

Determinants of the dynamics in buyer-supplier relationship quality

Peter Naudé

Manchester Metropolitan University Business School/University of Sydney Business School
United Kingdom/Australia

Paul Smith

Manchester Metropolitan University Business School
United Kingdom

Christine Pirkl

Alliance Manchester Business School
United Kingdom

Catherine Sutton-Brady

University of Sydney Business School
Australia

Reza Salenejad

Alliance Manchester Business School
United Kingdom

Abstract

This paper assesses how relationship quality in high-technology buyer-supplier relationships changes over time, and also identifies the key drivers of such change. The development of relationship quality over time has received scant attention by scholars, and developing our understanding of it is highly relevant for both academics and practitioners. Our paper addresses this question by first reviewing the relevant literature. Based on this literature review, we identify three different potential drivers of changes in relationship quality. Using this model as a basis for our subsequent fieldwork, we then interviewed six senior executives having extensive experience with strategic supplier relationships in high-technology industries in Germany. The empirical data collected from these face-to-face interviews confirms that relationship quality is highly dynamic, without showing a specific development pattern. Determinants for change in relationship quality are predominately internal factors (with regards to daily business behaviour, the achievement of milestones and the strategic importance of the supplier). Network influences, derived from discussing their individual network pictures, are of secondary importance. Finally, environmental conditions (e.g. PESTLE factors) play a less important role and only influence relationship quality indirectly. Drawing on the literature review and empirical results, our paper concludes with a model of the drivers of how to manage relationship quality successfully in long-term, strategic supplier relationships.

Keywords: industrial marketing, relationship quality, dynamics, long-term buyer-supplier relationships

Introduction

This paper seeks to (a) ascertain how relationship quality (RQ) develops over time in tightly interdependent buyer-supplier relationships, and (b) to identify what factors drive changes in relationship quality. Dynamics in RQ as well as its development over time have received only scant attention in the literature. This is unfortunate, as both topics are of high practical and theoretical relevance. Scholars have identified several benefits of high RQ in long-term business relationships including (but not limited to) higher customer loyalty and an increase in repurchase decisions (Hewett *et al.*, 2002; Rauyruen and Miller, 2007), stronger relationships and a better ability to develop the relationship further (Sheth and Parvatlyar, 1995). In order to increase the relationship performance, managers should continuously strive to maintain high RQ (De Wulf *et al.*, 2001; Palmatier *et al.*, 2007), which has a positive impact on the whole company (Leuthesser, 1997).

Usually, buyer-seller relationships are defined as long-term, close, interactive and complex (e.g. Ford, 1980; Turnbull *et al.*, 1996). Hence, they generate a higher level of interdependence and require commitment and adaptation (e.g. Brennan and Turnbull, 1999; Ford, 1982; Ford and Håkansson, 2006). Consequently, those business relationships provide specific challenges, which were recognised by the IMP Group focusing on the examination of interactions between buyers and sellers (e.g. Håkansson, 1982).

Participating in long-term relationships is, in general, regarded as beneficial for both parties. Through tailoring corporate resources, both are able to decrease operational costs whilst increasing revenues (Ford, 1980). As business volume between the two parties increases, cost per unit decreases (Williamson, 1991). Furthermore, Grönroos (1994) identified that opportunistic, short-term decisions are reduced as parties increase relationship commitment.

