# **Cooperative Purchasing in Small and Medium-sized Enterprises**

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Abstract Despite the increasing research interests in the purchasing group, cooperative purchasing in small and medium-sized enterprises (SMEs) has not received significant attention from the operations and supply chain management researcher. This study investigates the typical advantages of cooperative purchasing for SME retailers, and critical success factors for managing a purchasing group, using a case study of a purchasing group established by Chinese SME retailers. The study suggests that a successful purchasing group can help SME retailers to survive in today's competitive marketplace. The main advantages of cooperative purchasing for SME retailers are lower purchasing prices, mutual learning and support, dealing with illegal bribes, and quality improvement. The success factors for SME retailers to manage a purchasing group are good guanxi (personal and business relationships) among group members, similar characteristics of group members, similar personality traits of top executives, and the role of a "big brother" (group leader) in the group. This study also provides practical insights for retail managers to consider when developing a purchasing group in dynamic environments, in order to achieve the benefits of cooperative purchasing.

#### **1** Introduction

During the past two decades, there has been a paradigm shift in the role of purchasing in many firms (Carra and Pearson 1999). The present competitive environment requires that purchasing become part of the firm's strategic planning process (Carr and Smeltzer 1997). Cooperative purchasing has been considered as

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a vital strategic issue in many world-class supply chains (Choi and Han 2007). Despite its long history, cooperative purchasing has not received significant attention from the operations and supply chain management researcher (Essig 2000; Laing and Cotton 1997; Schotanus and Telgen 2007; Tella and Virolainen 2005). The lack of research attention seems unjustified, with cooperative purchasing being increasingly well established in practice (Doucette 1997; Nollet and Beaulieu 2003; Schotanus and Telgen 2007). In particular, cooperative purchasing among small and medium-sized enterprises (SMEs) does not seem to be either widely practised or, even when practised, well understood (Mudambi et al. 2004).

The small company attracts increasing attention from academia (Ellegaard 2006). Some previous studies (e.g., Gadde and Hakansson 2001; Pressey et al. 2009) have agreed that SMEs would particularly benefit from effective purchasing. Compared to large firms, SMEs operate under circumstances that pose different purchasing challenges (Ellegaard 2006). Due to the limited resources, SMEs are likely to need external resources to complement them in their purchasing activities (Pressey et al. 2009). Although there is a growing body of research on purchasing practices, research on purchasing in SMEs is still limited (Ellegaard 2006; Pressey et al. 2009; Quayle 2002). In addition, Tella and Virolainen (2005) suggested that there are a number of research opportunities in cooperative purchasing, such as "how can cooperative purchasing benefit SMEs?", while considerable efforts have been directed to investigating the critical success factors for managing cooperative purchasing among SMEs in developed countries (e.g., Hoffmann and Schlosser 2001; Schotanus et al. 2010), only few studies have considered the purchasing practices in emerging economies such as the Chinese retail sector.

#### 2 Literature Review

#### 2.1 Theoretical Reasoning for Cooperative Purchasing

Resource dependence theory (RDT) (Pfeffer and Nowak 1976; Pfeffer and Salancik 1978) has a high level of value in the cooperative purchasing context. RDT has been commonly used in previous studies (e.g., Schotanus et al. 2010; Tella and Virolainen 2005; Bakker et al. 2008) to assess the main advantages of cooperative purchasing and critical success factors for managing a purchasing group. RDT is based largely on the concept of interdependence and the assumption that organizations use their relationships in order to gain access to the resources, which are vital to their continuing existence (Handfield 1993; Fynes et al. 2004). It views interfirm governance as a strategic response to conditions of uncertainty and dependence (Thibaut and Kelley 1959; Emerson 1962). Handfield (1993) suggested that RDT provides a rich predictive framework for explaining how organizations can operate in dynamic environments to make them more stable or munificent. RDT asserts that companies facing substantial environmental uncertainty will attempt to stabilize it by imposing

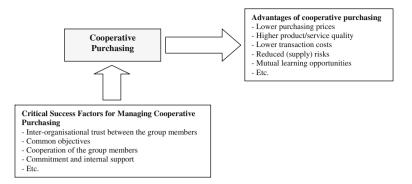


Fig. 1 Conceptual framework

interorganizational ties (Pfeffer and Nowak 1976; Pfeffer and Salancik 1978). The formation of close long-term strategic relationships is one means of creating governance mechanisms to reduce uncertainty and manage dependence, can help firms gain access to or acquire unique and valuable resources that they lack (Eisenhardt and Schoonhoven 1996; Fynes et al. 2004). By focusing on interorganizational coordination and relationships in hostile and dynamic environments, stronger cooperative purchasing allows SMEs to draw the necessary resources from partners in order to sustain performance (Paulraj and Chen 2007; Fynes et al. 2004).

