

# **Responding to Adverse Situations within Exchange Relationships: The Cross-Cultural Validity of a Circumplex Model**

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## **ABSTRACT**

When faced with adverse situations in exchange relationships, the people involved are required to respond. Response strategies are reactions to such adverse situations and represent cognitive schemata organized in an integrated structure forming a mental map. Extant response strategy research implicitly assumes that the content and internal structure of response strategies is universal, but with few exceptions, it fails to assess cross-cultural validity, a necessary step to investigate potential cultural variations in response strategy preferences. This study has investigated the cross-cultural validity of a circumplex model in the Netherlands, Switzerland, Turkey, and Japan. The seven response strategies examined attained measurement equivalence, and six were organized in an equivalent circumplex structure in all four countries. The findings also revealed cross-cultural differences in people's preference to use response strategies. This study therefore contributes to cross-cultural psychology literature by demonstrating that response strategy content and structure are nearly universal, whereas preferences for using response strategies vary across cultures.

**Response strategies are relationship-focused reactions** people use in an attempt to resolve a dissatisfying situation (e.g., Geyskens & Steenkamp, 2000). Unlike coping strategies, which are responses to stress (Lazarus & Folkman, 1984), and response styles, which reflect a systematic tendency to respond in a certain way to items or scales (Johnson, Kulesa, Cho, & Shavitt, 2005; Van Herk, Poortinga, & Verhallen, 2004), response strategies represent cognitive schemata organized in an integrated structure forming a mental map in people's minds, similar to individual values (Fontaine, Poortinga, Delbeke, & Schwartz, 2008; Schwartz, 1992; Schwartz and Boehnke, 2004) and personal goals (Grouzet et al., 2005). Therefore, people from different cultures may perceive different meanings of and prefer varying response strategies. Yet most cross-national studies assume response strategies to be universal and fail to assess measurement equivalence (e.g., Lee & Jablin, 1992; Vigoda, 2001; Yum, 2004). To address this concern, we formally test whether and to what extent the content and internal structure of response strategies are equivalent across cultural groups, a necessary step before investigating cross-cultural variations in response strategy preferences.

The exit, voice, loyalty, and neglect (EVLN) typology remains the most popular conceptualization of response strategies and has earned substantial theoretical and empirical support in various relationship situations, including romantic involvement (Rusbult & Zembrodt, 1983; Rusbult, Zembrodt, & Gunn, 1982), employee-supervisor relationships (Farrell, 1983; Rusbult, Farrell, Rogers, & Mainous, 1988; Saunders, Sheppard, Knight, & Roth, 1992; Thomas & Pekerti, 2003), customer complaints (Hibbard, Kumar, & Stern, 2001), and business relationships (Geyskens & Steenkamp, 2000; Ping, 1993). It also has received empirical support in several countries, including the United States (Ping, 1993; Rusbult et al., 1988), the Netherlands (Hagedoorn, van Yperen, van de Vliert, & Buunk, 1999), Hong Kong (Cheung, 2005), and Sweden (Liljegren, Nordlund, & Ekberg, 2008). A few cross-cultural studies have

started to investigate some differences and similarities in preferences for response strategies (e.g., Lee & Jablin, 1992; Thomas & Au, 2002; Thomas & Pekerti, 2003; Vigoda, 2001; Yum, 2004), yet three issues persist with respect to the cross-cultural validity of the EVLN typology.

First, some newly identified response strategies are not captured by the four EVLN strategies, and their content may be country specific. For example, Hagedoorn and colleagues (1999), in their investigation of employee–supervisor relationships in the Netherlands, identified aggressive voice as a particular form of voice, whereas using a Swedish sample, Liljegren and colleagues (2008) found that this response strategy had low internal consistency and poor discriminant validity, which they argued indicated that the strategy content differed across countries. Other response strategies include opportunism (Ping, 1993) and creative voice (Zhou & George, 2001), but no formal tests have assessed their cross-cultural equivalence. Formal testing of the equivalence of the content of these new response strategies is necessary before they can be incorporated into a universal typology, especially because previous studies have suggested that opportunism (Chen, Peng, & Saporito, 2002) and creative voice (Lubart & Sternberg, 1998) may have different meanings across cultures.

Second, some studies have questioned the two-dimensional structure that organizes the EVLN typology as possibly inadequate for capturing the interrelationships among response strategies (Hagedoorn et al., 1999; Liljegren et al., 2008; Thomas & Pekerti, 2003). Preliminary evidence indicated that an extended response strategy typology instead might be organized in a circumplex structure (Hagedoorn et al., 1999). A circumplex structure stipulates the order of response strategies along the circumference of a circle on the basis of the degree of compatibility and therefore better represents people’s mental maps of associations among response strategies (Fabrigar, Visser, & Browne, 1997; Schwartz, 1992). Hagedoorn and colleagues (1999) found empirical support for a circumplex structure that organized response strategies as follows: exit,

aggressive voice, considerate voice, patience, and neglect. However, no studies have formally assessed or confirmed the cross-cultural validity of the circumplex structure of response strategies.

Third, a few cross-cultural EVLN studies showed that response strategy preferences may be influenced by culture (Lee & Jablin, 1992; Vigoda, 2001; Yum, 2004). However, because these studies did not formally assess the cross-cultural validity of the content and structure of the response strategies, we cannot know if differences in preferences for response strategies really reflect cultural differences.

To address these three issues, we assess the cross-cultural validity of the content, internal structure, and preferences for response strategies (Fontaine et al., 2008; Matsumoto & Yoo, 2006; van de Vijver & Leung, 1997). To do so, we draw on theories and research pertaining to response strategies in different contexts in an effort to (1) define and measure an extended set of seven response strategies that differ from one another in content and are valid across cultures; (2) empirically demonstrate that the structure underlying the response strategy typology can be represented best by a circumplex and is equivalent across cultures; and (3) conduct an assessment of cultural differences in response strategy preference. We contribute to the debate between universalist and relativist approaches in cross-cultural psychology research (e.g., Berry, Poortinga, Segall, & Dasen, 2002) by demonstrating that the seven response strategies we investigate have measurement equivalence and that six of them possess an internal structure that appears nearly universally organized in a circumplex fashion. However, preferences for these strategies vary across cultures.

### **AN EXTENDED EVLN RESPONSE STRATEGY TYPOLOGY**

Hirschman (1970) initially identified exit, voice, and loyalty as three alternative responses to organizational decline. The addition of neglect by Farrell (1983) and Rusbult and Zembrodt

(1983) led to the EVLN four-strategy typology (Farrell, 1983; Rusbult et al., 1982; Withey & Cooper, 1989). In addition, Leck and Saunders (1992) proposed using the term “patience” to refer to loyalty as a response and reserving the term “loyalty” for the attitudinal component of the construct, in line with Hirschman’s (1970) original conceptualization. More recent research refined and increased the number of response strategies and identified seven: (1) exit, (2) opportunism, (3) aggressive voice, (4) creative voice, (5) considerate voice, (6) patience, and (7) neglect (Hagedoorn et al., 1999; Ping, 1993; Zhou & George, 2001).

Exit indicates a disinclination to continue the current relationship (Hirschman, 1970) and thus reflects the ultimate and most destructive response to an adverse situation; once a relationship has been dissolved, the participants must find alternative ways to achieve their objectives (Rusbult et al., 1982; Withey & Cooper, 1989). Opportunism as a response strategy entails an active intention to increase benefits from a relationship in ways that are explicitly or implicitly prohibited within the relationship (Ping, 1993). This type of response comprises shirking, the use of the circumstances to extract concessions from the exchange partner, evasion of obligations, and withholding critical information (Wathne & Heide, 2000). Hirschman (1970, p. 39) conceptualized voice broadly as “any attempt at all to change, rather than to escape an objectionable state of affairs.” However, empirical studies (e.g., Rusbult et al., 1988; Withey & Cooper, 1989) reported low internal consistency for voice, suggesting that it might be a more complex construct with several subcomponents; therefore, more recent studies have distinguished among three types of voice: aggressive, creative, and considerate. Aggressive voice consists of persistent efforts to solve the adverse situation, regardless of the partner’s ideas (Hagedoorn et al., 1999; van Yperen, Hagedoorn, Zweers, & Postma, 2000). With aggressive voice, people forcefully impose their views on others, without trying to avoid conflicts (Hibbard et al., 2001). Creative voice refers to voicing novel and potentially useful ideas (Cheung, 2005; Zhou &

George, 2001) and represents an attempt to overcome an adverse situation unilaterally by proposing innovative solutions. Considerate voice represents an attempt to change the situation by communicating in a relationship-preserving manner (Ping, 1993). People consider both their own concerns and those of their partner (Hagedoorn et al., 1999; van Yperen et al., 2000) by discussing the situation with the intent to develop mutually satisfactory solutions (Hibbard et al., 2001). Patience involves silently abiding the issues, with the confidence that things will improve in the future (Hibbard et al., 2001; Ping 1993). People voluntarily ignore the issue and hope that the adverse situation resolves itself, so they consider undesirable circumstances transitory phenomena that will dissipate over time (Ping, 1993). Finally, neglect pertains to allowing a relationship to deteriorate (Rusbult et al., 1982). A neglectful person expends little effort to maintain the relationship and ignores possible ways to solve the situation, such that the relationship eventually dies (Ping, 1993).

We expect that the seven response strategies have the same universal content across cultures. However, this prediction requires that the strategies be defined in broad terms and at a relatively high level of abstraction (Hui & Trandis, 1985). That is, broadly defined response strategies might be perceived similarly across cultures, whereas narrowly defined response strategies likely are context specific and thus may connote different contents in different cultures. For example, if neglect is broadly defined as “passively allowing the relationship to deteriorate,” it should have the same meaning across cultures, but if it is defined as “reducing commitment to the relationship by not communicating anymore with a partner,” it is context specific and difficult to compare meaningfully across cultures. Similarly, “exiting a romantic relationship” (Rusbult et al., 1982) and “quitting a job” (Rusbult et al., 1988) are not the same things, but at a high level of abstraction, they are conceptually equivalent: “ending the relationship.” Support for the assumption that broadly defined response strategies are comparable across cultures came from

Thomas and Au (2002) and Thomas and Pekerti (2003), who found that the four EVLN strategies had the same meaning across cultures in the context of employee–supervisor relationships when they defined the response strategies abstractly, which allowed for cross-cultural comparison. Even if some studies failed to recognize certain response strategies in specific cultural contexts (e.g., Liljegren et al., 2008), we expect that when measured at a high enough level of abstraction, response strategies retain the same universal content across cultures (Poortinga, Van de Vijver, & Van Hemert, 2002). Therefore, we hypothesize:

**Hypothesis 1:** The seven response strategies of exit, opportunism, aggressive voice, creative voice, considerate voice, patience, and neglect have the same meaning across cultures.