Several papers aim to define and investigate critical antecedents of RQ, which are conditions influencing the ability to establish high RQ. Figure 1 below summarises the various facts raised in the literature review, which identifies both endogenous and exogenous variables. Considering the relationship parties themselves, the similarity of the companies and the salespersons play a role (Boles *et al.* 2000; Crosby *et al.*, 1990; Doney and Cannon, 1997; Smith, 1998), as do their characteristics such as formalisation vs. centralisation (Dwyer and Oh, 1987; Menon *et al.* 1996), and reputation and business flexibility (Doney and Cannon, 1997). One key antecedent seems to be the supplier's expertise and competence (Bejou *et al.*, 1996; Lagace *et al.*, 1991, Wray *et al.*, 1994), although expertise is mostly linked to the salesperson's competence and not to the firm itself. The influence of the individual salesperson has probably decreased in the recent years, as the internet facilitates inter-organisational communication of expertise. Furthermore, the relational behaviour is an important antecedent. Scholars have examined the influence of the parties' ethical orientation (Lagace *et al.* 1991; Wray *et al.* 1994), customer orientation (Bejou *et al.* 1996) and effectiveness in communicating with each other (Friman *et al.* 2002; Menon *et al.* 1996; Morgan and Hunt, 1994; Sanzo *et al.* 2003; Smith, 1998). Also in this specific area scholars are split over the antecedents, e.g. Gummesson (1987) argues that relational behaviour, i.e. how the buyer or the seller manages the relationship, influences the perception of quality whereas Hennig-Thurau and Klee (1997) define the perception of the overall quality as a key antecedent. The nature of the offering itself is also seen to influence RQ, as shown by de Ruyter *et al.* (2001) who identify various facts of the offer characteristics, such as product performance, product output, and after sales service.

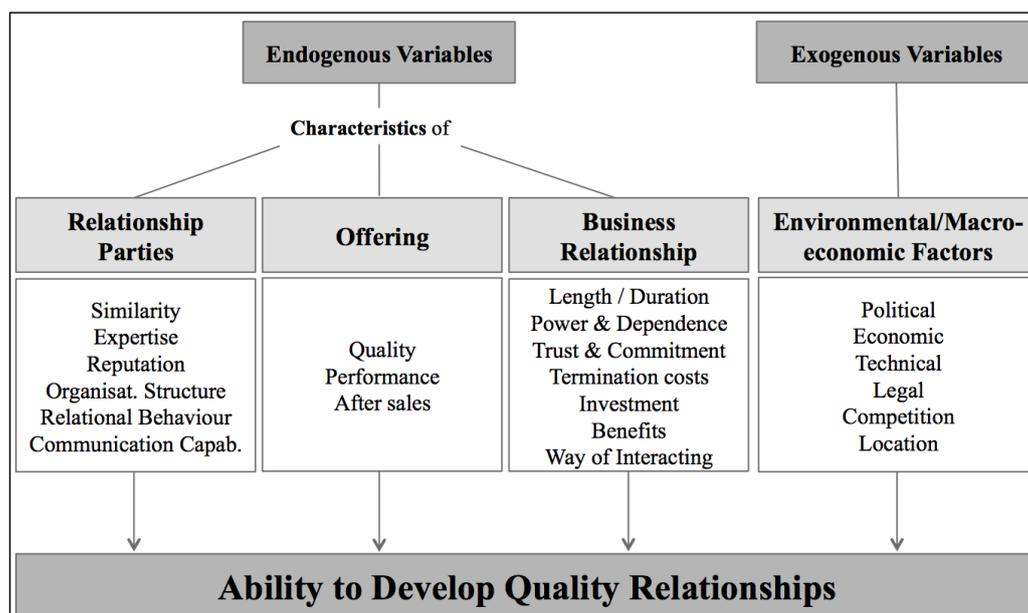


Figure 1. Overview over antecedents of relationship quality

The nature of the relationship determines its quality and scholars have examined several variables describing the relationship. According to Morgan and Hunt (1994) critical variables for establishing quality relationships are the length of the relationship, termination as well as switching costs and the benefits the relationship could possibly provide both partners with. In line with Morgan and Hunt (1994), relationship duration is frequently defined as a critical antecedent (e.g. Doney and Cannon, 1997; Lagace *et al.*, 1991; Smith, 1998). Johnson (1999) adds the future perspective by emphasising the positive link between the expectation of relationship continuity and RQ. Furthermore, authors acknowledge the impact of termination and switching costs (de Ruyter *et al.* 2001) and the influence of potential benefits (Bowen and Shoemaker, 1998; Friman *et al.*, 2002) on the ability of building quality relationships.