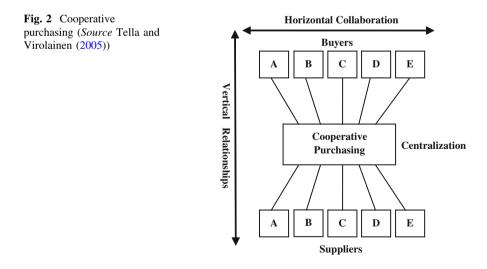
Drawing upon RDT (Pfeffer and Nowak 1976; Pfeffer and Salancik 1978) and previous studies on cooperative purchasing (Schotanus and Telgen 2007; Tella and Virolainen 2005), we develop a theoretical framework that explores two issues that have attracted considerable scholarly interest, which have nevertheless not yet received sufficient attention in academic research in the SMEs context, namely: (1) the advantages of cooperative purchasing for SMEs and (2) the critical success factors for managing cooperative purchasing in SMEs. The framework is presented in Fig. 1 and its main constructs are discussed in more detail below.

#### 2.2 Cooperative Purchasing

In today's competitive environment, companies need to find ways to create more value in supply chains. Purchasing has been an integral and important part of supply chain formation. Building a strategic relationship with similar companies in the field of purchasing practices is one way of achieving this (Katusiime 2008). Purchasing has assumed an increasingly fundamental strategic role, evolving from an obscure buying function into strategic business partnerships (Ellram and Carr 1994), and firms that emphasize cooperation are more likely to achieve greater economic benefits (Dyer 2000). RDT suggests that the establishment of interfirm relationships is viewed as dealing with problems of uncertainty and dependence by

increasing the extent of coordination with exchange partners (Cyert and March 1963). Cooperative actions enable members to achieve goals none can realize alone (Chisholm 1998). Although purchasing cooperation between independent companies has been practiced for a long time, the phenomenon is not extensively researched. Tella and Virolainen (2005) further stated that cooperative purchasing in particular formed by industrial companies has received relatively little attention in the literature of the discipline.

In the purchasing literature, many terms are used when referring to cooperative purchasing (Schotanus and Telgen 2007; Tella and Virolainen 2005). A review of the literature shows that "group purchasing" and "cooperative purchasing" are the most popular terms (Schotanus and Telgen 2007). Thus, the two terms are used interchangeably in this chapter. Schotanus and Telgen (2007) defined cooperative purchasing as "the cooperation between two or more organisations in a purchasing group in one or more steps of the purchasing process by sharing and/or bundling their purchasing volumes, information, and/or resources". Cooperative purchasing generally consists of two or more independent buyers. They join together, or utilize an independent third party, for the purpose of combining their individual needs for purchasing materials and capital goods/services to leverage more valueadded pricing, services, and technology from sellers that could not be obtained if each firm purchased goods/services individually (Choi and Han 2007). Tella and Virolainen (2005) also stated that cooperative purchasing is "horizontal cooperation" between independent organizations that pool their purchases in order to achieve various benefits. Drawing upon both the theory of partnerships and centralizing, Tella and Virolainen developed a theoretical framework (see Fig. 2) of cooperative purchasing.



