

OPEN ACCESS

African Journal of Marketing Management

February 2018
ISSN: 2141-2421
DOI: 10.5897/AJMM
www.academicjournals.org

academicJournals



ABOUT AJMM

The African Journal of Marketing Management (AJMM) African Journal of Marketing Management (AJMM) is a peer reviewed open access journal. The journal is published monthly and covers all areas of the subject.

Contact Us

Editorial Office: ajmm@academicjournals.org

Help Desk: helpdesk@academicjournals.org

Website: <http://www.academicjournals.org/journal/AJMM>

Submit manuscript online <http://ms.academicjournals.me/>

Editors

Prof. C. P. Rao

*Strategic Management and Marketing
Consultants,
Arkansas,
USA.*

Prof. Vimal K. Aggarwal

*Department of Finance & Accounting,
Gian Jyoti Institute of Management and
Technology (GJIMT)
Chandigarh
India.*

Prof. Mornay Roberts-Lombard

*Department of Marketing Management,
University of Johannesburg,
South Africa.*

Prof. Krishna K Govender

*Faculty of Management studies,
University of KwaZulu- Natal,
Pietermaritzburg,
South Africa.*

Dr. H.B. Klopper

*Department of Marketing (South Africa Campus)
Monash University
Ruimsig,
South Africa.*

Associate Editors

Prof. Yong Yang

*Department of Tourism Management,
East China Normal University,
PR China.*

Dr. Jung-Wan Lee

*Boston University Metropolitan College
Administrative Sciences Department
Boston,
USA.*

Dr. Norazah Mohd Suki

*Labuan School of International Business & Finance,
Universiti Malaysia Sabah,
Labuan International Campus,
Sabah,
Malaysia.*

Editorial Board Members

Dr. Isaac Olugbenga Fadeyibi
*Aegis School of Business,
Mumbai,
India.*

Dr. Mehdi Behboudi, M. A.
*Department of Business Administration,
School of Management & Accountancy,
Qazvin Islamic Azad University,
Iran.*

Prof. P. Malyadri
*Government Degree College
Osmania University
Andhra Pradesh,
India.*

Prof. Bostan D. Ionel
*Faculty of Economic Sciences and Public Administration,
University of Suceava,
Romania.*

Dr. Vasa, László
*Szent István University,
Faculty of Economics and Social Sciences
Páter K. u. 1.
Hungary.*

Prof. Muhammad Asad Sadi
*College of Industrial Management
King Fahd University of Petroleum and Minerals
Dhahran,
Saudi Arabia.*

Dr. Tejinderpal Singh
*University Business School,
Panjab University Chandigarh
Chandigarh,
India.*

Prof. Monle Lee, DBA
*Marketing, Advertising, & Business Law
School of Business & Economics
Indiana University South Bend
South Bend,
USA.*

Dr. Tony Conway
*Business Strategy Directorate,
Salford Business School,
University of Salford,
Manchester
UK.*

Dr. Todd A. Boyle,
*Schwartz School of Business
St. Francis Xavier University
Nova Scotia
Canada.*

Dr. Lina Salim, SE
*Management Department, Economics & Business Faculty,
Atma Jaya Catholic University,
Jakarta,
Indonesia.*

Dr. Carlos Adrián González Tamez
*Centre of Land Policy and Valuations,
Polytechnic University of Catalonia
Barcelona,
Spain.*

Dr. Jelena Petrovic
*Faculty of Science and Mathematics,
Department of Geography and Tourism,
University of Niš, 18000 Niš,
Serbia.*

Dr. Athanasios Chymis
*Centre for Planning and Economic Research
Athens,
Greece.*

Dr. Mohamed Ali Omri
*Faculty of Economic Sciences and Management of Tunis,
Campus Universitaire,
Tunis,
Tunisia.*

Prof. Miguel Sellitto
*PPGEPS, UNISINOS,
Brazil.*

Dr. Rajender Kumar
*Department of Commerce
Rajdhani College
University of Delhi
New Delhi
India.*

Prof. Naheed Zia Khan
*Department of Economics,
Fatima Jinnah Women's University,
Rawalpindi.
Pakistan.*

Dr. Noore Saher

*Scholar at Applied Economics Research Centre,
Karachi
Pakistan.*

Dr. Ali Khozein

*Department of Accounting,
Islamic Azad University,
Aliabad Katoul,
Iran.*

Dr. Azhar Kazmi

*Department of Management & Marketing,
College of Industrial Management,
King Fahd University of Petroleum & Minerals,
Saudi Arabia.*

Dr. Ilhaamie Abdul Ghani Azmi

*Department of Syariah and Management,
Academy of Islamic Studies,
Universiti Malaya,
Kuala Lumpur,
Malaysia.*

Dr. Adebayo Shittu

*University of Agriculture,
Abeokuta,
Nigeria.*

Dr. Baba Gnanakumar

*Department of Commerce,
Sri Krishna Arts and Science College,
Coimbatore,
India.*

Dr. NRV Prabhu

*Global Business School,
Chennai,
India.*

Dr. R. Ramakrishnan

*Academic Karthikeyan Institute of Management Sciences,
Andhra Pradesh,
India.*

Dr. Panisa Lanjananda

*Marketing Department,
Faculty of Business Administration,
University of Technology,
Thanyaburi,
Thailand.*

Dr. Stegaroiu Valentin

*Faculty of Economics,
University Titu Maiorescu" Bucharest,
Targu Jiu,
Romania.*

Dr. Raine Isaksson

*Scancem Research,
Sweden and Luleå University of Technology,
Luleå,
Sweden.*

Dr. Berislav Andrić

*Polytechnic of Pozega,
Pozega,
Croatia.*

Dr. Esnati Chaggu

*University College of Lands and Architectural Studies
(UCLAS),
Dar es Salaam,
Tanzania.*