Power and dependence play an important role in establishing high RQ (Goodman and Dion, 2001; Hibbard *et al.*, 2001) as the more power one party has, e.g. by being a monopolist, the more difficult it to be satisfied within the relationship. Interaction processes are another antecedent in the focus of scholars (Lagace *et al.*, 1991; Zineldin, 1995): the business partners should emphasise fairness in their daily business operations in order to be able to trust each other (Friman *et al.* 2002; Kumar *et al.* 1995) and must be committed to strive towards pursuing the common goals of the relationship (Huntley, 2006). This includes *inter alia* an open exchange of relevant information (Zineldin, 1995). Consequently, it remains to investigate whether trust and commitment are an antecedent or a dimension of RQ, however, Jiang *et al.* (2016) are strongly of the opinion that “trust and commitment are antecedents, not dimensions or indicators” (p.310).

Within the interaction processes, it is crucial that personal relationships between the representatives of the firms are well developed (Athanasopoulou, 2006) for which the frequency of interaction plays a critical role (Lagace *et al.*, 1991). In an international setting, De Wulf *et al.* (2001) define relationship investment as perceived by the other party as a direct backbone of RQ. The authors specifically highlight the importance of interpersonal communication and tangible rewards whilst preferential treatment plays a less significant role. This is framed differently by Håkansson (1992) who argues that RQ is an important factor for the willingness of investing into a relationship, which is a prerequisite for relationship development. Scholars tend to agree that service quality is a necessary but not sufficient prerequisite for high RQ between two parties (Crosby *et al.*, 1990; Halinen, 1996). Woo and Ennew (2004) detected though a positive and direct relationship between those two variables in their study limited to the area of professional business-to-business services.

Finally, most RQ studies include endogenous variables only and Athanasopoulou (2009) suggests that scholars examine the implications of external factors after the internal ones are scrutinised. The influence of exogenous variables is underexplored even though scholars mention the influence of the external environment (Leonidou *et al.*, 2006; Skarmeas *et al.*, 2008). Exogenous variables include environmental factors, such as political, economic and legal influences as well as competition (Athanasopoulou, 2009).

Research method

The empirical data was collected from face-to-face interviews with six senior executives having extensive experience with strategic supplier relationships in the high-technology manufacturing industry in Germany. This industry was chosen as in this environment the successful management of long-term relationships is especially important due to the particularly rapid globalisation and technology race (Möller and Rajala, 1999). We take a monadic, customer perspective, asking respondents to comment on how a particularly important relationship with one of their (unidentified) suppliers has developed over time.

The chosen sampling technique for identifying respondents was a snowball approach (Biernacki and Waldorf, 1981). It is especially relevant when possible respondents are difficult to identify and hard to access (Ritchie *et al.*, 2003). Usually, snowball sampling implies that existing respondents identify new ones. As this carries the danger of damaging the diversity of the sample (*ibid.*) the technique was slightly adapted for the purpose of this research: one of the authors approached contact persons in six different firms to identify the respondents most suitable for the purpose of this research. Small samples in qualitative research and especially in a business-to-business setting are widely accepted (Ritchie *et al.*, 2003). Details of the respondents are given in Table 1.

Table 1. Characteristics of interviewees

Interviewee	Interviewee position	Firm size – employee strength	Industry specification
Manager1	Executive	80,000 – 90,000	Security and aerospace
Manager2	Head of Dept.	100,000 – 110,000	Platform integration
Manager3	Head of Dept.	40,000 – 50,000	Space systems
Manager4	Executive	9,000 – 10,000	Electronics company
Manager5	Senior Manager	8,000 – 9,000	Aircraft engines
Manager6	Head of Dept.	40,000 – 50,000	Military aircraft
Reviewer	Executive	100,000 – 110,000	System integration