#### *Response Strategy Internal Structure*

In Hirschman's (1970) exit, voice, and loyalty typology, the three strategies were organized along a constructive–destructive dimension (Leck & Saunders, 1992). The addition of neglect by Farrell (1983) and Rusbult and Zembrodt (1983) led to the empirical identification of a second, active–passive dimension, such that each of the four response strategies are located in one of the quadrants: exit as active–destructive, voice as active–constructive, loyalty as passive–constructive, and neglect as passive–destructive (Farrell, 1983; Rusbult et al., 1982; Withey & Cooper, 1989).

However, this two-dimensional simple structure is not appropriate to account for interrelationships between response strategies that occur in an extended typology. In contrast with empirical evidence (Rusbult et al., 1988; Withey & Cooper, 1989), the two-dimensional structure is built on the assumption that response strategies are discrete and independent constructs. Hagedoorn and colleagues (1999) showed that a circumplex structure would be better suited to represent the interrelationships among the strategies. First, a circumplex structure postulates that the nature of the relationships among variables can be explained best by restricting the location of

the variables to the circumference of a circle (Fabrigar et al., 1997). The seven response strategies could be located in the two-dimensional space of the EVLN typology, but they all would be located at the same distance from the center of the circle, which means that they would all have the same weight or importance in people's minds. Second, a circumplex structure systematically organizes response strategies according to their degree of compatibility and incompatibility (Fabrigar et al., 1997; Gurtman, 1992; Schwartz, 1992). For example, creative voice and considerate voice, which are compatible, are located close by on the circle, whereas patience and aggressive voice, which are incompatible, are located opposite each other. This important characteristic reflects how compatible strategies are likely to be perceived as close alternatives in a particular adverse situation, whereas incompatible strategies are not likely to be considered simultaneously (Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009). Third, a circumplex structure is continuous, so there could be interstitial strategies between any pair of dimensions (Saucier, 1992). Thus, the circumplex structure can conceptually integrate new response strategies that blend the original EVLN strategies (Hagedoorn et al., 1999; Saucier, 1992). Furthermore, empirical evidence has suggested that response strategies represent a broad range of related responses (Rusbult et al., 1988). For example, weak forms of exit may verge on neglect, strong forms of loyalty approach considerate voice, and so on. Although response strategies can occur in their pure form, a response also could be a combination of two or more strategies (Withey & Cooper, 1989), which indicates a continuous structure.

Building on the circumplex structure identified by Hagedoorn and colleagues (1999) that reflects the active-passive and constructive-destructive two-dimensional space, we expect that our extended response strategy typology will exhibit a circumplex structure. Starting from exit, which depicts the most destructive strategy, and turning clockwise around the circumplex structure, the response strategies are likely to be ordered as follows: Opportunism should be next

to exit, because it is more active and less destructive, followed by aggressive voice, which is active but neither constructive nor destructive. Next there is creative voice, which is also active but constructive. Less active but more constructive, considerate voice comes next. Patience, which is also constructive but passive, follows. Finally, before closing the circle, neglect appears, involving a passive–destructive response.

Cross-cultural studies offered empirical support for the two active–passive and constructive–destructive dimensions of the EVLN typology (Lee & Jablin, 1992; Thomas & Au, 2002; Vigoda, 2001). However, the circumplex structure of the extended typology has not been tested across cultures. Cross-cultural studies of circumplex structures, such as those by Schwartz and Boehnke (2004) and Grouzet and colleagues (2005), empirically demonstrated that at a high level of abstraction, compatibility and incompatibility relationships encompassing the circumplex structure are consistent across cultures. Therefore, we contend that across cultures, people have equivalent mental maps of their response strategies, and we expect response strategies to be organized in the same circumplex structure across cultures. Therefore, we hypothesize:

**Hypothesis 2:** The seven strategies appear organized along the circumference of a circle across countries in the same order: exit, opportunism, aggressive voice, creative voice, considerate voice, patience, neglect.

#### *Cultural Differences in Response Strategy Preference*

Even if response strategies' internal structure is the same across cultures, empirical studies suggested possible cross-cultural differences in the preference for these strategies (Lee & Jablin, 1992; Thomas & Au, 2002; Vigoda, 2001; Yum, 2004). Because exchange relationships involve normative beliefs about how people should behave when interacting with others, the preference for using response strategies is likely to vary across cultures (Doney, Cannon, & Mullen, 1998; Thomas & Pekerti, 2003). Hofstede's (2001) cultural values typology identified four dimensions:

individualism/collectivism, masculinity/femininity, uncertainty avoidance, and power distance. Of the four dimensions, individualism/collectivism has dominated cross-cultural research and is perhaps the most commonly used to explain cultural differences (Gelade, Dobson, & Auer, 2008; Hofstede, 2001; Triandis, 1995). Masculinity/femininity also has a powerful influence on various social behaviors, including conflict management style (Hofstede, 2001). Both dimensions are particularly relevant with regard to the effect of culture on response strategies in our study setting (i.e., alliances; see the method section), because they provide social norms about how persons should interact with others (Doney et al., 1998).

For reasons of parsimony, we have not developed hypotheses related to the other two dimensions. Power distance correlates strongly with individualism/collectivism (Hofstede, 2001), and therefore, its effect on response strategy preference should be similar. Differences in terms of uncertainty avoidance tend to be detrimental to exchange relationships, because they imply differences in how people perceive opportunities and threats in the environment (Barkema & Vermeulen, 1997; Schneider & De Meyer, 1991), which may breed disagreement and conflicts between partners. Therefore, exchange relationships between partners with high and low uncertainty avoidance are less likely. Building on the individualism/collectivism and masculinity/femininity cultural dimensions, we develop two hypotheses pertaining to potential differences in response strategy preferences.

*Individualism/Collectivism.* In individualist cultures, personal goals and interests take precedence over those of the group (Hofstede, 2001). Triandis (1995) suggested that in collectivistic cultures, people instead make clear distinctions between in-group and out-group members. Under collectivistic norms, predilections for group affiliation may encourage members to overlook or downplay differences between themselves and in-group members but make sharp distinctions between members and out-groups (Nakana, 1971). In collectivist cultures, social

norms require people to hold group values and beliefs, because it is most important to protect group harmony and save face and embarrassment (Hofstede, 2001). In these cultures, cooperation is high with in-group members but unlikely when the other person belongs to an out-group (Triandis, 1995). For people in collectivist cultures, the interests of in-group members are relatively more important than they are in individualistic cultures, whereas the interests of out-group members are relatively less important. People in individualistic cultures do not make much distinction between in- and out-groups and thus have less difficulty collaborating with outsiders. In individualistic cultures, relations with others should be rational and governed by cost–benefit calculations, whereas in collectivistic cultures, relational and socio-emotional concerns are more important (Triandis, 1995).

In an adverse situation, individualistic cultural norms influence people to prefer more active and constructive strategies to solve the situation, because such norms induce people to pursue individual objectives. In collectivistic countries, people are inclined to consider their business exchange partners as out-groups (Johnson, Cullen, Sakano, & Takenouchi, 1996); therefore, in an adverse situation, they are more likely to prefer destructive or passive strategies to protect group harmony and save face. Starting with exit and moving clockwise around the response strategy circle, we systematically hypothesize effects of individualism/collectivism on people's preferences. Exit is more likely in collectivistic cultures, because ending a relationship saves face by avoiding the conflicts inherently tied to a slowly deteriorating relationship. Active–destructive strategies, such as opportunism and aggressive voice, are more likely in collectivistic cultures, because endangering a relationship with an out-group is considered more acceptable for them than it would be in individualistic cultures (Chen et al., 2002; Doney et al., 1998). Because creativity may disturb group harmony, creative voice is more likely in individualistic cultures than in collectivistic cultures. In more collectivistic cultures, which value conformity and

tradition, creativity should be minimized (Lubart & Sternberg, 1998). Considerate voice also is more likely in individualistic cultures, because this form of voice aims to repair the relationship through discussion of the adverse situation with one's partner. In contrast, people in collectivistic cultures are less likely to choose considerate voice, because making relationship hazards with partners transparent could be discomforting. In collectivistic cultures, people also prefer passive, relationship-preserving strategies, such as patience and neglect (Yum, 2004). Passive strategies do not directly deal with the adverse situation, which better preserves collective interests, because avoiding confrontation is an important social norm in collectivist cultures (Morris et al., 1998; Yum, 2004). Therefore, we hypothesize:

**Hypothesis 3a:** In cultures characterized by individualistic norms, people are more likely to prefer creative and considerate voices and less likely to prefer exit, opportunism, aggressive voice, neglect, and patience compared with people in cultures characterized by collectivistic norms.

*Masculinity/Femininity.* Masculine societies convey norms that emphasize the need for autonomous, competitive, and assertive actions to achieve materialistic goals. Masculine cultures also tend to emphasize decisive and daring behavior (Hofstede, 2001; Hofstede & Usunier, 2003). Conflicts get resolved through fighting rather than compromising. Dominant norms in masculine cultures value success, money, and material, with preference for more extrinsic rewards (Hofstede & Usunier, 2003). These norms result in more ego-boosting behaviors and sympathy for the strong, which suggests more aggressive, less cooperative, and more destructive behaviors. In contrast, feminine cultures convey norms that emphasize the need for collaboration and relationships (Hofstede, 2001). The dominant norms are caring for others and quality of life, with preference granted to more intrinsic rewards (Hofstede & Usunier, 2003). Feminine cultures exhibit a pattern of nurture, and there is a general norm toward less aggressive, more cooperative,

and more constructive behavior (Doney et al., 1998). The more caring sensitivity of feminine cultural norms also requires preserving relationships and finding consensus (Hofstede, 2001).

Masculine cultural norms, such as competition and assertiveness, value more active and destructive strategies; feminine norms, which convey ego effacement and lower tolerance for destructive strategies, value constructive and passive strategies. Exit is more likely in masculine cultures, because it is a bold response, which depicts a lack of caring. Resolving dissatisfying relationship situations by increasing the rewards obtained from the relationship may be more accepted in masculine cultures, even though this effort may involve some relational risks. Therefore, the preference for using opportunism and aggressive voice is more likely in masculine than in feminine cultures. People in feminine cultures are less likely to prefer such responses, which conflict with the social norm of caring for others' well-being. People in masculine and feminine cultures may perceive creativity differently (Lubart & Sternberg, 1998); as a more active strategy, which could involve high risks, creative voice should be more likely in masculine than in feminine cultures. Considerate voice is more likely to be preferred in feminine than masculine cultures, as it involves more cooperation than competition and requires consideration of the partner's opinions and preferences. People in feminine cultures are also more likely to prefer passive strategies, such as patience, which fosters well-being in the relationship, and neglect, which avoids conflict with the partner.