#### 2.3 Advantages of Cooperative Purchasing

According to RDT, by fostering the relationship-specific capabilities that are far superior to what the companies may possess on their own (Dyer and Singh 1998), resource dependence can ultimately lead to sustainable competitive advantage (Paulraj and Chen 2007). Collaborative relationships can help firms share risks (Kogut 1988), access complementary resources (Park et al. 2004), reduce transaction costs and enhance productivity (Kalwani and Narayandas 1995), and strengthen learning and innovation capability (Luo et al. 2006). Whatever the duration and objectives of business alliances, being a good partner has become a key corporate asset. Some previous studies (e.g., Anderson and Katz 1998; Johnson 1999; Nollet and Beaulieu 2005; Tella and Virolainen 2005; Choi and Han 2007; Schotanus and Telgen 2007) have examined the advantages of cooperative purchasing. In many manufacturing or retail companies, purchasing managers have long pursued a policy of reducing costs, and cooperative purchasing has been considered as one of the most competitive strategies for cutting costs in dynamic and competitive business environments (Choi and Han 2007). In particular, Anderson and Katz (1998) identified three types of cost reductions that cooperative purchasing can generate: Price, administrative costs, and utilization costs. The companies involved in cooperative purchasing usually expect to achieve lower costs, in addition to price reduction, lower management costs, increased flexibility of inventories, and lower logistics costs are benefits that the members of a purchasing group may achieve (Tella and Virolainen 2005). Moreover, Rozemeijer (2000) stated that cooperative purchasing brings about pooled negotiation power (purchasing together); by combining their purchases, different companies can obtain greater leverage over suppliers, reducing the cost or even improving the quality of the goods/services they purchase. Cooperative purchasing leads to better quality and value for customers and stronger partnerships with suppliers through commitment to contracts (SCEP 2005).

In sum, typical advantages of cooperative purchasing are lower purchasing prices, higher quality, lower transaction costs, reduced workloads, reduced (supply) risks, and mutual learning opportunities (Schotanus and Telgen 2007). On the other hand, some anticipated and actual disadvantages of cooperative purchasing have been anecdotally reported in the literature, such as set-up costs, coordination costs, loosing flexibility, supplier resistance, and possible interference by anti-trust legislation and the disclosure of sensitive information (Schotanus and Telgen 2007). However, in a large number of cases, the advantages of cooperative purchasing outweigh the disadvantages for many situations in the public and private sectors (Schotanus et al. 2010; Schotanus and Telgen 2007). Thus, at least in theory, cooperative purchasing can be a beneficial concept for organizations (Schotanus et al. 2010). A review of the literature suggests that the advantages of purchasing group have rarely been identified in the Chinese context, especially for Chinese SME retailers. Therefore, one of the aims of this study is to investigate the main advantages of cooperative purchasing for SME retailers in China.

# 2.4 Critical Success Factors for Managing Cooperative Purchasing

As noted above, some previous studies have investigated the advantages of cooperative purchasing. However, in practice, purchasing groups do not always flourish, and often end prematurely (Schotanus et al. 2010). A better understanding of factors affecting cooperative purchasing could help such groups to flourish, and could prevent premature endings (Schotanus et al. 2010). Potential success factors for cooperative purchasing can be related to several theories (Schotanus et al. 2010). Drawing upon RDT and previous empirical findings, we examine important success factors for managing a purchasing group.

Over recent years, some authors (e.g., Bakker et al. 2008; Johnson 1999; Laing and Cotton 1997; Nollet and Beaulieu 2005; Quayle 2002; Schotanus et al. 2010) have identified a set of potential success factors for managing cooperative purchasing. RDT suggests that interorganizational trust plays an important role for group members in improving their interorganizational cooperation. Several empirical studies (e.g., Nollet and Beaulieu 2005; Quayle 2002) have examined the importance of roles of competence and trust in organizing cooperative relationships. The importance of formality of a purchasing group has also been discussed by several authors (e.g., Johnson 1999). Moreover, Laing and Cotton (1997) stated that the existence of common objectives and interests of the group members has an important effect on managing a successful purchasing group. In addition, from the point of view of RDT, interorganizational cooperation among group members is important for them to strengthen the relationship-specific capabilities. Some previous studies (e.g., Hoegl and Wagner 2005; Laing and Cotton 1997; Jost et al. 2005; Schotanus et al. 2010) have suggested that efficient and effective communication among group members has a significant impact on cooperative purchasing. More specifically, drawing upon transaction cost economics, social exchange theory, and equity theory, Schotanus et al. (2010) identified critical success factors for managing small and intensive purchasing groups by comparing successful and unsuccessful purchasing groups in a large-scale survey. They concluded that the main success factors include enforcement of cooperation; cooperation of the group members and communication; commitment and internal support; common objectives and influence of the group members; and allocation of gains and costs. However, the critical success factors for managing cooperative purchasing have rarely been identified in the Chinese context, especially in China's retail sector. Few studies to date have investigated how SME retailers in China organize their purchasing practices to survive in an increasingly dynamic and complex environments.