Dr. Rateb J. Sweis

*Department of Business Administration,
University of Jordan,
Amman,
Jordan.*

Dr. Saroj Kumar Dash

*Department of Management Studies,
Skyline Institute of Engineering and Technology,
Uttar Pradesh,
India.*

Dr. Mihaela-Carmen Muntean

*Department of General Economics,
Faculty of Economic Sciences
Dunarea de Jos University
Galati
Romania.*

Dr. Benedicta Drobotă

*University of Agricultural Sciences and Veterinary Medicine
"Ion Ionescu de la Brad" Iasi,
Romania.*

Dr. Hormoz Asadi

*Department of Agricultural Economic
Seed and Plant Improvement Research Institute (SPII),
Karaj,
Iran.*

Assoc. Prof. Walailak Atthirawong

*King Mongkut University of Technology,
Thailand.*

Dr. Mastura Jaafar Mustapha

*Department of Quantity Surveying,
School of Housing, Building and Planning,
Universiti Sains Malaysia,
Penang,
Malaysia.*

Dr. Irfan Ahmed

*School of Management,
Iqra University Islamabad
Islamabad,
Pakistan.*

Dr. Mohammad Fateh Panni

*City University,
Bangladesh.*

Dr. Abdulrahman Twaijry

*Accounting Department,
College of Business & Economics,
Qassim University,
Al-Qassim, Saudi Arabia.*

Dr. Rosane Argou Marques

*Brazilian Agency for Industrial Development,
Brazil.*

Dr. Lidia Angulo Meza

*Universidade Federal Fluminense (UFF)
Brazil.*

Dr. Terezinha Ferreira Oliveira

*Federal University of Para '(UFPA)
Institute Exatas and Natural Sciences,
Faculty of Estatística,
Brazil.*

Dr. Soni Agrawal

*Department of Humanities & Social Sciences,
Indian Institute of Technology Kharagpur
West Bengal,
India.*

Dr. Abhijit (Abhi) Roy

*Kania School of Management,
University of Scranton,
Scranton,
USA.*

Dr. Asli Kucukaslan

*Marmara University,
Istanbul
Turkey.*

Dr. Andrew A. Washington

*Department of Economics,
Southern University at Baton Rouge,
USA.*

Dr. Zeba S. Khan

*College of Management Sciences,
Institute of Economics & Technology,
Karachi,
Pakistan.*

Dr. Ion Stegaroiu

*University Valahia of Targoviste,
Romania.*

Dr. Hamed Taherdoost

*Research and Development Department
Hamta Business Solution Sdn Bhd/Ahoora Ltd
Management Consultation Group
Kuala Lumpur,
Malaysia.*

Dr. Reza Gharoie Ahangar

*Department of Management and Economics,
Islamic Azad University,
Iran.*

Dr. Changiz Valmohammadi

*Department of Industrial Management,
Faculty of Management and Accounting,
Islamic Azad University,
Tehran,
Iran.*

Dr. Mahdi Salehi

*Islamic Azad University,
Takestan,
Iran.*

Dr. Hassan Mehrmanesh

*Islamic Azad University,
Tehran,
Iran.*

Dr. Ali Saeedi
University of Minnesota
Crookston,
USA.

Dr. Nasios Orinos
European University Cyprus
Nicosia,
Cyprus.

Dr. Alireza Miremadi
Graduate School of Management and Economics
Sharif University of Technology
Iran.

Dr. Carolina Feliciano Machado
University of Minho
School of Economic and Management
Department of Management
Braga,
Portugal.

Dr. Ahmad M.A. Zamil
Department of Marketing
King Saud University
Saudi Arabia.

Dr. Sang-Bing Tsai
Zhongshan Institute University of Electronic Science and
Technology
China.

African Journal of Marketing Management

Table of Contents: Volume 10 Number 2 February 2018

ARTICLE

Value congruence of manufacturer: Distributor guanxi orientation and manufacturer's relationship specific investments

PAN Xuan and ZANG Shuwei

8

Full Length Research Paper

Value congruence of manufacturer: Distributor guanxi orientation and manufacturer's relationship specific investments

PAN Xuan* and ZANG Shuwei

School of Economics and Management, Department of Marketing, Tsinghua University, 100088, Beijing Shi, China.

Received 16 October, 2017; Accepted 11 January, 2018

Values are very important for guiding firm's attitude, minds and behaviors. From intra- to inter-firm management, value congruence between cooperative firms is the cornerstone for relationship building. This paper focused on guanxi orientation values, popular in Chinese business context, and found the positive effect of value congruence in guanxi orientation on manufacturers' relationship specific investments (RSIs). The authors collected dyadic data, and applied polynomial regression and response surface approach in this paper. One surprising result is that manufacturer's RSIs keep high when manufacturer's guanxi orientation is low but distributor's is low. The results shed some light on the dynamic interplay between guanxi orientation and RSIs in marketing channel context.

Key words: Value congruence, Guanxi orientation, relationship specific investments (RSIs), dyadic data analysis.

INTRODUCTION

Nowadays, firms are looking for partners or alliances who share common values and Human Resource managers are also trying to find potential employees who admire firms' business values or at least believe in basic values. Given the fundamental nature of values in business markets, it is vital for firms to comprehend the mechanisms of how common values or value congruence work and the influence of common values on business relationships, especially among cooperative partners. Based on the research in marketing channel context, manufacturers and distributors are motivated to maintain close and coordinated interactions under shared values.

Therefore, value congruence is especially important for channel members to build and sustain strong relationships with each other (Zhang and Bloemer, 2008).

By integrating research from organizational behavior and relationship marketing, we develop and test a model that explores the effect of firm-level value congruence in *guanxi* orientation on member's RSIs behavior in channel context. The focus on *guanxi* orientation values is narrower than the traditional business philosophy, but it is in line with research in marketing channel management especially in Chinese context. In addition, we are more concerned with manufacturer's channel behaviors and

*Corresponding author. E-mail: panx3.14@sem.tsinghua.edu.cn or sunnyzshuw@126.com. Tel: (86) 18511366196.

relationship specific investments (RSIs). The answers to these questions will allow us to extend our understanding of value congruence and relationship marketing in new form. In addition, it will give practitioners guidelines on how to build business values and maintain long-time inter-firm relationships with partners.

