to the situation described above, by circling the number (1-7) that corresponds best with your opinion. Try to distinguish as much as possible between your responses by using all the numbers. Please, respond as quickly and carefully as possible. Your first impression is usually your most accurate impression. There is no right or wrong answer as we are only interested in your opinion. Please, indicate how you would respond to the situation described above.