Analysis and findings

All the interviewees were asked to sketch how the level of perceived RQ had changed over time. As shown in Figure 2, there is no conformity regarding the development of RQ (cyclical vs. U-Shape vs. volatile) and all interviewees stated that from their point of view a generalisation is difficult. Figure 2 combines the graphs developed during the interviews for a better overview. It should be noted, that the time-frames considered by the interviewees differed, and the graphs should only be seen relatively. Whereas M1, M3, M4 and M6 start to sketch the relationship from order intake, M2 and M5 start from the point in time they assumed responsibility for the specific supplier relationship.

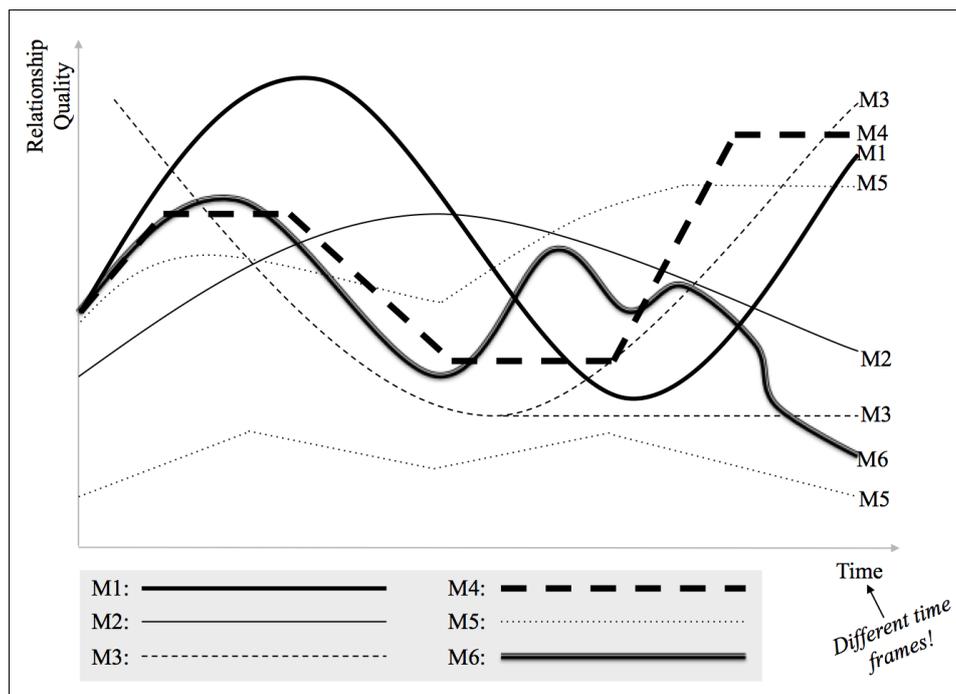


Figure 2: Dynamics of relationship quality

In general, the interview analysis indicates that a change in RQ is indeed due to communication problems, changing strategies leading to a change in long-term orientations and increasing or decreasing satisfaction regarding the outcomes of the relationships. The causes for those changes are mostly due to internal factors. External factors play a less prominent role. Managers, furthermore, add certain milestones or management decisions that lead to a change in RQ. The first milestone is the decision to select a certain supplier. A typical (strategic) supplier project in the high-tech industry includes a development phase. Therefore, a PDR (Preliminary Design Review) and CDR (Critical Design Review) is characteristic of the industry. Further examples of those milestones and decisions include:

“We decided we should have a special relationship with these suppliers because they make up the biggest portion of the cost of the equipment on Product2.” (M2)

“The CDR marks the end of the development phase [...] after that it becomes easier because there is a clear baseline [...] the relationship is therefore improving.” (M3)

“[RQ] goes through a valley [...]. Let’s say we have here the global procurement agreement, which has to be negotiated. Then we have maybe price roadmaps. We have the IP, or technology roadmap... necessities to discuss.” (M4)