THEORY AND HYPOTHESES

Value congruence

Edwards and Cable (2009) define values as “general beliefs about the importance of normatively desirable or end states”. Values are also defined as “enduring belief about what is preferred or desirable and standards by which existing structures or behaviors can be measured and assessed” by Scott (2014). Values guide organizational behaviors and provide motivations, enforcing cooperating parties’ obligations, promises, and expectations (Wang and Zhang, 2016), critical for understanding actions in and out organizations, influencing both individual and organizational performance (Gehman et al., 2013; Schein, 2010). Similar to organizational culture, which is defined as “the underlying values, beliefs, and principles” (Denison, 1990), organizational values guide an organization’s management practice. Besides, values manifest themselves through the actions of employees within firms, shape and integrate employees’ activities, and promote simultaneous pursuit with firms (Lee et al., 2017). Value congruence refers to the similarity, fit, confirmation, or comparability between values held by individuals or organizations. Similar to shared goals, value congruence represents the degree to which partners share a common understanding and approach to achievement of bilateral tasks and outcomes (Inkpen and Tsang, 2005).

For partnership selection, the first principle is whether the candidate shares the same business values with themselves. Shared values reduce unnecessary conflicts or disagreements and motivate both partners to engage in positive behaviors. Given the importance of values, yet research on inter-firm values remains rare, let alone value congruence. Therefore, it is critical to address this gap and understand how values are practiced across organizations and that values congruence influences inter-organizational relationships.

Currently, value congruence is more researched in organizational behavior and social psychology research. In organizational behavior studies, a number of organizational behavior studies demonstrated that value congruence between employees and organizations or groups, through influencing employees’ attitudes and behaviors, enhances employee’s job satisfaction, commitment, trust, wish to continue their employment relationship, and performance, and lowers the rate of turnover (Krisof-Brown et al., 2005; Cable and Edwards,

2004; Edwards and Cable, 2009; Cloe, Carter and Zhang, 2013). In social psychology studies, researchers use similarity-attraction theory (Schneider, 1987) to explain the effect of similarity in values on relationship quality and other outcomes.

In marketing field, Dwyer and Oh (1988) demonstrated the importance of goal congruence between channel members on commitment. Zhang and Bloemer’s (2008) study was the first to clearly point the concept of value congruence in marketing field. They supposed that consumer-brand value congruence is antecedents of relationship quality and outcomes (satisfaction, trust, affective commitment and loyalty) and found that value congruence has positive and direct influence on these relationship marketing outcomes. Two recent studies have investigated value congruence between channel members, both of which focused on the direct effects of perceptual congruence on channel relationship outcomes. Wang and Zhang (2016) showed that value congruence between manufacturers and their distributors were positively related to distributors’ performance. Kashiyap and Siyadas (2012) demonstrated that franchisors’ perceived value congruence could ensure themselves to finish their duty and encourage voluntary extra-role behavior. Chen et al. (2014) confirmed that shared values are antecedents of inter-organizational trust. In the same vein, Villena and Craighead (2017) pointed out that size and relational capital incongruence between buyers and suppliers has influence on opportunism and performance of each side. The current research focuses more on direct effect of value congruence, treating it as antecedents. In this paper, value congruence was also treated as antecedent variable.

Guanxi orientation

Focus is on one of the most important shared values in Chinese business environment, *guanxi* orientation, and investigate the effect of *guanxi* orientation congruence on manufacturers’ relationship specific investments.

Guanxi, opposite to arm’s length dealings, is built on mutual acquaintance or recognition in a network (Inkpen and Tsang, 2005). Knowledge, resources, markets or technologies can be provided to each other in the network when necessary. In Chinese business network, manufacturers and distributors develop mutual *guanxi* and build cooperative relationship. Good *guanxi* with each other is beneficial for achieving a higher level of trust. Luo (1997) found that *guanxi*-based business relationship has a significant and positive impact on the performance of foreign-invested enterprises.

As to *guanxi* orientation, it is defined as “the extent to which people willingly recognize obligations, harmony, and long-term reciprocation in their daily socialization” in individual level (Murray and Fu, 2016). *Guanxi* orientation is deeply rooted in Chinese culture. Similar to *guanxi*, this

kind of orientation also place great emphasize on reciprocity or favor (*renqing*), emotional attachment (*ganqing*), trust (*xinyong*), and preserving face (*mianzi*). Reciprocity or favor implies that once a benefactor gives a benefit to another, the receiver is obligated to repay the favor in order to restore balance (Hwang, 1987). Face (*mianzi*) in China represents an individual's social position or prestige, involved in impression management. Preserving or earning face is gained by successfully performing one or more specific social roles well recognized by others in his/her social network (Hwang, 1987), leaving a favorable image in others' minds. Emotional attachment (*ganqing*) is defined as a kind of feelings, indicating closeness of *guanxi* among members of social network. The aforementioned are key concepts involved in *guanxi* orientation research.

Guanxi is particularly important in sales force marketing, an important kind of firm-specific assets (Luo, 1997; Wang, 2007). Previous research suggest that *guanxi* orientation with its strategic role, benefits firms in cultivating business relationships, managing asset scarcity, securing production and distribution channels (Xin and Pearce, 1996), and creating an inter-organizational atmosphere where boundary spanners and firms actively establish and maintain interpersonal or inter-organizational relationships with their counterparts. *Guanxi*-orientated firms are committed to the code of reciprocity, obligated to return the favor in the future, and take partners' social reputation into consideration, maintaining and accumulating social capital during inter-firm exchanges.