#### **3** Cooperative Purchasing in Chinese SME Retailers

#### 3.1 Chinese SME Retailers and Culture

Since the 1980s, a number of major structural changes have been witnessed in China's retail market. As one of the main service industries in China, the retail market has experienced exponential growth in the last 20 years. However, the high levels of economic development have generated pressures from a wide variety of factors, including rising logistics costs, intense competition, and buyer-suppliers relationships (Hingley et al. 2009; Yu 2011). China's retail market is highly fragmented and composed of many small and medium-sized retailers (Lu 2010). SME retailers in China have been experiencing unprecedented development during the transformation process from a centrally planned to a market economy, which has increasingly contributed to China's economic growth (CCFA 2010; Mofcom 2010; Supermarket Weekly 2010). In 2008, more than 98 % of retail companies in China were SME retailers, accounting for about 96 % of the total sales volume of China's retail industry. SME retailers generated about 80 % of the total employment in the retail sector (CCFA 2010; Mofcom 2010). China's retail sector is becoming increasingly dynamic and competitive (Yu and Ramanathan 2012). SME retailers face keen competition not only from local giant retailers also from other multinational retailers in China. Building upon the analysis of the implementation of cooperative purchasing among a number of SME retailers, CCFA (2010) suggested that establishing purchasing groups is an innovative way for SME retailers in China to survive in a dynamic and competitive marketplace.

A typical characteristic of the small company is its limited resources, and one critical effect of this shortage is lack of attention to strategic purchasing. Small company owners perform operational acquisition of components, but do not develop their purchasing skills and procedures. Moreover, limited resources mean that vulnerability is high (Ellegaard 2006; Arend and Wisner 2005). In addition, the small company owner typically has limited supply market knowledge. Purchasing is a critical task in the small company, which is particularly dependent on external resources due to its limited size (Gadde and Hakansson 2001; Scully and Fawcett 1994; Ellegaard 2006). Based on Confucian values, Chinese culture emphasizes kin, community, or family relationships and quasi-relative relationships (Weber 1920/ 1995). Arising from the unique attributes of Chinese culture, guanxi (personal and business relationships), based on personal connections and trust has generally been considered to be one of the most important sources of competitive advantages for companies doing business in China (Tan et al. 2009; Yu 2011). Establishing longterm guanxi with business partners (such as suppliers and customers) is vital for a retailer's business development and survival in China (Yu 2011). Guanxi has widely been used by Chinese SMEs as a strategic weapon in managing environmental uncertainty and reducing transaction risks (Tan et al. 2009).

#### 3.2 Cooperative Purchasing in China

Over the last decade, a few Chinese SME retailers with good guanxi have conducted cooperative purchasing (CCFA 2010; Mofcom 2010). For example, as a pioneer of launching cooperative purchasing in China, the four SME retailers that are located in the same province in China (AB Province) established a special purchasing group, named PGSME. All four retail firms have been involved in the food retail sector for about 10 years in China. According to CCFA (2010)'s report, PGSME was one of the few purchasing groups in the Chinese SME retail market that achieved great success. Currently, the purchasing group consists of more than 100 retail stores, with annual sales volume of about US\$ 800 million. The average annual sales growth rate was more than 50 % (Supermarket Weekly 2010; CCFA 2010). In the fifth annual conference for chains of supermarket (CCS) 2010: Chinese SME Retailers Development, *PGSME* was chosen as an outstanding example of managing cooperative purchasing in China's retail sector (Supermarket Weekly 2010). The descriptions of PGSME members are summarized in Table 1.