**Hypothesis 3b:** In cultures characterized by masculine norms, people are more likely to prefer exit, opportunism, and aggressive and creative voices and less likely to prefer considerate voice, patience, and neglect compared with people in cultures characterized by feminine norms.

These two cultural dimensions might also interact to influence response strategy preferences, whether by reinforcing or cancelling out each other. However, predictions at this stage are not warranted, so we do not propose a specific hypothesis about the direction of this

interaction.

## **METHOD**

### *Study Setting and Procedure*

Similar to response strategy studies that use business relationships to understand responses to adverse situations (Geyskens & Steenkamp, 2000; Ping, 1993), we developed scenarios describing an adverse situation in an alliance to test our hypotheses. An alliance is a voluntary, long-term, contractual relationship between two organizations, designed to achieve specific objectives through shared resources. Such interorganizational relationships tend to exhibit a mix of promise and peril, suggesting that though alliances may enable organizations to capitalize on opportunities, alliance managers must remain responsive to the threat of adverse situations. For example, managers may need to resolve dissatisfying performance issues, improve poor working relationships, and deal with the negative consequences of exit barriers, such as relationship-specific investments and a lack of attractive alternatives. As such, alliances represent a fruitful setting for our study, because managers' preferences for response strategies likely are influenced by their cultural backgrounds.

To test the hypotheses, we designed an experimental, scenario-based study, a method that has proven useful for the investigation of response strategies (Lee & Jablin, 1992; Rusbult et al., 1988). To trigger response strategies, we developed 16 different scenarios in which we manipulated and combined four factors that previous research indicated influence response strategy preference. We chose this large number of scenarios to generate sufficient variance along the two expected dimensions of the internal structure of the response strategies, as well as distinguish between adjacent strategies. The scenarios manipulated economic satisfaction, social satisfaction, alliance-specific investments, and the availability of alternatives (e.g., Geyskens & Steenkamp, 2000; Ping, 1993) at two levels each. The experiment thus used a four-factor by two-

level (positive versus negative) between-subjects design, in which we combined the manipulations to form 16 different scenarios and from which we removed the all-positive scenario, because pretests indicated that it was not adverse enough to trigger a response.

#### *Country Selection and Samples*

The experiment was conducted with a sample of business students from the Netherlands, Switzerland, Turkey, and Japan. We selected these four countries to maximize the differences on the individualism and masculinity scales and to reduce the potential confounding effects of power distance and uncertainty avoidance (Sivakumar & Nakata, 2001). The four countries vary in their level of individualism and masculinity. Specifically, Hofstede's (2001) individualism scores for the four countries are as follows: 80 for the Netherlands, 64 for the French-speaking part of Switzerland, 37 for Turkey, and 46 for Japan. Thus, the Netherlands and Switzerland appear more individualistic, whereas Turkey and Japan tend to be more collectivistic. Hofstede's masculinity scores for these four countries are 14 for the Netherlands, 45 for Turkey, 58 for the French-speaking part of Switzerland, and 95 for Japan. Therefore, Switzerland and Japan possess more masculine cultures, whereas the Netherlands and Turkey are more feminine cultures. To a lesser extent, the four countries also vary in power distance and uncertainty avoidance. For power distance, Hofstede's scores are 38 for the Netherlands, 54 for Japan, 66 for Turkey, and 70 for the French-speaking part of Switzerland, which may raise concerns for confounding effects. However, because power distance scores correlate with the scores of individualism, both dimensions should have similar effects. For uncertainty avoidance, Hofstede's scores are 53 for the Netherlands, 70 for the French-speaking part of Switzerland, 85 for Turkey, and 92 for Japan, which indicates a difference between the Netherlands and the other three countries. Even if this difference is notable though, the four scores are all above average, which limits the impact of the

potential confounding effect. Because of data collection constraints, we could not completely eliminate this effect.

We used business students enrolled in Master's in Business Administration programs as respondents, because previous research indicated that managers' and students' responses converge in similar decision situations (Bateman & Zeithaml, 1989). Moreover, they represented a more homogeneous group than practicing alliance managers, which helped reduce noise and the effect of extraneous variations (Peterson, 2001). We collected 1,129 questionnaires from students in the Netherlands, Switzerland, Turkey, and Japan. The Dutch sample consisted of 334 students, with an average age of 24.4 years, 35.5% of whom were women. The Swiss sample consisted of 255 respondents with an average age of 23.3 years, 42.4% of whom were women. The Turkish sample consisted of 278 respondents, with an average age of 23.3 years, 49.6% of whom were women. The Japanese sample consisted of 262 respondents with an average age of 24.4 years, 32.1% of whom were women.

During class hours, students received an invitation to participate in an experiment; if they agreed, they received a document containing a scenario and a series of questions. The two-page document contained four parts: The first section included a randomly selected scenario with an adverse situation in an alliance setting, the second section contained a list of items pertaining to preferences for using response strategies, and the third and fourth sections provided manipulation checks and control questions. The instructions asked participants to read the scenario and answer the questions as if they were the manager responsible for dealing with the adverse situation. We assessed the degree to which respondents understood the scenarios using four manipulation check questions. The questions captured the degree to which they "were satisfied with the overall performance of the alliance," "perceived their partner to be trustworthy," "perceived they can end the alliance without substantial costs," and "perceived they have other alternatives available in

order to achieve their firm's objectives." To test for the effect of the manipulations, we subjected the items to a four-factor multivariate analysis of variance (MANOVA). The effects of the four factors were significant at .01; the respondents understood the manipulations.

#### *Response Strategy Measures and Controls*

To operationalize the response strategies, we used existing scales, adapted to the alliance setting if necessary (see Appendix A). The exit measure included items pertaining to whether the respondent intended to end the relationship or stop doing business with the partner (Geyskens & Steenkamp, 2000; Ping, 1993, Rusbult et al., 1988). The measures for opportunism came from Ping (1993) and included withholding information, exaggerating the adverse nature of the situation, and escaping from contractual obligations. Aggressive voice items referred to forcefully pushing one's own solution or being persistent (Hagedoorn et al., 1999). The creative voice measure used items related to the creation of innovative and creative solutions or fresh ideas (Zhou & George, 2001). To measure considerate voice, we used items that dealt with working to create a consensus and finding a solution that was satisfactory and acceptable for both partners (Ping, 1993; Rusbult et al., 1982). We operationalized patience with items such as optimistically waiting for better times and trusting that the situation would solve itself (Ping, 1993; Rusbult et al., 1982). Finally, we measured neglect with items referring to not dealing with the issue, not putting additional effort into the relationship, and not presenting initiatives to improve the situation (Ping, 1993). All these measures used seven-point Likert scales, ranging from "I would definitely not react in this way" [1] to "I would definitely react in this way" [7]. The studies in the Netherlands and Switzerland used the original scales in English, because English was the language used by students in their study programs. The Turkish and Japanese students received Turkish and Japanese versions, respectively, developed using standard translation and back-translation procedures (van de Vijver & Leung, 1997).

We included a three-item scale to measure the degree of overall satisfaction with the situation and assess the external validity of the circumplex structure of the response strategies. Items pertained to the extent of “satisfaction with the benefits derived through the alliance,” “satisfaction with the working relationship,” and “commitment to make the alliance successful.” Furthermore, to control for potentially influential demographic characteristics, we included age and gender items (e.g., Rusbult et al., 1988). A single-item scale, “to what extent do you think the situation is severe?” enabled us to assess perceptions of the severity of the situation, which may influence the use of response strategies (Rusbult et al., 1988).

Another important issue we controlled for was the possibility of socially desirable responding (Matsumoto & Yoo, 2006; Paulhus, 1991). In addition to being methodological artifacts, response biases can exert important cultural influences on the data (Fischer, 2004; Matsumoto & Yoo, 2006; Smith, 2004). Although standardization provides a means to control for response bias, we did not standardize the data before our analysis, which would have masked important cultural differences (Fischer, 2004). However, to address concerns about response bias, we included the MC2 version of the Marlowe-Crowne social desirability scale (Strahan & Gerbasi, 1972). Some response strategies are socially desirable (e.g., considerate voice) and others are socially undesirable (e.g., opportunism); therefore, a sense of social desirability likely biases the data at the individual level.

### *Analyses*

The analytical strategy, adapted from Grouzet and colleagues (2005), first required us to assess the reliability using Cronbach’s alpha and factor loadings from an exploratory factor analysis (EFA). Alphas greater than or equal to .70 suggested acceptable reliability, along with factor loadings that exceeded .50 (Nunnally & Bernstein, 1994). After applying internal reliability tests to determine which items to retain, we conducted a confirmatory factor analysis

(CFA) for each country separately to test the proposed seven-factor response strategy structure. Unlike Grouzet and colleagues (2005) but as recommended by Perrinjaquet, Furrer, Usunier, Cestre, and Valette-Florence (2007), we tested seven-factor models rather than the seven dimensions separately, which enabled us to test the discriminant validity of the seven response strategies. We employed maximum likelihood (ML) estimation procedures, because the data did not strongly violate multivariate normality assumptions (McDonald & Ho, 2002). Following common practice (e.g., Carmines & McIver, 1981; Hu & Bentler, 1999), we used multiple indicators to assess model fit, namely, normed chi-square ( $\chi^2/\text{d.f.}$ ), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), non-normed fit index (NNFI), and comparative fit index (CFI), and we required  $\text{RMSEA} \leq .06$ ,  $\text{SRMR} \leq .08$ ,  $\text{NNFI} \geq .90$ ,  $\text{CFI} \geq .95$ , and  $\chi^2/\text{d.f.}$  less than or equal to 2 to indicate good model fit.

We then tested response strategy measurement and construct invariance across countries. Measurement invariance pertains to the psychometric properties of the measurement scales and includes configural invariance, metric invariance, and scalar invariance. Scalar invariance is a prerequisite for interpreting construct differences (Cheung & Rensvold, 2002; Steenkamp & Baumgartner, 1998), which indicate between-group differences in latent means. However, full scalar invariance is not necessary for the further tests of construct invariance to be meaningful, provided at least one item is invariant (i.e., partial invariance) (Byrne, Shavelson, & Muthen, 1989; Steenkamp & Baumgartner, 1998). Considering the goals of our study and our hypotheses, we did not require higher levels of invariance (Steenkamp & Baumgartner, 1998). Latent mean invariance was not required, because we expected and hypothesized cross-cultural differences in the use of response strategy preference. In addition, factor variance and covariance invariance were not required, because we only hypothesized the same ordering of the response strategies around the circumplex structure, not the same exact position.