Normally, contract governance mechanism is used to regulate exchanges with partners. Contracts are complex and specific; however, they cannot foresee all the situations in advance during their cooperation with their partners. Sometimes when urgent or unpredictable things happen, firms have to come up with appropriate solutions. In this case, firms with *guanxi* orientation will make use of their network to work out a solution, where *guanxi* orientation plays partial role of relational governance mechanism, complementary to contract governance (Yang and Wang, 2011). Although each firm is self-interested, *guanxi*-oriented firms will still treat partners as business friends and believe they will make it through together.

***Guanxi* orientation congruence and RSIs**

According to Williamson (1985), RSIs increase the efficiency of production and show willingness to cooperate and trust in the partner. Relationship specific assets are the key determinant which influences synergy value creation through strategic alliance (Li, 2018). However, it is difficult to induce manufacturers' RSIs due to moral hazards and opportunism of distributors. Furthermore, if the relationship is terminated, the specialized and customized investments cannot be transformed into other

relationships, resulting in an irrevocable loss (Yu et al., 2006). Nonetheless, *guanxi* is the lubricant for cooperative relationships, and works as the governance mechanism, safeguarding the manufacturers' investment and keeping the investment recipient out of opportunistic behaviors. Established *guanxi* between manufacturers and distributors creates a competitive synergy advantage in the marketplace (Wu and Choi, 2004). Flexible models of cooperation can be adopted, trust is fostered, mutual benefits and reciprocity are created between *guanxi*-orientated firms, eventually inducing manufacturers' RSIs (Morgan and Hunt, 1994). Under values of *guanxi* orientation, norms of reciprocity in dyadic relationships, and consideration of social reputation or prestige inhibit opportunistic behaviors, thus partners are capable of preserving social capital within the network and are more committed in relationship-specific investments. No matter to keep emotional attachment or leave a good impression, *guanxi* building process needs necessary investments to each other. Recognizing the importance of *guanxi*, *guanxi*-orientated manufacturers make RSIs in the dyads to maintain trustful and cooperative relationship with distributors. In other words, manufacturers are motivated to make relationship specific investments as distributors and manufacturers are congruent in *guanxi* orientation. However, when manufacturers and distributors have unbalanced or incongruent level of *guanxi* orientation, whether the manufacturer or the distributor is higher, manufacturers' intention to make RSIs is lower than when manufacturers and distributors are congruent in *guanxi* orientation because of cognitive dissonance. If the manufacturers have higher *guanxi* orientation, they feel undeserved and their redundant RSIs would not pay back. In contrast, when the distributors have higher *guanxi* orientation, manufacturers believe that the distributors are bundled and would not leave the relationship voluntarily so they will decrease RSIs in the distributors and rearrange the RSIs in other parts. Therefore, we hypothesize:

Hypothesis: Manufacturer-distributor congruence in *guanxi* orientation has positive impact on manufacturer's relationship specific investments.

Therefore, we draw on the aforementioned literature to propose a conceptual model for manufacturer-distributor value congruence (*guanxi* orientation) and manufacturer's RSIs. Figure 1 depicts the conceptual model of this study.

METHODS

Data and sample

In order to investigate the relationships illustrated in Figure 1 and test the hypothesis, a survey using key informants was conducted. Our study used matched survey data from both manufacturer and distributor sides in cellphone distribution network, which includes one major brand manufacturer and its various distributors. Sales

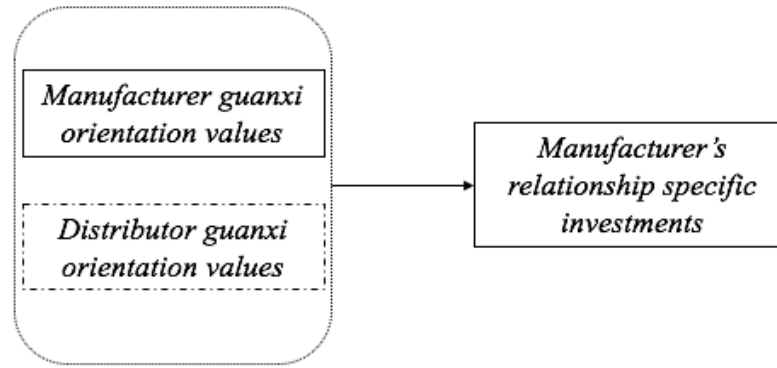


Figure 1. Conceptual model.

managers from the manufacturer and owners from distributors are surveyed as key informants. A double-blinded translation was followed when translating the items from English to Chinese, for the reason that most of our key informants speak Chinese. Satisfactory psychometric properties in Chinese business context of constructs and measures are taken into consideration during revision process. All measures used a Likert response scale ranging from 1 (strongly disagree) to 5 (strongly agree). For dyadic research, parallel wording in the measures of paired questionnaires was used. Under the help of the manufacturer, we employed a simple random sampling method to choose cellphone distributors with average monthly sales of more than 200 cellphones, resulting in qualified 613 distributors nationwide. Questionnaires were distributed to 613 distributors and counterpart manufacturer respondents, respectively. Finally, we collect qualified 342 dyads of questionnaire, with a response rate of 55.8%. The methodological design for collecting dyadic data not only diversifies our data and research perspectives, but also provides our study with advantage of reducing common method variance associated with unilateral data, checking data quality, and observing firm behavior differences and perception bias across various dimensions (Su et al., 2009; Huang et al., 2016). To test nonresponse bias, we compared firm attributes (size, revenues, and relationship length) of respondent distributors and non-respondent firms. None of the results were significant, suggesting the absence of nonresponse bias.