We undertook in-depth interviews with senior executives (e.g., purchasing manager, operations manager, or store manager) of PGSME members. Our interviews were guided by the conceptual framework presented in Fig. 1. The in-depth interviews focused on the three topics about cooperation purchasing in SME retailers, namely: (1) the main characteristics of the purchasing group; (2) advantages of cooperative purchasing; and (3) critical success factors for managing a purchasing group. The interviewees were asked about details on how SME retailers manage a purchasing group to achieve the potential benefits. Field research that investigates the views and opinions of companies directly and indirectly involved in the decision-making process is becoming increasing prevalent within the literature (Palmer and Quinn 2003). Therefore, some interviews were also conducted with cashiers, stock persons, and salesmen. Further, shop visits were arranged after interviews, so that we could have a better understanding of case company purchasing practices. In addition, multiple and independent sources of evidence, including market research reports, government statistics, company profiles, financial statements, and other media were used to corroborate the interview data and develop convergent lines of inquiry (Yin 2003; Voss et al. 2002; Stuart et al. 2002). The use of multiple types of data increases the odds of capturing the organization's view of a construct (Yin 2003). In the present study,

Name used in this study	Retail type	Market areas in AB province	Established (year)	Number of stores
PGSME-1	Food	Northwest	1992	34
PGSME-2	Food	Southwest	1999	28
PGSME-3	Food	Central and Northeast	1995	23
PGSME-4	Food	Southeast	1995	25

Table 1 Profiles of PGSME members

interview data were triangulated based on information collected through interviews, observation, and document review. According to Yin (2003), the interview data were examined using both within- and cross-case analysis methods in the study. Once the within-case analysis was completed, a cross-case analysis was undertaken to compare the retail operations and purchasing practices of group members.

#### **4** Findings and Discussion

The purchasing group (PGSME) established by the four independent SME retailers constitutes a type that has no correspondence in the purchasing literature. Schotanus and Telgen (2007) developed a typology for purchasing groups. Five main forms of cooperative purchasing were distinguished in their work, namely: piggy-backing groups, third-party groups, lead buying groups, project groups, and program groups. PGSME is not only a purchasing agreement, but also a strategic alliance (Hoffmann and Schlosser 2001). Within the PGSME, the four SME retailers have: (a) good guanxi; (b) rigorously divided the geographical market; (c) free access to individual companies' databases; (d) joint practices for human resources management; and (e) also provided a sort of internal financial support. In general, the results of case study analysis not only provide empirical evidence in support of our theoretical framework presented in Fig. 1, but also find some special advantages and success factors that have not been identified in previous studies of cooperative purchasing (e.g., Schotanus and Telgen 2007; Tella and Virolainen 2005). The typical advantages and critical success factors for managing a purchasing group in the Chinese context are discussed in more detail below.

# 4.1 Advantages of Cooperative Purchasing

Over the last few years, business costs (such as labor, rental, and transportation costs) have increased tremendously in China; profit margins are quite low, particularly in the food retail sector, where some daily products have zero profit margins (CCFA 2010). Price competition is becoming more and more intense in the Chinese retail market (Hingley et al. 2009). Cooperative purchasing can help SME retailers to reduce logistics costs and gain lower purchasing prices. As a consequence, the retailers can provide a lower price and add more value for their customers. Over the last few years, annual sales and profits of the purchasing group have increased significantly. Using cooperative purchasing together, the group can obtain more capabilities to negotiate with supplier for the lower purchasing prices, consequently adding more value for final users. This finding is consistent with the principles of RDT, which suggests that SEMs can use their interorganizational relationships to gain competitive advantages (Handfield 1993; Fynes et al. 2004). In addition, the group members can support and learn from each other through the cooperative purchasing. For instance, PGSME-3s financial incentive scheme was introduced and successfully implemented by the other three group members. The incentive scheme significantly helps the group members to reduce high labor turnover and improve employee loyalty.