To evaluate measurement and construct invariance, we used multigroup structural equation models (AMOS 16.0), performed mean and covariance structure (MACS) analyses (Little, 1997), and considered group comparisons across the four countries. The MACS analysis involved four nested models that corresponded to the different levels of invariance across groups (e.g., Cheung & Rensvold, 2002). In addition to the overall fit indices, we used two comparative fit indices to evaluate the difference between nested models. First, we used the chi-square difference test ( $\Delta\chi^2$ ). Second, as recommended by Cheung and Rensvold (2002), we examined changes in CFI ( $\Delta\text{CFI}$ ), which is less affected by sample size. An absolute value of  $\Delta\text{CFI}$  less than or equal to  $|\text{.01}|$  would indicate that the invariance hypothesis cannot be rejected (Cheung & Rensvold, 2002).

As we explained previously, a circumplex structure possesses several characteristics that differentiate it from a two-dimensional simple structure. Both structures can be represented on a two-dimensional space, but the circumplex structure implies that variables do not group along the two dimensions, as does the simple structure; rather, there are always interstitial variables between any orthogonal pair of dimensions (Saucier, 1992). To examine the circumplex structure of the seven response strategies, we first assessed the two-dimensional structure underlying the typology. That is, we examined a two-factorial bipolar model (active–passive and constructive–destructive) by estimating a second-order CFA model, with the seven response strategies as first-order constructs and constraining the second-order constructs to be orthogonal. Then we compared this simple, two-dimensional model with a second model in which we allowed the first-order response strategies to load on both second-order constructs to model interstitial strategies. To support a circumplex structure, the second model with cross-loadings should have better fit than the baseline model.<sup>1</sup>

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<sup>1</sup> We thank an anonymous reviewer for suggesting this procedure.

We also used Browne's (1992) circular stochastic modeling (CIRCUM) to test the circular component of the hypothesized structure. A structural equation modeling (SEM) software based on Fourier series correlation functions (Browne, 1992; Browne & Cudeck, 1992), CIRCUM was designed specifically for circumplex models (see also Fabrigar et al., 1997). We specified a three-component model ( $m = 3$ ) (Browne, 1992), because additional free parameters did not improve model fit. Similar to other SEM programs, CIRCUM yields goodness-of-fit indices, such as RMSEA, which provide a test of the degree to which the model corresponds to a circular representation of the data, in which the distance between variables is a function of the correlations among them (Fabrigar et al., 1997). Moreover, CIRCUM provides several ML estimates, including the polar angles, confidence intervals of common score variables (i.e., location on the circle in relation to a reference variable, whose position is set to  $0^\circ$ ), and estimates of the communality of each variable (i.e., proportion of variance estimated to represent common variance). Exit arbitrarily served as the reference variable, such that we estimated the location of the other response strategies relative to it. We placed constraints on the communalities (i.e., distances to the circle center set to be equal) to evaluate the positions of the response strategies on the circumference. When we relaxed this constraint, model fit did not improve. While controlling for scenario, gender, age, problem severity, and social desirability bias, we entered the  $7 \times 7$  partial correlation matrices from the response strategy mean scores into CIRCUM.

To examine the nomological validity of the circumplex structure, we correlated the response strategies with an overall satisfaction measure. On the basis of the circumplex structure, the correlations should follow a circular path (i.e., sinusoidal curve). To test the circular pattern with respect to overall satisfaction, we fitted a sinusoidal regression model (Gurtman, 1992). A high  $R^2$  provides support for a circumplex structure.

Our third objective was to examine cross-cultural differences in response strategy preferences, so we examined the effect of individualism/collectivism and masculinity/femininity on the seven response strategies. Because the response strategies were interrelated, we manipulated the scenario variables, and we used covariates to control for confounding effects, a MANCOVA was the most appropriate method (Huberty & Morris, 1989). Before conducting the analysis, we examined the MANCOVA assumptions but found no violations. We used Wilks' lambda to assess the significance of the MANCOVA model. We ran post-hoc one-way ANOVAs and *t*-tests with Bonferroni adjustment to control for Type-I errors to test the hypotheses and interpret the effects of the cultural dimensions (Huberty & Morris, 1989). In this analysis, we used the average scores for each response strategy as dependent variables and the scenarios and dummy variables for individualism/collectivism and masculinity/femininity as the fixed factors. Gender, age, problem severity, and social desirability were entered in the analysis as covariates. We also included the interaction effects between the two cultural dimensions and these dimensions and the scenarios.

## RESULTS

### *Psychometric Characteristics of the Response Strategy Scales (Hypothesis 1)*

We first subjected 35 response strategy items to an EFA in each country and computed the Cronbach's alpha for each response strategy. Consistent with our expectations, seven factors emerged with acceptable construct reliability. We then subjected items with factor loadings greater than .50 in each culture and no cross-loadings (21 items) to separate CFAs, as well as a pooled sample. We examined the error variances, correlations, standard errors, goodness-of-fit indices, and factor loadings to assess the psychometric properties of the model (Cheung & Rensvold, 2002). The error variances were all positive and did not significantly differ from 0; no correlations were greater than 1, and standard errors were not too large. The country models

possessed good fit (see Appendix B); the normed chi-square values were 1.50, 1.53, 1.98, and 1.75 for the Netherlands, Switzerland, Turkey, and Japan, respectively. In addition, other goodness-of-fit indices suggested acceptable fit: the RMSEA values ranged from .039 [90% confidence interval (CI): .028, .048] for the Netherlands to .059 [90% CI: .050, .069] for Turkey, below the cut-off value. For the Netherlands, the other indices also suggested a good fit with the statistics, including .049 (SRMR), .96 (NNFI), and .97 (CFI); for Switzerland, these values were .052 (SRMR), .95 (NNFI), and .96 (CFI); for Turkey, they were .059 (SRMR), .90 (NNFI), and .92 (CFI); and for Japan, they were .066 (SRMR), .93 (NNFI), and .95 (CFI). The Turkish NNFI and CFI thus were slightly below the expected values. The model with the pooled sample ( $n = 1,129$ ) also produced good fit indices, with a normed chi-square value of 2.65 and fit index values of .038 (RMSEA) [90% CI: .034, .043], .037 (SRMR), .96 (NNFI), and .97 (CFI).

To assess convergent validity, we examined the factor loadings, which were significant and exceeded the .50 threshold, ranging from .56 to .89 in the Dutch sample, .50 to .88 in the Swiss sample, .55 to .88 in the Turkish sample, and .50 to .87 in the Japanese sample. The Cronbach's alphas and composite reliability values were greater than .70, with a few exceptions that still remained above .60 (see Appendix C). The average variances extracted were slightly below their expected values (.33–.73), but the square roots ranged from .57 to .85, higher than any of their respective pairwise correlations, with one exception (patience and neglect in the Japanese sample).

We examined the measurement equivalence of the response strategies across cultures to test Hypothesis 1. In Appendix B, we provide the overall fit indices for each model, as well as comparative fit indices between nested models. Regarding configural invariance, all seven response strategy subscales were invariant and unidimensional across samples. The fit indices of unconstrained Model 1 were good, with only the CFI slightly below .95. Regarding metric

invariance, the fit indexes of Model 2a were just below the fit indexes of Model 1 ( $\Delta\chi^2 = 72.0$ ,  $p = .003$ ,  $\Delta CFI = .003$ ), which suggested partial metric invariance. Therefore, we estimated Model 2b, in which we released four factor loadings. The fit indexes of Model 2b were as good as those of the unconstrained model ( $\Delta\chi^2 = 47.8$ ,  $p = .13$ ,  $\Delta CFI = .001$ ), in support of partial metric invariance. Each item loaded on its relevant response strategy at approximately equal strength across the four countries. Regarding scalar invariance, the overall fit indices were still acceptable, but the comparative fit indices indicated rejecting the full scalar invariance hypothesis ( $\Delta\chi^2 = 390.6$ ,  $p = .000$ ,  $\Delta CFI = .038$ ). The modification indices revealed that 10 items (including the constraints released in Model 2b) were not fully scalar invariant, because their intercepts were not equal across countries. After we released these equality constraints, the overall fit indices of Model 3b improved, and the comparative fit indices were not statistically significant ( $\Delta\chi^2 = 22.3$ ,  $p = .32$ ,  $\Delta CFI = .000$ ), which supported a revised hypothesis of partial scalar invariance.

To assess whether the 10 non-invariant items could have substantial effects on further analysis, we conducted, consistent with our data analysis strategy, differential item functioning (DIF) analysis with MACS (Chan, 2000; Ferrando, 1996). DIF analysis allows us to distinguish between nonuniform and uniform DIF items. Whereas, nonuniform DIF items pertain to extent to which the item discriminates between respondents with high scores and those with low scores on their respective response strategies, this is when the slope and intercept are different, uniform DIF items pertain to extent to which the attractiveness of an item differs across countries, this is when only the intercept is different. Examining the results of Model 3b we identified four nonuniform DIF items—Op3, Agr4, Cre1, and Con1 (The complete wordings of the items are shown in Appendix A) and six uniform DIF items—Exit2, Op5, Cre2, Con5, Neg1, and Neg2 (The parameter estimates of DIF items are shown in Appendix D). For the nonuniform DIF items, the results indicated that Con1 and Op3 are more discriminating in Japan and Turkey,

respectively, and that Cre1 and Agr4 are less discriminating in Japan, compared to the other countries. For the six uniform DIF items the results indicated that for Exit2, Swiss and Japanese respondents expressed higher response scores than did Dutch and Turkish respondents. Swiss and Turkish respondents expressed higher response scores for Op5 than did Dutch and Japanese respondents, suggesting that this item was more salient in this country. For Agr4 and Con5, Turkish and Japanese respondents expressed higher response scores than did Dutch and Swiss respondents. Japanese respondents gave a stronger endorsement for Cre2 than respondents from the other countries. Finally for Neg1, Dutch respondents expressed higher response and Turkish respondents lower response compared to Swiss and Japanese respondents.

To decide if these ten DIF items can be retained for further analysis, we assessed whether they have substantial effect on the response strategy's mean scores (Chan, 2000). To this end, we calculated the mean score on each response strategy, with and without removing DIF items, for each country and compared them based on the standardized mean difference ( $d$ ). The difference in  $d$  between two countries yields an index of the practical significance of the DIF (Chan, 2000). The average pairwise  $d$  difference was .03 for exit, .07 for opportunism, .07 for aggressive voice, .02 for creative voice, .17 for considerate voice, and .03 for neglect. Considering that all except of one of the differences in  $d$  were lower than .10 (Robert, Lee, & Chan, 2006), the impact of retaining the DIF items seems not to be problematic. Thus, as the practical significance of DIF is inconsequential at the scale-level of mean scores (Chan, 2000), further analysis is appropriate.