Measures

The values, *guanxi* orientation were measured using six items. Following the research of Su et al. (2009), these items assessed key features of *guanxi* practice in China business environment. On this basis, we conceptualize and measure *guanxi* orientation congruence between manufacturers and distributors in terms of objective fit, which assumes that manufacturer and distributor *guanxi* orientation values exist independently (Edwards and Cable, 2009). We measure the outcome construct, RSIs in one rough item (Claro et al., 2003; William, 1975; Wang et al., 2014). Smart PLS 3.0 was used to calculate factor loadings of every measurement. Items and factor loadings are illustrated in Appendix Table 1. Appendix contains parameter estimates for the measurement model. In the polynomial regression model, four variables (firm size, yearly revenues, relationship duration, and dependence structure) are considered to influence the outcome variable. To control the effects, respondents were asked to indicate distributor's number of employees (firm size), yearly revenues, relationship duration and dependence (Jap and Ganesan, 2000). All data were collected from both distributor' and manufacturer's side to mitigate common method bias.

Analytical strategy

The polynomial regression and response surface approach was used for dyadic data analysis, widely used in marketing (Ceniels et al., 2017), organizational behavior (Edwards and Parry, 1993; Shanock et al., 2010; Cloe et al., 2013), innovation (Lee et al., 2017), information system (Venkatesh and Goyal, 2010) (Figure 2 and Table 2). Compared with traditional research methods, polynomial regression and response surface avoid ambiguous and confounding results, and the loss of information of independent variables, and present three-dimensional and non-linear findings. The hypothesis was tested by estimating the following equation (to simplify, we cancelled all control variables in the Equation 1):

$$RSIs = b_0 + b_1D + b_2M + b_3D^2 + b_4(D \times M) + b_5M^2 + e, \quad (1)$$

where RSIs represent the outcome variable and D and M are distributor's and manufacturer's *guanxi* orientation respectively (single character was used to simplify the equation 1). D^2 , $D \times M$, and M^2 stand for quadratic combinations of D and M. Regression coefficients (b_1 , b_2 , b_3 , b_4 , b_5) were then calculated to plot the three-dimensional response surface where D and M were plotted on the perpendicular horizontal axes, and RSIs were plotted on the vertical axis (Edwards and Parry, 1993; Shanock et al., 2010).

To test the hypothesis (congruence effect of manufacturer-distributor *guanxi* orientation), three key features of the plotted response surface were examined, underlined by Edwards and Parry (1993) and Edwards (2002). Regression coefficients from Equation 1 were to calculate the curvature and slopes along congruence line and incongruence line. To interpret the results from the surface, we examine the incongruence line ($D = -M$) on the response surface firstly. To testify the hypothesis, the curvature along incongruence line should be negative (curvature = $b_3 - b_4 + b_5$, concave along incongruence line). Secondly, tests of whether slope p_{11} of the first principle axe differed from 1, and intercept p_{10} differed from 0 were conducted. The tests were to verify the ridge of the response surface runs along the congruence line, providing additional evidence for hypothesis. If $p_{11} = 1$, $p_{10} = 0$, then manufacturer's RSIs are maximized when *guanxi* orientation between manufacturer and distributor are equal. Suggested by Cole et al. (2013), bootstrapping method was used to calculate 95% bias-corrected confidence intervals (CIs) for p_{11} and p_{10} , because of nonlinear combinations of regressions from Equation 1. Thirdly, we examine the curvature and slope along congruence line ($D = M$), to determine whether the surface along congruence line is flat. If the slope ($b_1 + b_2$) and curvature ($b_3 + b_4 + b_5$) of congruence line do not significantly differ from zero, then the level of manufacturer's RSIs is the same no matter whether the level of manufacturer-distributor value congruence is high or low. According to Edwards and Cable

Table 1. Means, standard deviations, and correlations among variables.

Variable	M	SD	1	2	3	4	5	6	7	8
1.Tenure	1.44	1.12								
2.Firm size	2.55	2.14	0.05							
3.Interdependence	5.92	1.23	-0.00	0.14						
4.Dependence asymmetry (D)	0.68	0.83	-0.02	-0.18	0.01					
5.Dependence asymmetry (M)	0.36	0.64	-0.01	0.05	-0.01	-0.46				
6.D- <i>guanxi</i> orientation	3.79	0.63	0.05	-0.07	0.13	0.04	-0.01			
7.M- <i>guanxi</i> orientation	3.61	0.57	-0.01	0.13	0.17	-0.12	0.06	0.17		
8.M-RSIs	3.41	1.04	0.01	0.15	0.17	-0.11	0.07	0.04	0.16	

Values on the diagonal represent correlations. Correlations greater than 0.13 are significant at $p < 0.01$. Correlations greater than 0.10 are significant at $p < 0.05$. Variables interdependence and dependence asymmetry (D and M) are calculated by adding or subtracting the dependence scores from manufacturer and distributor side.

(2009), if the third condition mentioned cannot be met, it does not exclude congruence effect. However, the maximized level of manufacturer's RSIs will be determined by whether manufacturer and distributor *guanxi* orientation are low or high, because the response surface along congruence line is not flat but changing with the level of values.

RESULTS

Table 1 shows means, standard deviations, and correlations among variables studied in this research. Table 2 illustrates the regression results of Equation 1.

The hypothesis predicted a congruence effect in which manufacturer's RSIs will increase as manufacturer-distributor *guanxi* orientation values become more aligned, and RSIs will decrease as discrepancy between manufacturer and distributor *guanxi* orientation values become larger. As shown in Table 2, Model 2 with nonlinear relationships explains a significant incremental variance in RSIs than Model 1, indicating a nonlinear relationship exists between manufacturer-distributor *guanxi* orientation and manufacturer's RSIs. Next, we examined the three conditions for congruence effect (Edwards and Parry, 1993). From Table 2, the surface along incongruence line is curved downward (curvature=-0.241), meeting the first condition. In addition, the slope p_{11} of the first principle axis does not significantly differ from 1 (95% CI [-5116.231, 5127.548]), and the intercept p_{10} does not significantly differ from 0 (95% CI [-1144.102, 1185.18]), satisfying the second condition. Finally, the slope of congruence is positive (slope=0.255), indicating that manufacturer's RSIs increase as the aligned manufacturer-distributor *guanxi* orientation level are from low-low to high-high. The curvature of congruence line is not significantly different from zero. The significant and positive slope of incongruence line ($b_1-b_2=2.479$, $p<0.001$) indicates that manufacturer's RSIs is higher when distributor's *guanxi* orientation is higher than manufacturer's (right side) than when manufacturer's

guanxi orientation is higher than the distributor's (left side). In summary, congruence effect of manufacturer-distributor *guanxi* orientation on RSIs is satisfied.