China's retail sector is a buver's market and various varieties of products are on sale. There is keen and even vicious competition among suppliers, and retailers have the luxury of selecting from a number of suppliers that have a similar level of quality and price. The potential for "illegal bribe kickbacks" during the purchasing process exists. For example, employees in purchasing department routinely are given kickbacks by suppliers. In addition, Chinese retailers face ethics challenges with corruption, bribery, and kickback, due to the unique cultural characteristics of China's retail sector. Confucianism is a common characteristic of Chinese societies. Because of the influence of Confucianism, the gift giving is widely accepted as legal practice in business in Chinese cultural society. Tian (2008) stated that bribery or kickback is closely linked to "gift-giving" ethos in China. A cooperative purchasing team, which is placed under strict surveillance by the different group members, can help SME retailers to combat bribes and kickbacks, and consequently improve product quality. Over the last two decades, the standard of living in China has drastically increased. The rapid rise in household income has simultaneously increased the demand for consumer goods. Chinese consumers, especially in big cities, are becoming more discerning and demanding with respect to quality, variety, and taste (Hingley et al. 2009; CCFA 2010). In response to customer demand, PGSME considers quality as one of the most important criteria of choosing suppliers. Through cooperative purchasing, the group members establish strict quality control procedures, and require all suppliers to pass a formal certification of quality control system (e.g., QS and ISO9001).

To gain the benefits, it is very essential for the group members to recognize critical factors influencing cooperative purchasing, which are discussed in more detail below.

## 4.2 The Critical Success Factor for Managing Cooperative Purchasing in SMEs

There are a number of critical factors for managing cooperative purchasing in the context of China's retail sector, including good guanxi among group members, similar characteristics of group members, similar personality traits of top executives, and the role of a "big brother" in the group. Our results are generally consistent with the findings of previous studies (e.g., Schotanus et al. 2010) and the principles of RDT.

Good guanxi among group members is a critical success factor for SME retailers to manage cooperative purchasing in China. Guanxi and business networking are important mechanisms that enable Chinese SMEs to deal with the uncertainty and increased risks arising from ongoing institutional transitions (Tan et al. 2009). A purchasing group with good guanxi can achieve benefits not only in information sharing but also in problem solving. Cultivating close guanxi among purchasing group members is a critical task of business. RDT also recommends developing long-term guanxi (relationships) based on mutual dependence and trust (Yu 2011). Trust and honesty among the group members play a vital role in managing a successful purchasing group. PGSME considers trust as the "blood" of a purchasing group. All members of PGSME should be honest and loyal, and "like" each other personally. This finding is somewhat contrary to a previous study by Schotanus et al. (2010), who found that interorganizational trust is not identified as a success factors for managing purchasing groups. This is not surprising when we examine the unique aspects of Chinese culture. As mentioned earlier, guanxi is uniquely rooted in the context of Confucianism that dominates various aspects of Chinese people's life. Guanxi building is the process of producing trust among group members, and the accessibility of guanxi is determined by the level of personal trust existing among group members (Chen and Chen 2004). Without good guanxi based on mutual trust, successful cooperative purchasing would not be possible for the four SME retailers.

PGSME members use familiar analogies to describe friendships (guanxi) among top executives. Such analogies are appropriate, because business partnerships are not entirely "cold-blooded" (Kanter 1994). In a purchasing group, a good personal rapport among top executives creates an important opportunity for member employees to obtain an effective communication. Also, the personality traits of a president, especially in a SME retailer, significantly influence the direction of organizational growth. Miller and Toulouse (1986) suggested that CEO personality will be most closely related to strategy, performance, decisionmaking methods, and structures in organizations that are small. PGSME members prefer to establish guanxi and do business with people who have similar personality characteristics and traits. The similar personality traits of top executives (such as openness, agreeableness, conscientiousness, and stability) enable the group members to obtain an effective communication among different departmental functions and various levels of employees. Indeed, a successful purchasing group nearly always depends on the creation and maintenance of a comfortable personal relationship (guanxi) among the top executives. In addition, at least one member acts as a "big brother" (group leader) in a purchasing group. In PGSME, PGSME-3 plays a champion role; the other three SME retailers consider the president of PGSME-3 as their "big brother". Because of the influence of the ancient Confucianism, Chinese often extend kinship terms to close nonrelatives to show friendship, warmth and kindness, such as "big brother". Chinese families are very close-knit. Generally, older brothers/sisters in the traditional Chinese family have to take care of and protect their younger siblings. Like a "big brother" in the family, PGSME-3 provides support and help for other group members, for example, providing interest free loans and sharing company's databases and salary incentive system with other three SME retailers. PGSME members view the leading role of PGSME-3 as one of the important success factors for managing a purchasing group in China.