Managers need to accept and recognise dynamics in the quality of relationships with their suppliers in order to retrieve a favourable outcome of the relationship. At all times, the manager should keep in mind that “it is not just a relationship of companies – it is a relationship of persons” (M4) which can be contradicting to the commercial aspect implying that “the supplier, on the one side, tries to support as minimum as possible, and we [the buyer], on the other side, request the maximum” (M6). In the beginning of the relationship, it is crucial to view the relationship as a type of shared organisation in order to “build a mutuality of purpose” and “generate a culture of trust, openness and transparency” (M1). This influences the further course of the relationship significantly as the interviewed executives highlight that a strong relationship supports problem solving later on. The culture can be strengthened by workshops “to understand each other’s place of work and which factors influence it” (M2).

For the course of the relationship, the manager should be prepared that RQ will always be dynamic and the challenge is to continuously work on the relationship, even if RQ is good, by recognising at the same time upcoming risks for RQ and to react appropriately. In terms of risks, managers should not only consider factors internal to the relationship but should pay attention to the network, its possible influences and potential changes. Even though external factors influence RQ only indirectly, they can be considered by applying, for instance, the scenario technique (see Wade (2012) for precise guidelines). On these grounds, comprehensive recommendations are depicted in Figure 3.

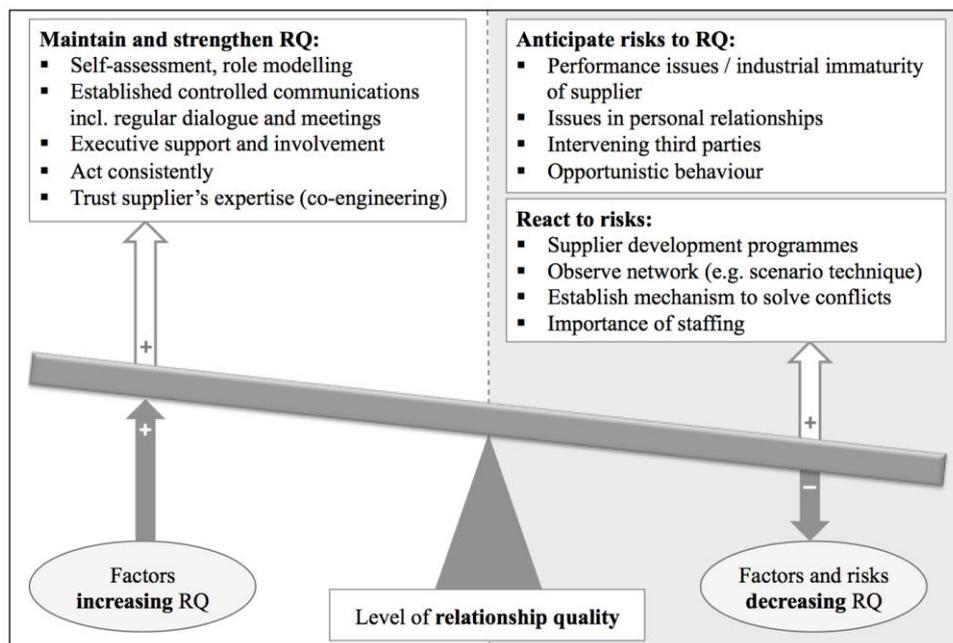


Figure 3: Managerial recommendations

Based on the findings for the ROs, the framework depicting determinants for dynamics in buyer-supplier relationships needs to be adapted. First of all, the academically established antecedents of RQ do not seem to be a significant factor for the ability to establish RQ. Thus, antecedents were replaced by the supplier selection decision and the first agreement that in general leads to positive RQ. Furthermore, supplier reputation can significantly improve RQ. Secondly, the model should depict that external factors play only a minor role in the course of RQ development. Besides internal and network factors, the achievement of milestones significantly leads to a change in RQ dimensions. These changes

determine the dynamics in RQ over time. As suggested within the literature and confirmed by the empirical findings, managers strongly recognise the importance of RQ in the high-tech manufacturing industry and take actions. Based on these empirical findings, the adapted framework is as shown in Figure 4.