To give a visual explanation, we plotted the response surface in Figure 2 using estimated coefficients from Equation 1. The surface looks like a saddle, curved downward along incongruence line (dashed line in the bottom). This implies that the levels of manufacturer's RSIs increase as *guanxi* orientation between manufacturer and distributor become more aligned, and decrease as discrepancy in *guanxi* orientation between manufacturer and distributor is larger. As depicted, the ridge of the response surface does not deviate little from congruence line (solid line in the bottom), and the surface along the congruence line rises across the congruence line.

A 2x2 matrix was drawn to give a sketch of RSIs distribution (Figure 3). The darker the color is, the higher RSIs value is, indicating the more manufacturers invest. From Figure 3, we can conclude that when *guanxi* orientation values of manufacturer and distributor are both high and congruent, manufacturer's RSIs are highest, providing further evidence for the hypothesis. Under normal conditions, manufacturer with low *guanxi* orientation is unwilling to invest in the bilateral relationship. However, we found an inspiring result that when manufacturer's *guanxi* orientation is low but distributor's *guanxi* orientation is high, manufacturer's RSIs still keep comparatively high. The following explanations that contract mechanism regulates routines and details, used to govern the manufacturer-distributor relationship are given. Manufacturer's intention to decrease RSIs is constrained by contract governance mechanism so it cannot adjust investments at will. Moreover, the manufacturer decides to invest according to economic input-output potentials. For the distributor with high *guanxi* orientation, its intention to maintain the exchange relationship remains strong. Therefore, as long as the exchange exists and remains profitable, manufacturer's

Table 2. Polynomial regression results for relationship specific investments.

Parameter	Model 1	Model 2
Tenure	0.089***	0.013
Firm size	0.029*	0.053**
Interdependence	0.101***	0.109**
Dependence asymmetry (D)	0.029	-0.079
Dependence asymmetry (M)	0.154*	0.041
Constant	1.756***	1.836
D	0.026	1.367*
M	0.289***	-1.112
D ²	-	-0.240**
D×M	-	0.115
M ²	-	0.134
R ²	0.026	0.047
ΔR ²	-	0.021**
Incongruence line (D=-M)		
Slope (b ₁ -b ₂)	-	2.479**
Curvature (b ₃ -b ₄ +b ₅)	-	-0.241
Congruence line (D=M)		
Slope (b ₁ +b ₂)	-	0.255
Curvature (b ₃ +b ₄ +b ₅)	-	0.009
Lateral shift quantity (b ₂ -b ₁)/[2×(b ₃ -b ₄ +b ₅)]	-	-5.143

***p<0.01, **p<0.05, *p<0.1.

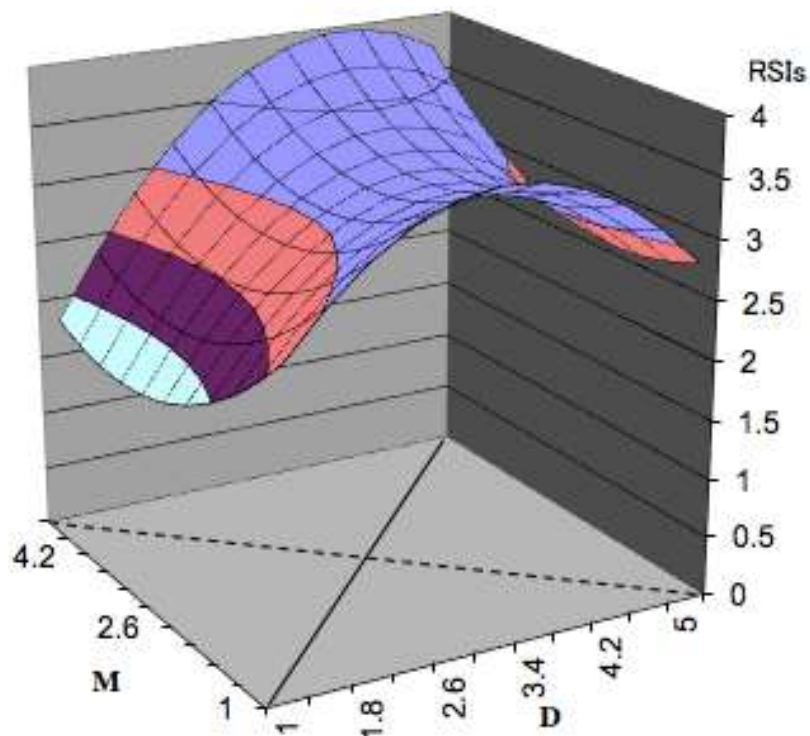


Figure 2. Congruence effect of manufacturer-distributor *guanxi* orientation on relationship specific investments.

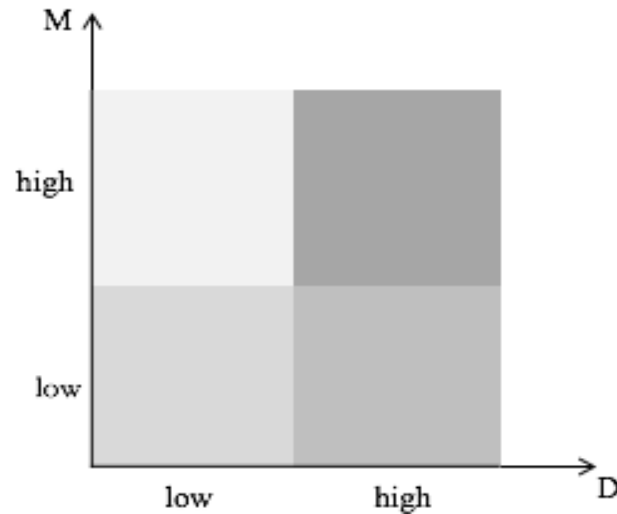


Figure 3. 2x2 Matrix diagram for relationship specific investments.