Similar characteristics of group members affect the success of cooperative purchasing. The PGSME members have similar retail characteristics, such as similar industry, similar characteristics of supply chain market, similar firm size and age, and similar physical location (see Table 1). The uniformity of the group members makes it possible for them to organize effective cooperative purchasing. Operating in the same industry (the food retail sector) enables the group members to achieve more effective communication. All four SME retailers established in the 1990s have the similar retail formats, such as supermarket and convenience store. At one extreme, in mutual service consortia, similar companies in similar industries pool their resources to gain a benefit too expensive to acquire alone—such as access to a large number of purchasing volumes (Kanter 1994). In addition, operating in the same province with different business locations enables the group members to deal with the psychic distance. There is, to some extent, fewer and lower psychic distance, such as cultural, regulatory, legal, and financial, among four SME retailers. The retailing literature (e.g., Johanson and Vahlne 1992) has implied that psychically close location is more similar and, because similarities are easier to manage than differences, it is expected that businesses will achieve greater success in similar markets. Further, since the group members operate chain stores in different cities in AB Province (see Table 1), they are not potential competitors, which facilitate easier cooperation.

Similar organizational culture is another critical success factor for managing a purchasing group. In practice, every company has its own unique organizational culture. Hence, it is very important for the members of a purchasing group to integrate their organizational cultures. After establishing PGSME, the group members began to develop and consider "add more values for both customers and employees" as their common organization culture. The group members place great emphasis on improving customer and employee loyalty. Learning and borrowing ideas from partners can also help group members to smooth over cultural and organizational differences. In a purchasing group, member employees, at all levels, must become teachers as well as learners (Kanter 1994). Uniformity of group members, such as all members having similar organizational cultures, is an important factor for members to achieve competitive advantages (Polychronakis and Syntetos 2007). In addition, PGSME considers effective and efficient communication among group members as a success factor for conducting cooperative purchasing. This finding is consistent with previous studies (e.g., Hoegl and Wagner 2005; Laing and Cotton 1997) demonstrating the important impacts of efficient communication on interorganizational cooperation.

#### 5 Conclusions

This study investigates the typical advantages of cooperative purchasing for SME retailers, and the critical success factors for managing a purchasing group, using a case study of a purchasing group established by four independent SME retailers in China. This study makes a contribution to the understanding of cooperative purchasing on two fronts. On a theoretical front, this study fills a gap in the existing literature. Research on purchasing group in SMEs is still limited (Ellegaard 2006; Pressey et al. 2009), especially in the Chinese context. Generally, the results of case study analysis support the conceptual framework presented in Fig. 1. Furthermore, the study finds some special advantages and important success factors in the Chinese SMEs context that have not been identified in previous studies of purchasing, such as the advantage of dealing with illegal bribes, the factors of good guanxi among group members, the role of a "big brother" (group leader), and similar personality traits of top executives. On a practical front, the findings of this study also provide practical insights for retail managers to consider when developing a purchasing group in dynamic environments, in order to achieve the benefits of cooperative purchasing.

While this study makes contributions to research and practice, there are limitations that need to be considered when interpreting the study findings. Like all case studies, the external validity of our proposed model needs to be empirically tested in a much larger sample. The research reported here draws on a very small sample. As such, any analytical generalizations drawn from a limited number of case studies, no matter how carefully sampled and researched, clearly deserve healthy caution. CCFA (2010) reported that the purchasing group in China faces a number of challenges, such as anti-trust, different organizational culture, and a lack of communication. A few purchasing groups established by SME retailers in China have failed over the last few years. For example, as a pioneer purchasing group in China's retail sector, nine small and medium-sized electronic appliance retailers established a purchasing group in 2002. However, because two of the nine group members were purchased by the leading electrical retailers in China over the last few years, the purchasing group ceased to exist (CCFA 2010). In addition, four small food retailers in Zhejiang Province launched cooperative purchasing in 2004. During the last few years, some of the group members were purchased by retail giants. At the same time, the group accepted several new members. Burt et al. (2003) suggested that a better understanding of failure would be of benefit to academics and retailers alike and might help to close the gulf between theory and practice. Hence, future research should study failure in cooperative purchasing, and also test the results obtained in this research.

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