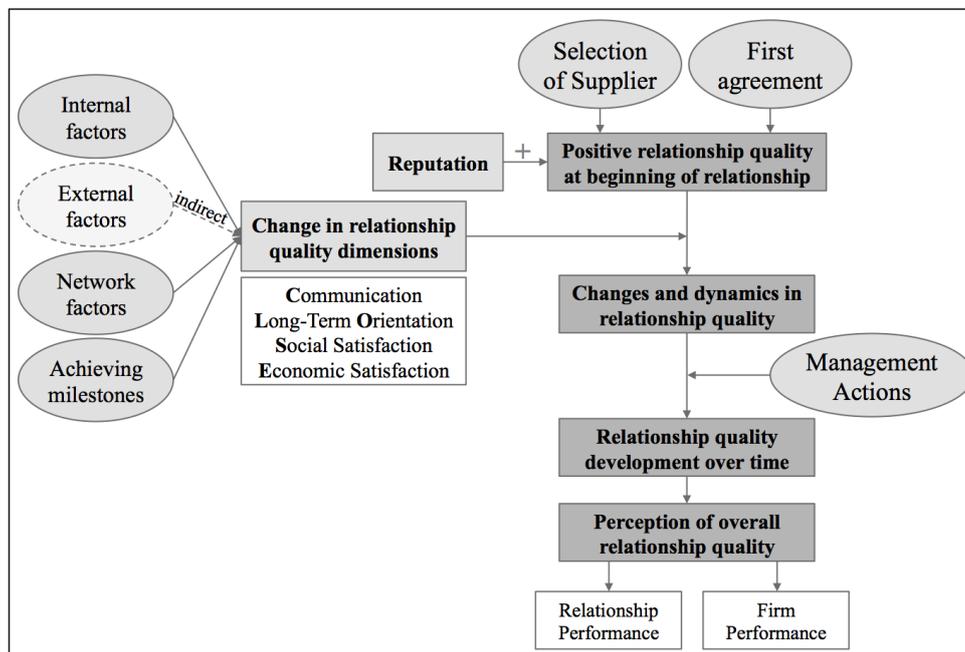


Figure 4: Adapted framework for dynamics of relationship quality

Overall, these results confirm that relationship quality is highly dynamic without showing a specific development pattern. Determinants for change in relationship quality are predominately internal factors (with regards to daily business behaviour, the achievement of milestones and the strategic importance of the supplier) and influences of the network (resulting in a comprehensive network picture depicting influencing organisations), whilst environmental conditions (e.g. PESTEL factors) play a less prominent role and only influence relationship quality indirectly.

Selected references

- Athanasopoulou, P. (2006) 'Determining relationship quality in the development of business-to-business financial services', *Journal of Business to Business Marketing*, 13(1), pp.87-120.
- Athanasopoulou, P. (2009) 'Relationship quality: A critical literature review and research agenda', *European Journal of Marketing*, 43(5/6), pp.583-610.
- Brennan, R. and Turnbull, P. (1999) 'Adaptive behavior in buyer-supplier relationships', *Industrial Marketing Management*, 28(5), pp.481-495.
- Doney, P.M. and Cannon, J.P. (1997) 'An examination of the nature of trust in buyer-seller relationships', *Journal of Marketing*, 61(2), pp. 35-51.
- Ford, D. (1980) 'The Development of Buyer-Seller Relationships in Industrial Markets', *European Journal of Marketing*, 14(5/6), pp.339-353.
- Ford, D. and Håkansson, H. (2006) 'IMP – some things achieved: much more to do', *European Journal of Marketing*, 40(3/4), pp.248-258.
- Ford, D. (1982) 'The development of buyer-seller relationships in industrial marketings', in Håkansson, H (Ed.) *International Marketing and Purchasing of Industrial Goods: An Interaction Approach*, New York, NY: John Wiley, pp.288-304.
- Grönroos, C. (1994) 'From Marketing Mix to Relationship Marketing: Towards a Paradigm Shift in Marketing', *Management Decision*, 32(2), pp.4-20.
- Gummesson, E. (1987) 'The new marketing – developing long-term interactive relationships', *Long Range Planning*, 24(4), pp.10-20.

- Håkansson, H. (1982) *International marketing and purchasing of industrial goods: An interaction approach*. Chichester: J.Wiley.
- Halinen, A. (1996), 'Service quality in professional business services: a relationship approach', in Swartz, T.A., Bowen, D.E. and Brown, S.W. (eds.) *Advances in Services Marketing and Management*. 5th ed. Greenwich: JAI Press, CT, pp.315-41.
- Jiang, Z., Shiu, E., Henneberg, S. and Naudé, P. (2016) 'Relationship Quality in Business to Business Relationships-Reviewing the Current Literatures and Proposing a New Measurement Model', *Psychology & Marketing*, 33(4), pp.297-313.
- Kumar, N., Scheer, L.K. and Steenkamp, J.E. (1995) 'The effects of supplier fairness on vulnerable resellers', *Journal of Marketing Research*, 32(1), pp.54-65.
- Lagace, R.R., Dahlstrom, R. and Gassenheimer, J.B. (1991) 'The relevance of ethical salesperson behavior on relationship quality: the pharmaceutical industry', *Journal of Personal Selling and Sales Management*, 11(4), pp.39-47.
- Möller, K. and Rajala, A. (1999) 'Organizing Marketing in Industrial High-Tech Firms', *Industrial Marketing Management*, 28(5), pp.521-535.
- Palmatier, R.W., Scheer, L.K., Houston, M.B., Evans, K.R. and Gopalakrishna, S. (2007) 'Use of relationship marketing programs in building customer-salesperson and customer-firm relationships: Differential influences on financial outcomes', *International Journal of Research in Marketing*, 24, pp.210-223.
- Rauyruen, P. and Miller, K.E. (2007) 'Relationship quality as a predictor of B2B customer loyalty', *Journal of Business Research*, 60, pp.21-31.
- Sheth, J.N. and Parvatiyar, A. (1995) 'Relationship marketing in consumer markets: Antecedents and consequences', *Journal of the Academy of Marketing Science*, 23, pp.255-271.
- Skarmeas, D., Katsikeas, C.S., Spyropoulou, S. and Salehi-Sangari, E. (2008) 'Market and supplier characteristics driving distributor relationship quality in international marketing channels of industrial products', *Industrial Marketing Management*, 37(1), pp.23-36.
- Turnbull, P., Ford, D. and Cunningham, M. (1996) 'Interaction, relationships and networks in business markets: an evolving perspective', *Journal of Business and Industrial Marketing*, 11(3/4), pp.44-62.
- Williamson, O. (1991) 'Comparative Economic Organization: The Analysis of Discrete Structural Alternatives', *Administrative Science Quarterly*, 36 (2), pp.269-96.
- Woo, K.S. and Ennew, C.T. (2004) 'Business-to-business relationship quality: An IMP interaction-based conceptualization and measurement', *European Journal of Marketing*, 38, pp.1252-1271.
- Wray, B., Palmer, A. and Bejou, D. (1994) 'Using neural network analysis to evaluate buyer-seller relationships', *European Journal of Marketing*, 28(10), pp.32-48.
- Wu, F. and Cavusgil, S.T. (2006) 'Organizational learning, commitment, and joint value creation in interfirm relationships', *Journal of Business Research*, 59, pp.81-89.
- Zineldin, M. (1995) 'Bank-company interactions and relationships: some empirical evidence', *International Journal of Bank Marketing*, 13(2), pp. 30-40.