RSIs are meaningful.

DISCUSSION

This study went beyond manufacturer and distributor perceptions of the *guanxi* orientation and proposes an integrative model which helps to explain how manufacturer-distributor interactions influence manufacturer's behaviors. The model shows that the congruence between manufacturer and distributor *guanxi* orientation impacts on the manufacturer's RSIs. This research is conducted from manufacturer's perspective, but data are collected from both sides. Results demonstrate that not only *guanxi* orientation influence manufacturer's investment intention to the specific relationship with distributor, but value congruence between manufacturer and distributor has effect on manufacturer's RSIs as well. The more aligned their *guanxi* orientation, the higher their *guanxi* orientation congruence, the more RSIs manufacturer will make. In addition, when manufacturer's *guanxi* orientation is low but distributor's is high, manufacturer's RSIs still keep high. This does not mean that distributor's *guanxi* orientation is not important, for the relationship needs the distributor to maintain. Therefore, value congruence in *guanxi* orientation plays a key role in inter-organizational relationships. In marketing channel, manufacturers and distributors should take value congruence into consideration to select the most appropriate cooperative partners.

Theoretical and managerial contributions

Firstly, this research highlights the importance of value congruence in channel members and its impact on behaviors of channel members. The more aligned values

in *guanxi* orientation between manufacturer and distributor, the more investments will manufacturer make. Even when the manufacturer has low-level of values, it keeps investing due to potential interests. Secondly, as suggested by Wang and Zhang (2016), we also find the potential of value congruence functioning as a governance method. Thirdly, the research applies the response surface approach which gives a three-dimensional and visualized picture on how dependent variable changes with independent variables and explains a considerable proportion of hypothesized equation. Dyadic data were collected from two sides in the channel relationship for better capturing essence of value congruence, and analyzed to avoid self-reported bias and common method bias.

For managerial implications, values are internal forces driving and directing firm's behaviors and attitudes, and the bedrock of organizational culture guiding firm's decisions about business ethics (Schein, 2010; Wang and Zhang, 2016). Managers should pay more attention to the joint effects of manufacturer's values and its counterpart distributor's preferred values (from intra-firm to inter-firm). Common or shared values create mutual cooperation basis. For *guanxi* orientation values, firms with these values treat partners as friends and take care of partners' social status, and help cope with problems encountered by their partners. So they are willing to do relationship specific investments in their partners to keep long-standing commitment.

Limitations and future research directions

The data were collected from only one industry, cellphone industry, so generality is a concern. It is suggested that further data collecting from multiple industries to draw an all-around conclusion. The research is based in China,

where investigated values belong to eastern culture. Additional tests are needed to generalize the conclusions to other cultures. Cross-sectional data limits casual inferences. Further longitudinal studies are needed. The relatively low R^2 of outcome variable suggests other significant drivers of relationship specific investments beyond manufacturer and distributor values exist.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

ACKNOWLEDGEMENTS

The authors appreciate the following for funding the publication of this manuscript: China Postdoctoral Science Foundation (Number 2017M620811) and Natural Science Foundation of China (Number 71372046), Manufacturer's Multi-channel Coordination Strategy: An integrated perspective.