#### *Circular Representation: CIRCUM Analysis (Hypothesis 2)*

To rule out a two-dimensional simple structure of response strategies, we assessed a second-order, two-factorial bipolar model. The results indicated a relatively poor fit compared with an alternative model with cross-loadings between the response strategies. The CFI indexes improved significantly in each country: .92 to .97 for the Dutch sample ( $\Delta\chi^2 = 130.74, p < .001$ ,

$\Delta CFI = .05$ ); .92 to .96 for the Swiss sample ( $\Delta\chi^2 = 98.9$ ,  $p < .000$ ,  $\Delta CFI = .04$ ); .89 to .91 for the Turkish sample ( $\Delta\chi^2 = 69.15$ ,  $p < .000$ ,  $\Delta CFI = .02$ ); and .90 to .94 for the Japanese sample ( $\Delta\chi^2 = 111.9$ ,  $p < .000$ ,  $\Delta CFI = .04$ ). That is, response strategies appeared interrelated and organized in a circular structure.

As in Figure 1, the CIRCUM analyses with the seven response strategies yielded RMSEAs of .001 [90% CI: .000, .006] for the Dutch, .088 [90% CI: .054, .123] for the Swiss, .081 [90% CI: .049, .116] for the Turkish, and .178 [90% CI: .148, .211] for the Japanese sample—that is, an acceptable level of fit for the Dutch sample only. The Swiss, Turkish, and Japanese correlation matrices indicated that the deviation from the circumference of the circle resulted from opportunism. Additional CIRCUM analyses of the Swiss, Turkish, and Japanese data without opportunism improved fit to a satisfactory level with RMSEA indices of .000 [90% CI: .000, .022] for the Swiss sample, .064 [90% CI: .009, .113] for the Turkish sample, and .070 [90% CI: .018, .119] for the Japanese sample (Browne & Cudeck, 1992). The estimated item communality indices ranged from .73 (Dutch) to .90 (Japanese), indicating a low level of measurement error.

[Insert Figure 1 about here]

The results from the CIRCUM analyses thereby showed that the ordering of response strategies around the circle was the same in the four countries, with one exception: In the Swiss, Turkish, and Japanese samples, opportunism deviated from the circumplex structure. Furthermore, based on the 95% CI around the response strategy point estimates of polar angles, we determined that only one of the polar positions of the response strategies differed between countries. The Japanese respondents perceived creative voice as a more active strategy than did respondents in the other samples. These results therefore provided support for Hypothesis 2 for six of the seven response strategies.

To assess the external validity of the circumplex structure of these six response strategies, we correlated each response strategy with a three-item overall satisfaction scale ( $\alpha = .79$ ). The correlations appear in Table 1. If the structure of the response strategy is circumplex, the pattern of correlations should exhibit a sinusoidal shape (Schwartz, 1992). To assess the circumplexity of the pattern of correlations, we fitted a sinusoidal regression model, in which the correlations were the dependent variable and the polar angles from the CIRCUM analysis represented the independent variables (Gurtman, 1992). For each country, the regression models resulted in high and significant  $R^2$  (.77 for the Netherlands, .44 for Switzerland, .87 for Turkey, and .76 for Japan), in support of the circular structure of the response strategies. The lower  $R^2$  for Switzerland may be caused by the relatively close position of creative and considerate voices in this country.

[Insert Table 1 about here]

#### *Cross-Cultural Differences in Response Strategy Preference (Hypothesis 3)*

We tested for differences in preferences for six out of seven response strategies across cultures by conducting a MANCOVA. Because opportunism was not part of the circumplex structure, we did not include it in the MANCOVA. The omnibus MANCOVA test indicated significant effects for the predictors and covariates. Specifically, the results revealed significant Wilks' lambdas for individualism ( $\Lambda = .94$ ,  $F = 11.33$ ,  $p < .001$ ), masculinity ( $\Lambda = .98$ ,  $F = 4.11$ ,  $p < .001$ ), the interaction between individualism and masculinity ( $\Lambda = .94$ ,  $F = 11.39$ ,  $p < .001$ ), and scenario ( $\Lambda = .71$ ,  $F = 4.56$ ,  $p < .001$ ), as well as for the problem severity ( $\Lambda = .98$ ,  $F = 2.95$ ,  $p < .01$ ) and social desirability ( $\Lambda = .98$ ,  $F = 3.00$ ,  $p < .01$ ) covariates. The two-way interaction between the scenario manipulations and individualism was not statistically significant ( $\Lambda = .93$ ,  $F = .98$ ,  $p > .05$ ), nor was the interaction with masculinity ( $\Lambda = .91$ ,  $F = 1.20$ ,  $p > .05$ ). The direct

effects of gender ( $\Lambda = .99$ ,  $F = .54$ ,  $p > .05$ ) and age ( $\Lambda = .99$ ,  $F = 1.56$ ,  $p > .05$ ) also were not significant. The  $F$ -values of the corrected model, which reflected variations in the response strategies attributable to predictors and covariates, indicated significant results for all six response strategies (Table 2).

[Insert Table 2 about here]

There were significant differences between individualistic and collectivistic cultures for the six strategies: exit ( $F = 20.80$ ,  $p < .001$ ), aggressive voice ( $F = 4.92$ ,  $p < .05$ ), creative voice ( $F = 14.23$ ,  $p < .001$ ), considerate voice ( $F = 22.78$ ,  $p < .001$ ), patience ( $F = 40.98$ ,  $p < .001$ ), and neglect ( $F = 13.89$ ,  $p < .001$ ). There were also significant differences between masculine and feminine cultures for two strategies: aggressive voice ( $F = 5.33$ ,  $p < .05$ ), and neglect ( $F = 5.00$ ,  $p < .05$ ). To interpret these findings, we conducted post-hoc group comparisons. Their results, presented in the second panel of Table 2, showed that respondents from individualistic cultures were more likely to prefer creative ( $\Delta \bar{x} = .22$ ,  $p < .001$ ) and considerate ( $\Delta \bar{x} = .28$ ,  $p < .001$ ) voices and less likely to select exit ( $\Delta \bar{x} = -.35$ ,  $p < .001$ ), aggressive voice ( $\Delta \bar{x} = -.14$ ,  $p < .05$ ), patience ( $\Delta \bar{x} = -.39$ ,  $p < .001$ ), and neglect ( $\Delta \bar{x} = -.23$ ,  $p < .001$ ) than were respondents from collectivistic cultures. These results provided support for Hypothesis 3a.

In terms of masculinity/femininity, the post-hoc results showed, in line with Hypothesis 3b, that respondents from masculine cultures were less likely to prefer neglect ( $\Delta \bar{x} = -.14$ ,  $p < .05$ ) and marginally more likely to prefer exit ( $\Delta \bar{x} = .14$ ,  $p < .10$ ) compared with respondents from feminine cultures. Contrary to expectations, respondents from masculine cultures were less likely to prefer aggressive voice ( $\Delta \bar{x} = -.15$ ,  $p < .05$ ) than were respondents from feminine cultures. The differences for creative ( $\Delta \bar{x} = .05$ ,  $p > .05$ ) and considerate ( $\Delta \bar{x} = -.03$ ,  $p > .05$ ) voices and

patience ( $\Delta \bar{x} = .00, p > .05$ ) were not significant. Overall, these results provided mixed support for Hypothesis 3b.

The interaction between individualism and masculinity was also significant for exit ( $F = 18.48, p < .001$ ), aggressive voice ( $F = 18.61, p < .001$ ), and neglect ( $F = 11.18, p < .001$ ). There was no significant interaction effect for creative or considerate voices and patience. The post-hoc results (see the country comparisons in Table 2) between individualism/collectivism and masculinity/femininity showed that respondents from Japan (collectivistic and masculine) preferred the exit strategy more than respondents from the other countries and that respondents from Turkey (collectivistic and feminine) preferred neglect more than respondents from the other countries. In addition, respondents from Switzerland were least likely to choose aggressive voice.

Concerning the control variables, the post-hoc *t*-tests revealed that across countries, the more severe the perceptions of the situation, the more likely respondents were to select exit ( $F = 7.22, p < .05$ ) and prefer aggressive voice ( $F = 4.14, p < .05$ ), though they were less likely to be patient ( $F = 6.31, p < .05$ ). Social desirability also had a significant effect on the likelihood of several response strategies across countries: creative voice ( $F = 4.20, p < .05$ ) and considerate voice ( $F = 14.37, p < .001$ ). It exhibited a marginal effect on exit ( $F = 5.70, p < .10$ ). Respondents with high scores on the social desirability scale tended not to choose to exit but instead employed creative and considerate voice, more so than respondents with low social desirability scores. There was no significant difference for aggressive voice, patience, and neglect.

## DISCUSSION

We examined the cross-cultural validity of an extended response strategy typology. This scenario-based experiment among business students from the Netherlands, Switzerland, Turkey, and Japan provided a better understanding of how response strategies may be organized in

people's cognitive schemata across cultures and their preferences for these response strategies when they must deal with adverse situations in exchange relationships.

### *Interpretation of the Results*

We established the reliability and convergent, discriminant, and cross-cultural validity of the response strategy measures. We also demonstrated that a circumplex represents the structure of response strategies better than a two-dimensional model. The CIRCUM analyses further showed that six response strategies are organized in an equivalent circumplex fashion across four distinct cultures. We established the nomological validity of the circumplex structure by depicting the sinusoidal pattern of correlations between response strategies and a measure of overall satisfaction. In addition, the results revealed that preferences for using a response strategy vary across cultures.

In line with previous studies (e.g., Thomas & Au, 2002; Thomas & Pekerti, 2003), we found support for the validity of the EVLN response strategies, but by validating an extended EVLN typology, we also offered a finer-grained range of response strategies from which people may choose to deal with adverse situations in exchange relationships. We added opportunism and divided voice to the aggressive, creative, and considerate forms. Because we confirmed the psychometric properties of these new strategies, we helped overcome some limitations of previous research that reported low reliability and internal validity.

Our study also extended previous research (Hagedoorn et al., 1999; Liljegren et al., 2008) by demonstrating that the response strategies are organized in a circumplex structure across the four countries we investigated. The findings indicated that the seven response strategies appeared in a circumplex organization in the Dutch sample, but opportunism deviated from the structure in Switzerland, Turkey, and Japan. This result means that opportunism is structurally different from the other six strategies. Whereas, the other six strategies can be fully defined by their degrees of

constructiveness–destructiveness and activeness–passiveness, opportunism cannot. A possible explanation of this finding could be the presence of a third moral dimension. Whereas the other six response strategies were perceived as neutral in terms of their moral content in the four countries, opportunism may have been perceived as morally charged in Switzerland, Japan, and Turkey. To explore the possibility of a third moral dimension, we conducted multi-dimensional scaling (MDS) analysis per country including opportunism. The MDS results indicated that for Switzerland, Turkey, and Japan, a three-dimensional structure has better fit (i.e., higher  $R^2$  and lower stress value) compared with a two-dimensional structure (results available on request), providing some preliminary evidence of the existence of a third moral dimension. However, contrary to the other countries, we found that in the Netherlands opportunism is part of the two-dimensional structure. This difference means that the structural location of opportunism varies across countries, in the sense that in some countries opportunism may be more morally wrong than in other countries (Chen et al., 2002). For example, in countries with low uncertainty avoidance, people are more tolerant of transgressions of moral norms, such as opportunism, whereas in countries with higher uncertainty avoidance scores, such transgressions are considered morally wrong (Doney et al., 1998; Hofstede, 2001). This could explain why in Switzerland, Turkey, and Japan, which score higher than the Netherlands on uncertainty avoidance, a third moral dimension is present. However, contrary to the other two dimensions, our data suggested that this moral dimension might not be universal. As, opportunism is the only morally charged response strategy we measured, we could not formally test the presence of this third dimension. Further research should validate the existence of this third moral dimension and investigate its cultural universality.

The order of the six response strategies around the circle was consistent across these four countries, though their absolute locations differed slightly. For example, in Japan, creative voice

appeared more active than in the three other countries. In this collectivistic and masculine country, creativity may be perceived as less constructive, because it could disturb social harmony. Furthermore, whereas creative voice and considerate voice were clearly distinct response strategies in the Dutch and Japanese samples, their locations were hardly distinguishable in the Swiss and Turkish samples. Considerate and creative responses appeared to overlap and share the same meaning, perhaps because people in these countries believed that developing innovative solutions required taking partners' opinions into account. Despite these minor differences, the combined findings provided support for the cross-cultural validity of a circumplex model of the response strategy typology.

Although the content and internal structure of six response strategies (exit, aggressive, creative, and considerate voices, patience, and neglect) were equivalent across the four countries, our results indicated cultural differences in respondents' preferences. We found that the individualism/collectivism cultural dimension was associated with people's preferences for the six response strategies in the expected directions and that the masculinity/femininity cultural dimension was associated with exit and neglect in the expected directions. These findings were in line with results reported by Lee and Jablin (1992), who noted that in Japan, people use less (creative and considerate) voice than do people in the United States, as well as the results from Vigoda (2001) and Radford and colleagues (1991), who reported that people in individualistic cultures are less patient than people in collectivistic cultures. Consistent with Morris and colleagues (1998), we also found that people in individualistic cultures are more likely to prefer aggressive voice than are people in collectivistic cultures.

However, the effect of masculinity/femininity on aggressive voice was in the opposite direction of our expectations. That is, people from feminine cultures were more likely to prefer aggressive voice than people from masculine cultures. This unexpected finding is difficult to

explain but may be due to the business situation described in the scenarios and the use of business students as respondents. In today's competitive world, more aggressive responses may be expected from managers in adverse alliance relationships, especially in more feminine cultures in which such behavior traditionally has not been natural. In addition, business students may not be fully representative of their national culture; in feminine cultures, such students may have more masculine values than the general population does. Alternatively, this result may have been induced by confounding effects for which we did not control. People from countries with a relative lower gross domestic product (GDP) tend to be more aggressive (House, Hanges, Javidan, Dorfman, & Gupta, 2004). The four countries in our sample had different GDPs—whereas the Netherlands, Switzerland, and Japan have relatively high GDPs, Turkey has a relatively low GDP—and this distinction may have influenced our results. Additional research should control for GDP, or other possible confounding factors, directly or through country selection.

Some other results deserve further comment as well. First, the two cultural dimensions interact to influence response strategy preferences; they either reinforce or cancel out each other. The findings suggest that the effect of individualism/collectivism on exit and neglect is reinforced by masculinity/femininity. However, in the case of aggressive voice, the two cultural dimensions cancel each other. This finding may be attributed to the possibility of a confounding effect of other cultural dimensions (i.e., power distance and uncertainty avoidance), suggesting that research should examine the interacting effect of cultural dimensions on response strategies.

Second, as expected, the scenarios we used in our experimental design had a direct effect on response strategy preference, for which we controlled. However, the interaction between country and scenario was not significant, which indicated that the adverse situations described in the scenarios provoked similar responses across cultures.

Third, as expected, social desirability influenced response strategy preference. However, in contrast with some studies (see Johnson & Van de Vijver, 2003) that have indicated people in collectivistic cultures are more likely to respond in a socially desirable way, we did not find a significant interaction between country and social desirability. Our measure tapped two different aspects of social desirability: impression management and self-deceptive enhancement. Lalwani, Shrum, and Chiu (2009) found that collectivism related more to impression management and individualism more to self-deceptive enhancement. Thus, our non-significant result may have been caused by a confounding effect.

### *Theoretical Implications*

These results advance response strategy theory by demonstrating that the content and structure of six of the seven responses to dissatisfaction are nearly universally organized in a circumplex fashion. A circumplex structure possesses distinct advantages over the two-dimensional EVLN typology, in that it takes into account the interrelationships among response strategies. First, because it is continuous, a circumplex structure can integrate new response strategies. For example, we added aggressive voice and creative voice to the four EVLN strategies and positioned them on the circumference of the circle according to their distinct combinations of activeness–passiveness and constructiveness–destructiveness. However, other new strategies could be added. Our results indicated a negative correlation between the adjacent response strategies considerate voice and patience, which suggests that unidentified passive responses may exist between them in people’s cognitive schemata. Further research should investigate passive strategies in more detail and extend the proposed seven-response strategy typology. Such new strategies also need to be validated across cultures.

Second, a circumplex structure enables a systematic organization of response strategies according to their degree of compatibility and incompatibility (Fabrigar et al., 1997; Gurtman,

1992; Schwartz, 1992). This important characteristic reflects how compatible strategies are likely to be perceived as close alternatives in a particular adverse situation, whereas incompatible strategies are not likely to be considered simultaneously (Bardi et al., 2009). For example, a pairwise comparison of response strategies in this study indicated that creative voice and considerate voice were compatible and close alternatives, whereas creative voice and neglect were opposites. Thus, people's cognitive schemata of response strategies may organize responses in such a way that adjacent strategies represent potential alternatives to resolve an adverse situation, whereas incompatible response strategies get eliminated from the alternative set.

A circumplex structure not only makes specific assumptions about the interrelationships between response strategies but also implies nonlinear relationships between response strategies and external variables. Unlike previous EVLN studies, which have hypothesized separate linear relationships with each response strategy, the circumplex structure stipulates that when an external variable relates to a response strategy, it also relates to the other strategies in a circular way (Hagedoorn et al., 1999; Schwartz, 1992). That is, the association with an external variable, such as relationship-specific investments or overall satisfaction, first decreases from the most positively (or least negatively) associated response strategy and then increases again in the progression around the circular structure, exhibiting a sinusoidal curve (Fabrigar et al., 1997). Response strategies should be conceptualized as an integrated system rather than as a collection of independent strategies when hypothesizing relationships with external variables. Therefore, in comparison to a two-dimensional representation, a circumplex structure provides a more systematic framework for theoretical development on response strategies.

We also contributed to response strategy theory by demonstrating that preferences for response strategies vary across cultures. Response strategy research proposed a well-supported investment model (e.g., Geyskens & Steenkamp, 2000; Ping, 1993; Rusbult et al., 1988), in

which satisfaction with exchange outcomes, investment magnitude, and availability of alternatives influence response strategy preferences. The manipulations used in the scenarios were based on this investment model. However, the results suggested that in an international context, people likely respond similarly to adverse situations, though response strategy preference, in addition to the adverse situation, depends on culture. People from more collectivistic cultures prefer passive responses more than do people from more individualistic cultures, whereas people from more individualistic cultures prefer active–constructive responses. People from more feminine cultures tend to prefer destructive responses, such as opportunism, aggressive voice, and neglect, compared with people from more masculine cultures. These findings received some corroboration from the interaction between the two cultural dimensions. For example, people from more collectivistic and more feminine cultures (i.e., Turkey) preferred neglect, a passive and destructive response, whereas people from more individualistic and more masculine cultures (i.e., Switzerland) were less inclined to use aggressive voice, an active and destructive response. Studies drawing on the investment model to examine responses in international exchange relationships should consider these cross-cultural differences.

### *Limitations and Conclusions*

Our study is limited in several respects. First, our sample consisted of respondents from four cultural groups. The four cultural groups varied in terms of individualism and masculinity. However, to some extent, they also varied along the other two cultural dimensions, power distance and uncertainty avoidance. These differences may have induced confounding effects for which we did not completely control (Sivakumar & Nakata, 2001). The attribution of differences in response strategy preferences to individualism–collectivism and masculinity–femininity therefore should be considered with caution. A broader sample of cultures would help disentangle the effect of the different cultural dimensions.

Second, we focused on the effect of national culture on response strategy preference, without measuring cultural values directly. In a recent study, Thomas and Au (2002) found that people with an orientation toward horizontal individualism (i.e., individual-level construct) are more prone to active response strategies, which offers evidence of intracountry differences in response strategies. Therefore, measuring cultural values at the individual level would be necessary to understand inter- as well as intracountry differences.

Third, we controlled for individual-level social desirability bias by including the MC2 social desirability scale in our analyses (Strahan & Gerbasi, 1972). However, we did not estimate the potential biasing effect of acquiescence and extreme response style, because our questionnaire did not contain additional, independent items that could be used to measure such biases adequately. Although the partial scalar equivalence of our measures provided some evidence that these biases should not be too severe in our data, further research should use more sophisticated methods to deal with the potential biasing effects of acquiescence and extreme response style.

Fourth, we also conducted an item response bias analysis to assess the effect of the noninvariant items, which was shown not to be of practical significance. However as argued by Chan (2000), it is important to understand the reasons for the differences in item functioning. Translation could be one of these reasons. Thus, we examined the DIF items for possible translation errors. Indeed, small translation differences might have caused Arg4, Cre1, and Con1 to exhibit non-uniform DIF in Japan, and Op3 in Turkey. For the items with uniform DIF, translation does not seem to be the issue. Beside translation issues, other factors might have caused DIF (Robert et al., 2006): It might be that the response strategies tapped by the noninvariant items were differently valid (i.e., appropriate) across cultures. It might also be that items comprising the response strategy only partially represent the construct as defined within some of the cultures. Or, it is possible that the items failed to adequately represent all relevant

facets of the response strategies in some cultures. Further qualitative research should investigate the causes of these items' noninvariance.

Fifth, to test the hypotheses, we used a scenario-based experiment in which we examined respondents' behavioral intentions. The controlled setting of the experiment enabled us to disentangle the relationships among culture, exchange conditions, and response strategies, but it also inhibited a generalization of results. Furthermore, because behavioral intentions do not always translate into behavior, additional research targeting practicing managers should test the extended response strategy typology with behavioral data.

Overall, this study provides a better understanding of how people respond to adverse situations in exchange relationships in different countries, which is relevant for advancing cross-cultural psychology research. It validates a response strategy typology of six response strategies and shows that these response strategies consistently organize in a circumplex fashion across four dissimilar countries. It also provides evidence that when they face similar adverse situations, people from different cultures likely prefer different response strategies. Overall, our results offer support for a nearly universal circumplex model of response strategies and show that response strategy preferences vary across cultures.

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**Table 1****Sinusoidal Correlation Patterns between Response Strategies and Overall Satisfaction**

Country	Exit	Aggressive Voice	Creative Voice	Considerate Voice	Patience	Neglect
The Netherlands ( <i>n</i> = 334)	-.44 <sup>***</sup>	-.14 <sup>**</sup>	.10 <sup>†</sup>	.26 <sup>***</sup>	.22 <sup>***</sup>	-.07
Switzerland ( <i>n</i> = 255)	-.40 <sup>***</sup>	-.01	.14 <sup>*</sup>	.12 <sup>†</sup>	.37 <sup>***</sup>	.05
Turkey ( <i>n</i> = 278)	-.29 <sup>***</sup>	-.03	.19 <sup>**</sup>	.28 <sup>***</sup>	.08	-.13 <sup>*</sup>
Japan ( <i>n</i> = 262)	-.35 <sup>***</sup>	-.10 <sup>†</sup>	-.02	.20 <sup>***</sup>	.23 <sup>***</sup>	.05

Notes: Correlations between response strategy scores and a measure of overall satisfaction

<sup>†</sup>  $p < .10$ ; <sup>\*</sup>  $p < .05$ ; <sup>\*\*</sup>  $p < .01$ ; <sup>\*\*\*</sup>  $p < .001$

**Table 2**  
**MANCOVA Results**

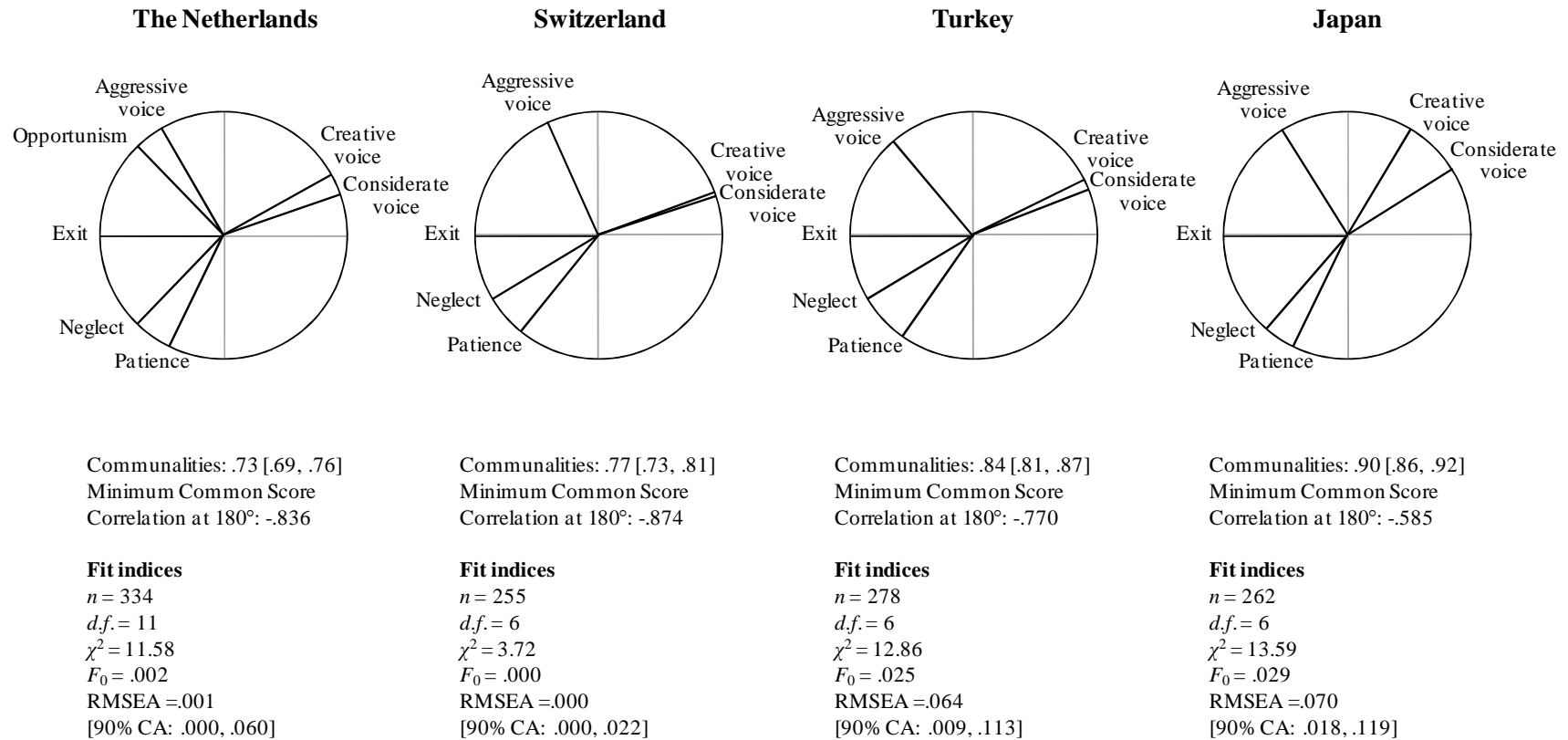
		Exit	Aggressive Voice	Creative Voice	Considerate Voice	Patience	Neglect	Wilks $\Lambda$ ( <i>F</i> -value)
Individualism	<i>F</i>	<b>20.80</b> <sup>*** a</sup>	<b>4.92</b> *	<b>14.23</b> <sup>***</sup>	<b>22.78</b> <sup>***</sup>	<b>40.98</b> <sup>***</sup>	<b>13.89</b> <sup>***</sup>	<b>.94</b> <sup>*** b</sup> (11.33)
Masculinity	<i>F</i>	3.34 <sup>†</sup>	<b>5.33</b> *	.59	.35	.00	<b>5.00</b> *	<b>.98</b> <sup>***</sup> (4.11)
Individualism $\times$ masculinity	<i>F</i>	<b>18.48</b> <sup>***</sup>	<b>18.61</b> <sup>***</sup>	.23	1.60	.06	<b>11.18</b> <sup>***</sup>	<b>.94</b> <sup>***</sup> (11.39)
Scenario	<i>F</i>	<b>18.40</b> <sup>***</sup>	<b>1.80</b> *	<b>3.47</b> <sup>***</sup>	<b>7.34</b> <sup>***</sup>	<b>3.32</b> <sup>**</sup>	<b>2.59</b> <sup>***</sup>	<b>.71</b> <sup>***</sup> (4.56)
Individualism $\times$ scenario	<i>F</i>	.83	.52	.89	1.27	.65	.79	.93 (.98)
Masculinity $\times$ scenario	<i>F</i>	1.09	1.69 <sup>†</sup>	.81	1.16	.77	1.61 <sup>†</sup>	.91 (1.20)
Gender	<i>F</i>	.36	.52	.15	1.00	.13	.01	.99 (.54)
Age	<i>F</i>	.16	.19	2.56	4.44*	.61	.13	.99 (1.56)
Problem severity	<i>F</i>	<b>4.62</b> *	<b>3.84</b> *	1.23	.28	<b>6.32</b> *	.00	<b>.98</b> <sup>**</sup> (2.95)
Social desirability	<i>F</i>	3.65 <sup>†</sup>	1.07	<b>4.62</b> *	<b>16.26</b> <sup>***</sup>	.62	2.08	<b>.98</b> <sup>**</sup> (3.00)
<i>Corrected model F-value</i>		<b>6.84</b> <sup>***</sup>	<b>1.84</b> <sup>***</sup>	<b>2.13</b> <sup>***</sup>	<b>3.92</b> <sup>***</sup>	<b>2.68</b> <sup>***</sup>	<b>2.08</b> <sup>***</sup>	
<i>Estimated marginal means</i>								
Individualism		3.00	4.31	5.54	5.46	1.93	2.17	
Collectivism		3.36	4.45	5.32	5.18	2.33	2.41	
Masculinity		3.25	4.31	5.45	5.30	2.13	2.22	
Femininity		3.11	4.46	5.41	5.34	2.13	2.36	
Individualism/femininity (NL)		3.10	4.53	5.53	5.51	1.92	2.14	
Individualism/masculinity (SW)		2.91	4.10	5.55	5.41	1.94	2.21	
Collectivism/femininity (TU)		3.12	4.39	5.28	5.16	2.33	2.58	
Collectivism/masculinity (JA)		3.59	4.52	5.35	5.20	2.32	2.23	
<i>Country comparison</i>		JA > (TU, NL, SW)	(NL, JA, TU) > SW	(NL, SW) > (JA, TU)	(NL, SW) > (JA, TU)	(JA, TU) > (SW, NL)	TU > (JA, SW, NL)	

Notes:  $n = 1,129$ ; NL = Netherlands; SW = Switzerland; TU = Turkey; JA = Japan; <sup>†</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

<sup>a</sup> The *F*-values in the rows list the univariate effects on the dependent variables.

<sup>b</sup> The multivariate column lists the multivariate effect of each independent variable on the seven response strategies.

**Figure 1**  
**CIRCUM Polar Angles and Fit Indices**



## Appendix A. Response Strategies, Descriptions, and Sample Items

Response Strategies	Description	Sample Item
Exit	The disinclination to continue the current relationship (Ping, 1993; Rusbult et al., 1982; Withey & Cooper, 1989)	Ex1: I will consider ending the alliance with XXX. (*) Ex2: I think that I will probably stop doing business with XXX. Ex3: I am not likely to continue the alliance with XXX. Ex4: I have the intention to exit the XXX alliance. (*) Ex5: I believe that I will terminate the XXX alliance.
Opportunism	Self-interested behavior that is explicitly or implicitly prohibited (Ping, 1993; Wathne & Heide, 2000).	Op1: I will purposefully exaggerate the situation in order to get additional benefits. Op2: I will change the facts slightly in order to get what I need from XXX. (*) Op3: I will deliberately make the situation sound more problematic than it really is to obtain more benefits from the XXX alliance. Op4: In order to improve the situation I will try to escape from certain contractual obligations. (*) Op5: I will withhold important information from XXX to gain additional benefits.
Aggressive voice	A form of voice that consists of efforts to win without consideration for the concerns of the exchange partner (Hagedoorn et al., 1999; van Yperen et al., 2000).	Agr1: I will forcefully push my firm's solution to improve the situation. (*) Agr2: I will use my power to solve situation in a way that suits my firm. (*) Agr3: I will prove in all possible ways to XXX that my firm's solution for the situation is right. Agr4: I will be very persistent with XXX to have them accept my firm's solution to the situation. Agr5: I will strongly advocate my firm's solution to solve the situation with the XXX alliance.
Creative voice	A form of voice that consists of the generation of novel and potentially useful ideas (Cheung, 2005; Zhou & George, 2001).	Cre1: I will adopt a fresh approach to improve the situation. Cre2: I will come up with new ideas to improve the situation with the XXX alliance. Cre3: I will suggest constructive changes to XXX to improve the situation. (*) Cre4: I will search for new and innovative ideas to improve the situation. (*) Cre5: I will propose creative solutions to XXX to improve the situation.
Considerate voice	A form of voice that consists of attempts to solve the situation by considering one's own concerns as well as those of the partner (Ping, 1993).	Con1: I will try to come to an understanding with XXX to solve the situation. Con2: I will work to create a consensus with XXX to solve the situation. (*) Con3: I will approach XXX with a proposition to solve the situation and work it out together. Con4: In collaboration with XXX, I will try to find a solution that is satisfactory to everyone. (*) Con5: I will contact XXX to find an acceptable solution for both partners.
Patience	Abiding relationship issues in silence with the confidence that things will get better (Hagedoorn et al., 1999; Hibbard et al., Leck & Saunders, 1992; Ping, 1993)	Pat1: I trust the situation will solve itself. Pat2: I will not say anything to XXX because I expect the situation to go away by itself. Pat3: Optimistically, I wait for better times. (*) Pat4: I will wait patiently and hope the situation solves itself. Pat5: I expect that soon everything will work out with the XXX alliance. (*)
Neglect	Passively allowing the relationship to deteriorate (Ping, 1993; Rusbult et al., 1982)	Neg1: I do not plan anything extra to solve the situation with the XXX alliance. Neg2: I will not initiate anything to improve the situation with the XXX alliance. Neg3: I will passively let the alliance with XXX end. (*) Neg4: I will not deal with the situation with the XXX alliance. Neg5: I do not intent to invest anymore into the alliance with XXX to solve the situation. (*)

\* Excluded from data analysis.

## Appendix B. Overall Fit Indices of the Measurement Models

Model	$\chi^2$	d.f.	p-value	$\chi^2/\text{d.f.}$	RMSEA [90% CI]	SRMR	NNFI	CFI	$\Delta\text{CFI}$	$\Delta\chi^2$	$\Delta\text{d.f.}$	p-value
<i>Country Models</i>												
The Netherlands ( $n = 334$ )	251.3	168	.000	1.496	.039 [.028, .048]	.049	.959	.967	—	—	—	—
Switzerland ( $n = 255$ )	256.7	168	.000	1.528	.046 [.034, .056]	.052	.948	.959	—	—	—	—
Turkey ( $n = 278$ ) <sup>*</sup>	329.9	167	.000	1.976	.059 [.050, .069]	.059	.904	.924	—	—	—	—
Japan ( $n = 262$ )	293.1	168	.000	1.745	.053 [.043, .063]	.066	.931	.945				
Pooled sample ( $n = 1129$ )	445.2	168	.000	2.650	.038 [.034, .043]	.037	.961	.968	—	—	—	—
<i>Overall Models (multi-group)</i>												
1. Configural invariance (i.e., without equality constraints)	1131.1	671	.000	1.686	.025 [.022, .027]	.049	.936	.949	—	—	—	—
2a. Full metric invariance (i.e., equal factor loadings)	1203.1	671	.000	1.687	.025 [.022, .027]	.049	.936	.946	.003	72.0	42	.003
2b. Partial metric invariance <sup>**</sup>	1178.9	709	.000	1.663	.024 [.022, .027]	.049	.939	.948	.001	47.8	38	.133
3a. Full scalar invariance (i.e., equal factor loadings and intercepts)	1569.5	751	.000	2.090	.031 [.029, .033]	.049	.899	.910	.038	390.6	42	.000
3b. Partial scalar invariance <sup>***</sup>	1201.2	729	.000	1.648	.024 [.022, .026]	.049	.940	.948	.000	22.3	20	.324
4. Latent means invariance (i.e., equal latent means)	1456.6	750	.000	1.942	.029 [.027, .031]	.051	.913	.922	.027	255.4	21	.000

<sup>\*</sup> A constraint was placed between the error terms of cre5 and neg4, reducing the degrees of freedom to 167.

<sup>\*\*</sup> The factor loadings of Agr4 (Japan), Con1 (Japan), Cre1 (Japan), and Op3 (Turkey) were not invariant across the four countries and were released.

<sup>\*\*\*</sup> Consistent with Model2b, we released the intercepts of the items with variant factor loadings. In addition, we released for the four countries Ex2, Op5, and Neg2; Con5 for the Japanese and Turkish samples; Neg1 for the Dutch and Turkish samples, and Cre2 for the Japanese sample.

## Appendix C. Construct Reliability and Partial Correlation Matrices

### A. The Netherlands

Response Strategy	$\alpha$	CR	AVE	1	2	3	4	5	6
1 Exit	.888	.888	.725						
2 Opportunism	.698	.706	.448	.238***					
3 Aggressive voice	.735	.738	.487	.187**	.487***				
4 Creative voice	.805	.822	.613	-.295***	-.035	.043			
5 Considerate voice	.746	.746	.494	-.385***	-.071	-.007	.522***		
6 Patience	.739	.747	.498	.050	.084	-.083	-.229***	-.171**	
7 Neglect	.701	.713	.455	.247***	.136**	.008	-.370***	-.317***	.471***

$n = 334$ .  $^{\dagger}p < .10$ ;  $^*p < .05$ ;  $^{**}p < .01$ ;  $^{***}p < .001$ . s.d. = standard deviation.  $\alpha$  = Cronbach's alpha. CR = composite reliability. AVE = average variance extracted.

### B. Switzerland

Response Strategy	$\alpha$	CR	AVE	1	2	3	4	5	6
1 Exit	.886	.888	.726						
2 Opportunism	.715	.737	.492	.132*					
3 Aggressive voice	.724	.729	.475	.089	.417***				
4 Creative voice	.779	.788	.566	-.422***	-.076	.072			
5 Considerate voice	.718	.720	.462	-.465***	-.181**	.021	.591***		
6 Patience	.769	.768	.527	.182**	.153*	-.009	-.324***	-.301***	
7 Neglect	.769	.771	.530	.386***	.345***	.083	-.463***	-.509***	.499***

$n = 255$ .  $^{\dagger}p < .10$ ;  $^*p < .05$ ;  $^{**}p < .01$ ;  $^{***}p < .001$ . s.d. = standard deviation.  $\alpha$  = Cronbach's alpha. CR = composite reliability. AVE = average variance extracted.

### C. Turkey

Response Strategy	$\alpha$	CR	AVE	1	2	3	4	5	6
1 Exit	.823	.825	.613						
2 Opportunism	.672	.686	.326	.111 $^{\dagger}$					
3 Aggressive voice	.677	.676	.413	.062	.331***				
4 Creative voice	.780	.807	.589	-.375***	.099	.239***			
5 Considerate voice	.682	.680	.417	-.432***	-.031	.112 $^{\dagger}$	.700***		
6 Patience	.778	.778	.538	.251***	.085	-.084	-.355***	-.293***	
7 Neglect	.711	.706	.445	.486***	.085	-.037	-.565***	-.546***	.587***

$n = 278$ .  $^{\dagger}p < .10$ ;  $^*p < .05$ ;  $^{**}p < .01$ ;  $^{***}p < .001$ . s.d. = standard deviation.  $\alpha$  = Cronbach's alpha. CR = composite reliability. AVE = average variance extracted.

### D. Japan

Response Strategy	$\alpha$	CR	AVE	1	2	3	4	5	6
1 Exit	.854	.856	.664						
2 Opportunism	.712	.716	.458	.229***					
3 Aggressive voice	.603	.605	.341	.101	.296***				
4 Creative voice	.845	.852	.659	-.141*	-.251***	.177**			
5 Considerate voice	.700	.707	.454	-.337***	-.244***	.102 $^{\dagger}$	.604***		
6 Patience	.773	.766	.525	.083	.423***	.006	-.425***	-.260***	
7 Neglect	.781	.784	.550	.248***	.410***	-.043	-.473***	-.441***	.733***

$n = 262$ .  $^{\dagger}p < .10$ ;  $^*p < .05$ ;  $^{**}p < .01$ ;  $^{***}p < .001$ . s.d. = standard deviation.  $\alpha$  = Cronbach's alpha. CR = composite reliability. AVE = average variance extracted.

### Appendix D. Parameter Estimates of uniform and non-uniform DIF items

	<b>Factor loadings<sup>a, b</sup></b> <b>(item discrimination)</b>	<b>Intercepts<sup>a</sup></b> <b>(item attractiveness)</b>
Exit		
- Exit2		3.01 / 3.18 / 2.92 / 3.17
Opportunism		
- Op3	1.28 / 1.28 / .88 / .128	
- Op5		3.37 / 4.33 / 4.44 / 3.32
Aggressive voice		
- Agr4	1.14 / 1.14 / 1.14 / .78	
Creative voice		
- Cre1	.70 / .70 / .70 / .89	
- Cre2		5.61 / 5.61 / 5.61 / 5.76
Considerate voice		
- Con1	1.06 / 1.06 / 1.06 / 1.40	
- Con5		5.60 / 5.60 / 5.84 / 5.98
Neglect		
- Neg1		2.37 / 2.02 / 1.60 / 2.02
- Neg2		1.96 / 1.87 / 2.15 / 2.18

<sup>a</sup> Netherlands / Switzerland / Turkey / Japan.

<sup>b</sup> Unstandardized coefficients from MACS analysis.