REFERENCES

- Cable DM, Edwards JR (2004). Complementary and supplementary fit: a theoretical and empirical integration. *J. Appl. Psychol.* 89(5):822-834.
- Caniëls MC, Vos FG, Schiele H, Pulles NJ (2017). The effects of balanced and asymmetric dependence on supplier satisfaction: Identifying positive effects of dependency. *J. Purch. Supply Manag.* in press.
- Chen YH, Wu JJ, Chien SH, Shiah YC (2014). Exploring the Factors of Inter-Organizational Knowledge Sharing. *World Academy of Science, Engineering and Technology. Int. J. Soc. Behav. Educ. Econ. Bus. Ind. Engineering*, 8(7):2188-2191.
- Claro DP, Hagelaar G, Omta O (2003). The determinants of relationship governance and performance: how to manage business relationships? *Ind. Market. Manage.* 32(8):703-716.
- Cole MS, Carter MZ, Zhang Z (2013). Leader–team congruence in power distance values and team effectiveness: The mediating role of procedural justice climate. *J. Appl. Psychol.* 98(6):962-973.
- Denison DR (1990). *Corporate culture and organizational effectiveness.* John Wiley & Sons.
- Dwyer FR, Oh S (1988). A transaction cost perspective on vertical contractual structure and interchannel competitive strategies. *J. Mark.* 52(2):21-34.
- Edwards JR (2002). Alternatives to difference scores: Polynomial regression and response surface methodology. In F. Drasgow & N. W. Schmitt (Eds.). *Advances in measurement and data analysis* (350-400). San Francisco, CA: Jossey-Bass.
- Edwards JR, Cable DM (2009). The value of value congruence. *J. Appl. Psychol.* 94(3):654-677.
- Edwards JR, Parry ME (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Acad. Manage. J.* 36(6):1577-1613.
- Gehman J, Trevino LK, Garud R (2013). Values work: A process study of the emergence and performance of organizational values practices. *Acad. Manage. J.* 56(1):84-112.
- Huang Y, Luo Y, Liu Y, Yang Q (2016). An Investigation of Interpersonal Ties in Interorganizational Exchanges in Emerging Markets A Boundary-Spanning Perspective. *J. Manage.* 42(6):1557-1587.
- Hwang KK (1987). Face and favor: The Chinese power game. *Am. J. Sociol.* 92(4):944-974.
- Inkpen AC, Tsang EW (2005). Social capital, networks, and knowledge transfer. *Acad. Manage. Rev.* 30(1):146-165.
- Jap SD, Ganesan S (2000). Control mechanisms and the relationship life cycle: Implications for safeguarding specific investments and developing commitment. *J. Market. Res.* 37(2):227-245.
- Kashyap V, Sivadas E (2012). An exploratory examination of shared values in channel relationships. *J. Bus. Res.* 65(5):586-593.
- Kristof-Brown AL, Zimmerman RD, Johnson EC (2005). Consequence of individuals fit at work: An meta-analysis of person-job, person-organization, person-group, and person-superior fit. *Pers. Psychol.* 58(2):281-342.
- Lee K., Woo HG, Joshi K (2017). Pro-innovation culture, ambidexterity and new product development performance: Polynomial regression and response surface analysis. *Eur. Manag. J.* 35(2):249-260.
- Li WS (2018). *Creating Value Through Strategic Alliances.* Strateg. Manag. Account. pp. 193-216. Springer, Singapore.
- Luo Y (1997). Guanxi and performance of foreign-invested enterprises in China: An empirical inquiry. *MIR: Manag. Int. Rev.* 37(1): 51-70.
- Morgan RM, Hunt SD (1994). The commitment-trust theory of relationship marketing. *J. Market.* 58:20-38.
- Murray JY, Fu FQ (2016). Strategic guanxi orientation: How to manage distribution channels in China?. *J. Int. Manage.* 22(1):1-16.
- Schein EH (2010). *Organizational culture and leadership* (Vol. 2, 4th ed). San Francisco: John Wiley & Sons.
- Schneider B (1987). The people make the place. *Pers. Psychol.* 40:437-453.
- Scott WR (2014). *Institutions and organizations: ideas, interests, and identities.* Sage Publications.
- Shanock LR, Baran BE, Gentry WA, Pattison SC, Heggestad ED (2010). Erratum to: Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores. *J. Bus. Psychol.* 25(4):543-554.
- Su C, Yang Z, Zhuang G, Zhou N, Dou W (2009). Interpersonal influence as an alternative channel communication behavior in emerging markets: The case of China. *J. Int. Bus. Stud.* 40(4): 668-689.
- Venkatesh V, Goyal S (2010). Expectation disconfirmation and technology adoption: polynomial modeling and response surface analysis. *MIS quarterly*, 281-303.
- Villena VH, Craighead CW (2017). On the Same Page? How Asymmetric Buyer–Supplier Relationships Affect Opportunism and Performance. *Prod. Oper. Manage.* 26(3):491-508.
- Wang CL (2007). Guanxi vs. relationship marketing: Exploring underlying differences. *Ind. Mark. Manag.* 36(1):81-86.
- Wang G, Wang X, Zheng Y (2014). Investing in guanxi: An analysis of interpersonal relation-specific investment (RSI) in China. *Ind. Mark. Manag.* 43(4): 659-670.
- Wang JJ, Zhang C (2016). The impact of value congruence on marketing channel relationship. *Industrial Marketing Management.* in press.
- Williamson OE (1975). *Markets and hierarchies: antitrust analysis and implications: A study in the economies of internal organization.* New York: The Free Press.
- Williamson OE (1985). *The economic institutions of capitalism.* New York: Collier MacMillan Publishers.
- Wu WP, Choi WL (2004). Transaction cost, social capital and firms' synergy creation in Chinese business networks: An integrative approach. *Asia Pacific J. Manage.* 21(3):325-343.
- Xin KK, Pearce JL (1996). Guanxi: Connections as substitutes for formal institutional support. *Acad. Manage. J.* 39(6):1641-1658.
- Yu CMJ, Liao, TJ, Lin ZD (2006). Formal governance mechanisms, relational governance mechanisms, and transaction-specific investments in supplier–manufacturer relationships. *Ind. Mark. Manage.* 35(2):128-139.
- Yang Z, Wang CL (2011). Guanxi as a governance mechanism in business markets: Its characteristics, relevant theories, and future research directions. *Ind. Mark. Manag.* 40(4): 492-495.
- Zhang J, Bloemer JM (2008). The impact of value congruence on consumer-service brand relationships. *J. Serv. Res.* 11(2):161-178.

Appendix Table 1. Construct reliability and validity.

Constructs, measurement items, reliability, and validity		Factor loadings
Guanxi orientation ($\alpha=0.633$, $CR=0.771$, $AVE=0.461$); adopted from Su et al. (2009)		
GO1	One tree doesn't make a forest.	0.614
GO2	Network is important for business success.	0.836
GO3	To pay back favor is more urgent than debts.	0.628
GO4	Business dealings entail reciprocity.	0.612
Dependence on partner ($\alpha=0.668$, $CR=0.800$, $AVE=0.500$); adopted from Jap and Ganesan (2000)		
DP1	If the relationship with our company is terminated, our local sales revenues will drop a lot.	0.706
DP2	If the relationship with our company is terminated, it is difficult for our company to find an alternative.	0.728
DP3	It is difficult for our company to replace the role the partner plays in the relationship.	0.733
DP4	Our company needs maintain the relationship with the partner.	0.660
Relationship specific investment (M) (Claro et al., 2003)		
RSI1	Our company has invested a lot of resources in the distributor to build good relationships.	N.A.
Relationship time (RelationT)		
	How long have you been cooperating with the manufacturer/distributor? year(s)	N.A.
Yearly revenues (YearlyR)		
	The distributor's yearly revenues(RMB)<0.5million (<0.5 million)<1 million<5 millions<10 millions<25 millions<50 millions<75 millions<100 millions<150 millions<300 millions and 300 millions or above	N.A.
Firm size (FirmS)		
	How many employees in the distributor:<20<50<100<200<300<500<700<1000<1500<2002 thousands or above	N.A.

N.A.: Not applicable.

Related Journals:

