

The Impact of Supply Chain Relationship Quality and Cooperative Strategy on Strategic Purchasing

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Abstract Developing a close relationship between suppliers and customers is well encouraged in the literature of supply chain management. Considering the dimensions of Supply Chain Relationship Quality (SCRQ) and Cooperative Strategy (CS), we aim to present a conceptual model for the effects of their indicators on Strategic Purchasing (SP). For this purpose, 187 questionnaires were distributed among recycling experts in order to identify the effective factors. Factor Analysis and Structural Equation Modelling (SEM) are used to discover the relationship among them. Moreover, this study utilizes descriptive-correlation methods with an applied approach. Through confirmatory factor analysis in SEM, factoring is accepted. Exploratory factor analysis is performed by SPSS 18. LISREL is then used for structural equation modelling. Research results demonstrate a significant and positive relationship among Supply Chain Relationship Quality, Cooperative Strategy, and Strategic Purchasing in recycling industries in Iran.

Keywords Supply Chain Relationship Quality, Cooperative Strategy, Strategic Purchasing, Recycling Industries

1. Introduction

Supply Chain Management (SCM) is the whole set of measures taken to integrate suppliers, manufacturers, warehouses, and markets; which consequently leads to manufacturing products at the best possible cost, in the right time and right place. This alliance reduces the total costs in supply chain while satisfying the market demand (Simchi-Levi, 2005). Thus, the significance of supply chain is winning approval of firms to correlate their competitive edge to SCM (Zuckerman, 2002). Su et al. (2008) mentioned that supply chain relationship exists as long as both parties in the supply chain are involved in a short-term or long-term interaction. Supply chain relationship favours a long range relation to maintain and develop cooperation. So, companies strive more and more to establish and develop close and long-term relationships with suppliers (Fynes et al., 2005b).

With a glimpse into literature, we encounter numerous studies that have investigated interactions among different dimensions of supply chain relationships (SCR) (Fynes et al., 2008, Fynes et al., 2004, Fynes et al., 2005a, Fynes et al., 2005b, Huntley, 2006, Mohaghar et al., 2011, Rauyruen and Miller, 2007, Su et al., 2008, Woo and Ennew, 2004). However, quite a few ones considered the effects of SCR on cooperation strategy (Su et al., 2008, Chang et al., 2012).

The growing importance of supply chain management highlights the strategic role of purchasing, derived from “buying” to “procurement” and “supply management” (Paulraj et al., 2006). Strategic role of purchasing in the firm’s long-term planning is defined as strategic purchasing. A group of suppliers are selected to promote a possible long-term partnership (Chiang et al., 2012). According to Chen et al. (2004), strategic purchasing develops close relations, increases open communications and develops strategic relationship.

Maintaining a strong supplier partnership and an effective supply chain requires a small manageable supply base (Sarkar and Mohapatra, 2006). This is a cost-efficient approach which may lower the transaction costs and increase supplier responsiveness. But, blind reduction in supply base may also increase supply risk and reduce supplier innovation and consequently jeopardize the overall competitiveness (Choi and Krause, 2006).

In this paper, we try to investigate the relations between the indicators of supply chain relationship quality (SCRQ) and cooperative strategy (CS) which affect strategic purchasing (SP). To determine the relative significance of identified factors (in our case, in the recycling industries) we first studied the literature on SCRQ, CS, and SP, in addition to a thorough review of studies on the effects of SCRQ on firms. Having identified the indicators, a questionnaire was distributed among experts of recycling industry in Iran. 187 questionnaires were completed and returned. Through confirmatory factor analysis (performed by SPSS 18.0), factoring is either accepted or rejected. Finally, we used structural equation modelling (SEM) in

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Published online at <http://journal.sapub.org/logistics>

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LISREL 8.8 to analyse our data.

2. Theoretical Background

2.1. Supply Chain Relationship Quality (SCRQ)

As we explained, SCRQ is concerned about the degree to which parties are engaged in an active, long-term working relationship. Fynes et al. (2004) have conceptualized such definition, using different indicators and dimensions. The research utilizes the SCRQ model presented by Mohaghar and Ghasemi (2011). They define SCRQ as a higher order latent variable for: Trust, communication, commitment, co-operation, interdependence, atmosphere, and adaptation.

2.1.1. Communication (CM)

Communication difficulties are identified as a major problem among parties (Lages et al., 2005). Communication is “the formal as well as informal sharing of meaningful and timely information between firms” (Anderson and Narus, 1990). Frequent and timely communication is important since it assists companies in resolving disputes and aligning perceptions and expectations (Morgan and Hunt, 1994).

2.1.2. Trust (T)

Trust is among the most prevalent cited indicator of SCR in the literature, since a crucial reason for unsuccessful relationships in a supply chain is the lack of trust between the partners. The establishment of trust between companies is considered as the basic reason for the prosperous long-term relationships by both researchers and practitioners (Walter et al., 2002). It has been defined as the established belief in a firm that another company will perform actions that would result in positive actions for the firm, while avoiding unexpected actions that entail negative outcomes (Anderson and Narus, 1990).

2.1.3. Adaptation (A)

By investing in transaction specific assets such as product/process technology and human resources, suppliers adapt to the needs of specific important customers and customers adapt to the capabilities of specific suppliers (Håkansson and Group, 1982). Such adaptations frequently occur between suppliers and customers because of some critical reasons. First of all, these adaptations, as stated, can represent considerable investments by one or both parties. Second, they may have a critical importance to conduct a business. And third, the aforementioned investments frequently cannot be transferred to other SC relationships. (Fynes et al., 2005b).

2.1.4. Commitment (C)

Commitment refers to the willingness of trading partners to exert effort on behalf of the relationship and suggests a future orientation in which firms attempt to construct a relationship that can support unanticipated problems

(Gundlach et al., 1995). Organizations build and maintain long-term relationships if they perceive mutually beneficial outcomes accruing from such a commitment (Morgan and Hunt, 1994). So, commitment is actually an important variable for long-term success because supply chain partners are willing to invest resources, sacrifice short-term benefits for long-term success (Mentzer et al., 2000a, Mentzer et al., 2000b).

2.1.5. Interdependence (I)

In exchange relationships, both parties may be, to some degree, dependent on each other (Gundlach and Cadotte, 1994). In fact, interdependence exists whenever a firm does not entirely control all of the conditions which is necessary for the achievement of an action or for obtaining the desired outcome from the action” (Pfeffer and Salancik, 2003).

2.1.6. Co-operation (CO)

Co-operation makes reference to situations in which firms work conjointly to achieve mutual goals (Anderson and Narus, 1990).

2.1.7. Atmosphere (AT)

Woo and Ennew (2004) explained atmosphere as the result of relationship that indicate the closeness of two partners. They stated that atmosphere, like the environment, is technically external to the firm, and unlike the environment, is an immediate consequence of the relationship. They believe that atmosphere exists when both parties interact.

2.2. Cooperative Strategy (CS)

Cooperative strategy is the strategy both parties took in the further state of business relationships, i.e., decide to terminate, maintain or extend relations; and this strategy determines the future of relationships (Su et al., 2008). The significant advantages of inter-organizational cooperation in supply chain are as follows:

- Pertaining to valuable contacts along the supply chain,
- Profoundly understanding the usual activities of the organization and identifying the opportunities for doing projects with other members of the chain,
- Discussing and solving common problems by having regular meetings between the members,
- And facilitating the future strategies of the supply chain (Bayat, 2008).

Su et al. (2008) presented a conceptual model for SCRQ and cooperative strategy with data collected from 311 manufacturing firms in West China. They stated that SCRQ can be defined as a construct of communication, cooperation, trust, adaptation, and atmosphere, and SCRQ has a significant positive impact on relationship persistence, relationship frequency, and relationship diversity.

Su et al. (2008) defined “relationship persistence” as the perception of the firms that both parties expect the relationship to continue into the future, involves anticipated

duration into the future rather than the historical duration to date. Young (2000) defined “relationship diversity” as the perception of the extent and scope of future interaction which describes the complexity, extent and scope of the collaborative activities. Su et al. (2008) defined “relationship frequency” as the times that both parties in a relationship cooperate/interact in a fixed period of time.

2.3. Strategic Purchasing (SP)

Resource-based theory implies that the attributes of purchasing and supply chain management may be regarded as the sources of competitive advantage (Barney, 2012). According to Glock and Hochrein (2011), the trend line of research on organizational aspects of purchasing shows a continuous growth in the number of studies over the years. The purchasing function is becoming a strategic part of firms rather than the conventional operational task of ordering (Castaldi et al., 2011).

2.4. Structural Equation Modelling (SEM)

SEM is a comprehensive statistical approach for testing hypotheses about relations among observed and latent variables. A major advantage of SEM is the ability to estimate a complete model incorporating both measurement and structural considerations. We tested the measurement and research models using structural equation modelling (SEM) in LISREL 8.8 with 187 samples. A variety of indices were used to evaluate model fitness. Seven fitness indices were utilized. Indicating acceptable model fitness values are:

1. The ratio of the χ^2 statistic to its degrees of freedom, with values of less than 3 indicating acceptable fit;

2. Root mean squared error of approximation (RMSEA), with values below 0.08 representing acceptable fit;
3. Goodness of fit index (GFI), with values exceeding 0.9 indicating good fitness;
4. Adjusted GFI (AGFI), with values exceeding 0.8 indicating acceptable fitness (Ngai et al., 2007).

3. Hypotheses and Proposed Model

The proposed model is composed of three kinds of variables: SCRQ, CS and SP. The conceptual model incorporating the research hypotheses is shown in the following figure.

According to the above-mentioned figure, the main research hypothesis is:

H1: In recycling industries, SCRQ will positively influence SP meaningfully.

The research sub hypotheses are:

H2: SCRQ is defined as a higher-order construct which represents (a) communication, (b) trust, (c) adaptation, (d) commitment, (e) interdependence, (f) cooperation, and (g) atmosphere in recycling industries.

H3: CS is defined as a higher-order construct which represents (a) relationship persistence, (b) relationship frequency, and (c) relationship diversity in recycling industries.

H4: In recycling industries, SCRQ has a positive effect on CS.

H5: In recycling industries, CS has a positive effect on SP.

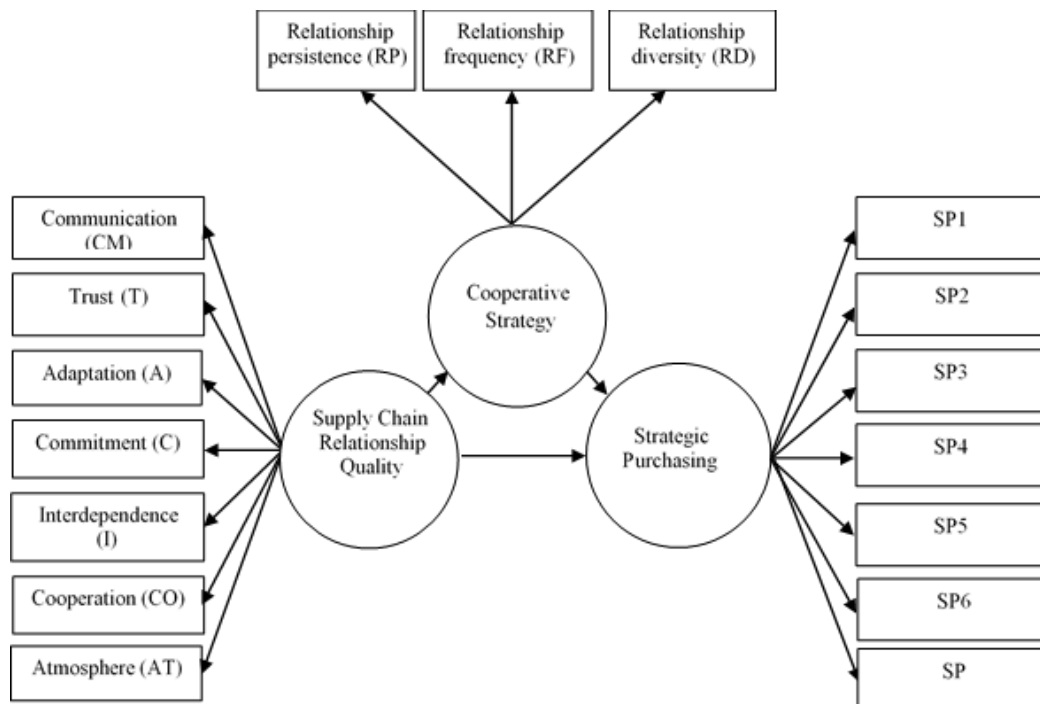


Figure 1. Proposed research model

4. Methodology

4.1. Survey Instrument

After reviewing the literature and interviews with experts (16 experts of recycling industry and supply chain management), a questionnaire based on existing measurement scales for the research constructs (see Appendix A) was initially drafted. This draft questionnaire was then pretested with academics and practitioners to check its content validity and terminology and modified accordingly. The modified questionnaire was then pilot tested to check its suitability and appropriateness for the target population before distributing.

4.2. Statistical Population and Sample Size

Statistical population of this research included 300 industrial experts (CEO, Logistic experts, purchasing experts, strategic managers, and operational managers) from 87 companies in recycling industries of paper and cardboard, metals, and plastic.

According to population, sample size was determined to be 169 persons. Random classified sampling was used for this research. Table 1 shows the ratio of this groups and sample sizes. After the distribution of 250 questionnaires, 187 filled questionnaires from experts were returned.

Table 1. Population and sample size in three sections of recycling industry

Recycling industry	Paper and Cardboard recycling	Metals recycling	Plastic Recycling industry	Total
Number of companies	26	18	43	87
Population size	101	76	123	300
% in population	33.7%	25.3%	41%	100%
Sample size	72	52	63	187
% in sample	38.5%	27.8%	33.7%	100%

4.3. Information Gathering Tools

Implemented questionnaires are composed of three parts: the first part consists of 26 questions about SCRQ's dimensions; each one of communication, trust, adaptation, interdependence, and cooperation had 3 questions; and finally commitment and atmosphere had 3 questions. Second part was about CS which contained 8 questions about relationship persistence (with 2 questions), relationship frequency (with 3 questions) and relationship diversity (with 3 questions). Third part was about SP with 7 questions (see appendix A).

4.4. Reliability and Validity

4.4.1. Reliability

For reliability evaluation we utilized Cronbach's alpha (as shown in Table 2). The Cronbach's alpha reliability of all the ten latent variables are more than 0.6 ($\alpha > 0.6$), which

indicates that all scales demonstrate good reliability.

Table 2. The summary statistics of formal survey

Instrument	N	Cronbach's alpha
SCRQ	26	0.907
CS	8	0.779
SP	7	0.910
Total	41	0.935

In this table, N is the number of questions (items) and α is Cronbach's alpha coefficient. For reliability evaluation we utilized Cronbach's alpha based on 32 pretest questionnaires. The Cronbach's alpha reliability (α) for all instruments are over 0.6 ($\alpha > 0.6$), which indicates that all scales demonstrate desirable reliability (Sekaran, 2006).

4.4.2. Validity

For evaluating validity of questionnaires, content validity and construct validity were used.

Content validity deals with how representative and comprehensive the items were in creating the scale. It is assessed by examining the process by which scale items are generated (Moon and Kim, 2001). Content validity assured us that all aspects and parameters that impact the main content were evaluated. For testing content validity after devising a framework for questionnaire, we asked 16 people (including 4 scholar and 12 recycling industries experts) to evaluate all implemented criteria and modify the questionnaire if needed.

Construct validity determines the extent to which a scale measures a variable of interest (Moon and Kim, 2001). In this research, "exploratory factor analysis" was used to consider the structure of research. Exploring factor analysis and criteria factor was used to investigate the construction of questionnaire and confirm that all of the criteria are measured in these questionnaires.

5. Analysis of Findings

The relationships among variables are identified in the following sections. These variables are then properly factored and put into structural equation modelling (SEM). Through confirmatory factor analysis in SEM, factoring is either accepted or rejected.

5.1. Exploring Factor Analysis

We considered 26 questions by factor analysis and based on 187 gathered questionnaires, KMO was 0.812, showing that the sample size was enough. Also note that the sig. in Bartlett test was lower than 0.05. The total variance explained for the seven factors in the questionnaire was 67.92%, which explains the variance of the concept of SCRQ, indicating a high level of reliability for the questionnaire.

Also, we considered 8 questions by factor analysis, and based on 187 gathered questionnaires, KMO was 0.689 showing that the sample size was enough. Also note that sig.

in Bartlett test was lower than 0.05. The total variance explained for the 3 factors in the questionnaire was 72.70%, which explains the variance of the concept of CS, indicating a high level of reliability for the questionnaire.

Finally, we considered 7 questions by factor analysis, and based on 187 gathered questionnaires, KMO was 0.606

showing that the sample size was enough. Also note that sig. in Bartlett test was lower than 0.05. The total variance explained for the 1 factor in the questionnaire was found to be 65.21%, which explains the variance of the concept of SP, indicating a high level of reliability for the questionnaire.

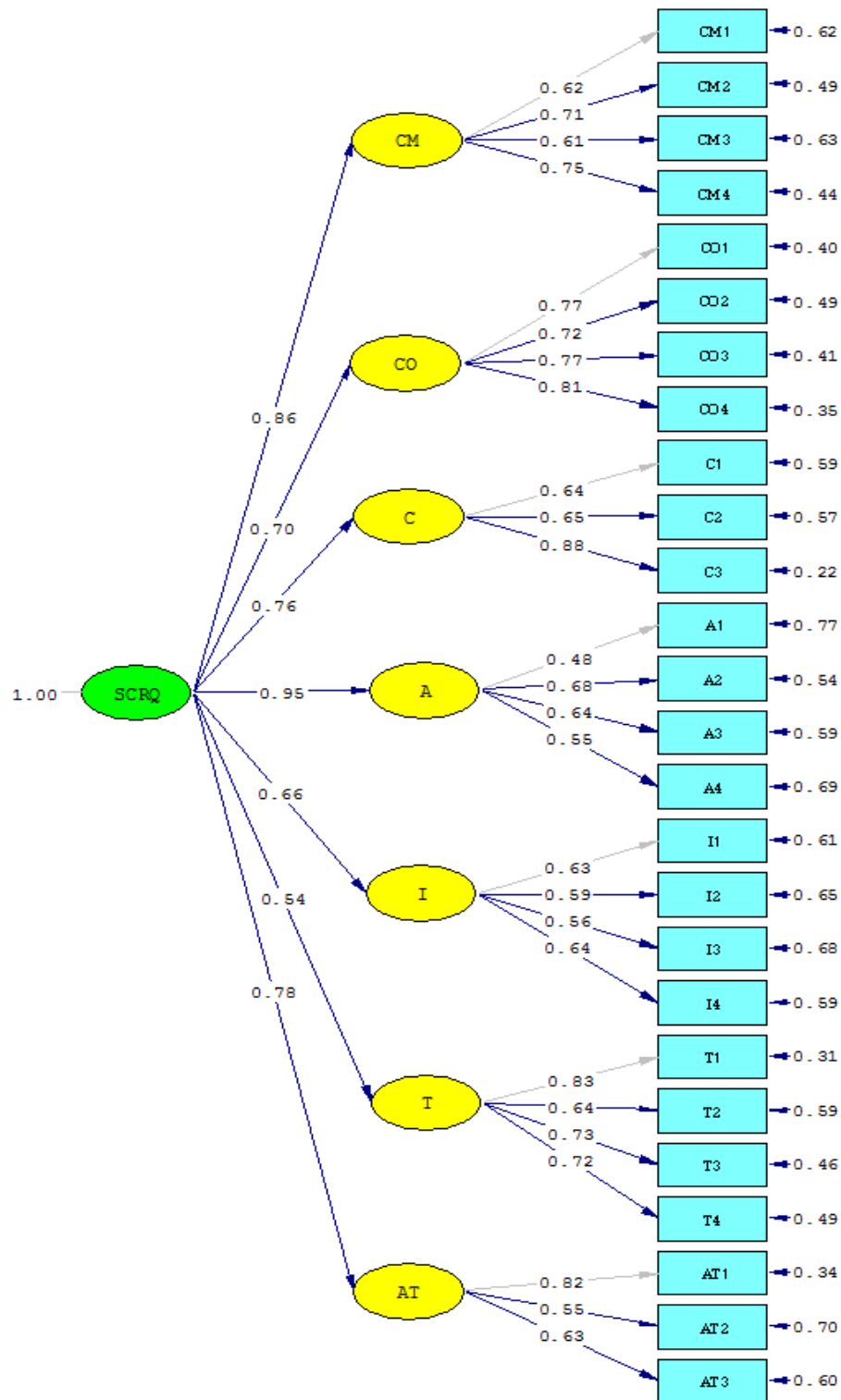


Figure 2. Standardized solutions model for SCRQ

The first step of the abovementioned analyses is performed by SPSS 18.0 and the second step by LISREL 8.53. The following sections present the results of exploratory factor analysis and structural equation modelling. The secondary hypotheses (H2, H3, H4 and H5) are examined, and finally the main hypothesis is explained after the confirmatory factor analysis of both sides of the model. In fact, the proposed model is put to test in the following steps:

1. SCRQ: its latents and indicators;
2. CS: its latents and indicators;
3. The effect of SCRQ on CS;
4. The effect of CS on SP;
5. The effect of SCRQ on SP.

Table 3. SCRQ model fitness indices

Fitness Indices	Measure of Index
Chi-Square/df	2.6733
P-value	0.000
Root Mean Square Error of Approximation (RMSEA)	0.095
Goodness of Fit Index (GFI)	0.93
Adjusted Goodness of Fit Index (AGFI)	0.90

5.2. X Model; Measurement Model of SCRQ

In the initial step, confirmatory factor analysis is conducted in LISREL 8.8. The path diagram of X model eventually evolves as shown in Figure 2. Then, the relationship between SCRQ latent and its indicators are studied. Goodness indices in Table 3 show that our X model

fits well, and the selected indicators are a proper representative for each dimension of SCRQ. Thus, our second hypothesis (H2) is supported.

Figure 2 shows the extent each variable describes SCRQ. These variables, ordered by their relative rank, are: 1. adaptation, 2. communication, 3. atmosphere, 4. commitment, 5. cooperation, 6. interdependence, and 7. trust.

Also, the following statements could be inferred from Figure 2:

- ✓ The significant factor in Communication is “providing proprietary by both parties” (CM4) with a factor loading of 75%.
- ✓ The significant factor in Commitment is “strongly committing to the relationship with the customer” (C3) with a factor loading of 88%.
- ✓ The significant factor in Adaptation is “tailoring the production system to meet the requirements of the supplier” (A2) with a factor loading of 68%.
- ✓ The significant factor in Atmosphere is “the harmonic atmosphere surrounding the working relationship with the supplier” (AT1) with a factor loading of 82%.
- ✓ The significant factor in Trust is “the characteristics of the level of trust based on past and present experience” (T1) with a factor loading of 83%.
- ✓ The significant factor in Interdependence is “relying on ourselves to achieve business objectives” (I4) with a factor loading of 64%.
- ✓ The significant factor in Cooperation is “cooperating with respect to quality practices” (CO4) with a factor loading of 81%.

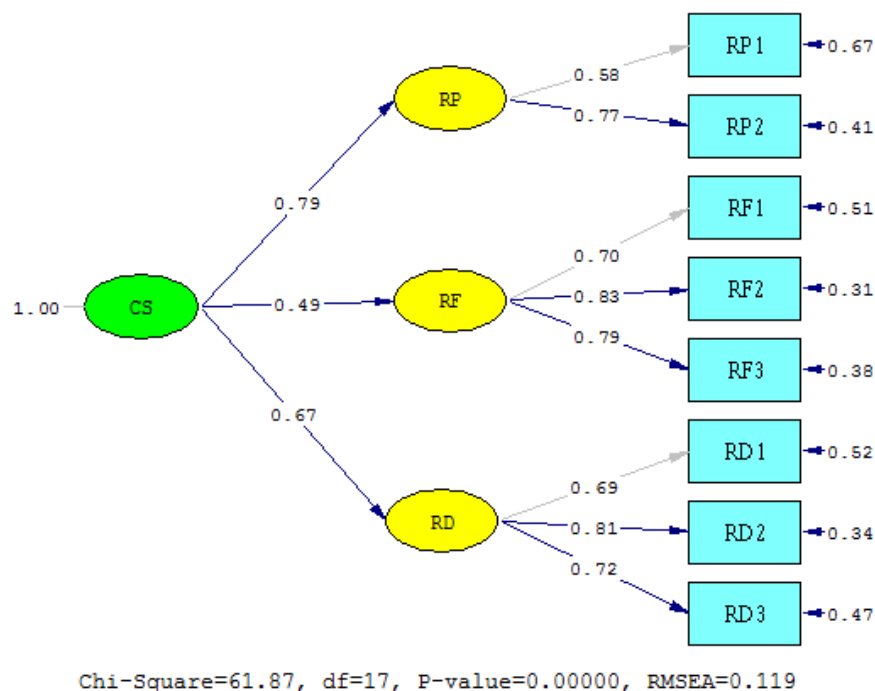


Figure 3. Standardized solutions model for CS

5.3. Y Model; Measurement Model of CS

In the next step, the same procedure is repeated for CS: confirmatory factor analysis is conducted for CS and its indicators in LISREL. The path diagram of Y model is shown in Figure 3. The relationship between CS latent and its indicators are then put to test. Goodness indices in Table 4 show that our Y model is fitted well, proving that the selected indicators are a good representative for each dimension of CS. So, our third hypothesis (H3) is also supported.

Table 4. CS model fitness indices

Fitness Indices	Measure of Index
Chi-Square/df	3.6394
P-value	0.000
Root Mean Square Error of Approximation (RMSEA)	0.119
Goodness of Fit Index (GFI)	0.92
Adjusted Goodness of Fit Index (AGFI)	0.84

Figure 3 illustrates the extent each variable describes CS. The ranking of these variables is as follows: 1. Relationship persistence, 2. Relationship diversity, and 3. Relationship frequency. The following statements could be inferred from Figure 3:

- ✓ The significant factor in Relationship Persistence is RP2 with a factor loading of 77%.
- ✓ The significant factor in Relationship Frequency is RF2 with a factor loading of 83%.
- ✓ The significant factor in Relationship Diversity is RD2 with a factor loading of 81%.

5.4. Y Model; Measurement Model of SP

Confirmatory analysis is also repeated for SP and its

indicators in LISREL. The path diagram of Y model is shown in Figure 5. Table 5 proves that the selected indicator are good representative for each dimension of SP and our forth hypothesis (H4) is supported.

Table 5. SP model fitness indices

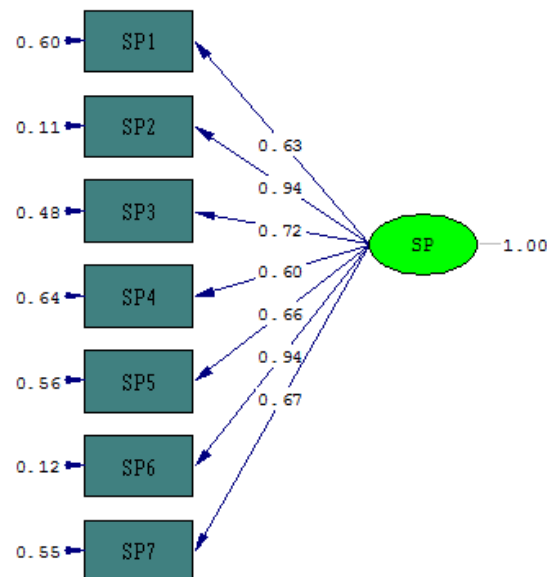
Fitness Indices	Measure of Index
Chi-Square/df	2.6979
P-value	0.000
Root Mean Square Error of Approximation (RMSEA)	0.095
Goodness of Fit Index (GFI)	0.96
Adjusted Goodness of Fit Index (AGFI)	0.91

5.5. Structural Model; Path Analysis

In order to apply the data gathered from questionnaires into SEM, we defined a new variable for every latent variable of SCRQ and CS and then used the mean of scored answers for investigating our primary hypothesis. The structural model consists of seven dimensions of SCRQ and three component of CS and seven questions for SP.

Table 6. The structural model fitness indices

Fitness Indices	Measure of Index
Chi-Square/df	2.0267
P-value	0.000
Root Mean Square Error of Approximation (RMSEA)	0.074
Goodness of Fit Index (GFI)	0.97
Adjusted Goodness of Fit Index (AGFI)	0.94



Chi-Square=37.77, df=14, P-value=0.00000, RMSEA=0.095

Figure 4. Standardized solutions model for SP

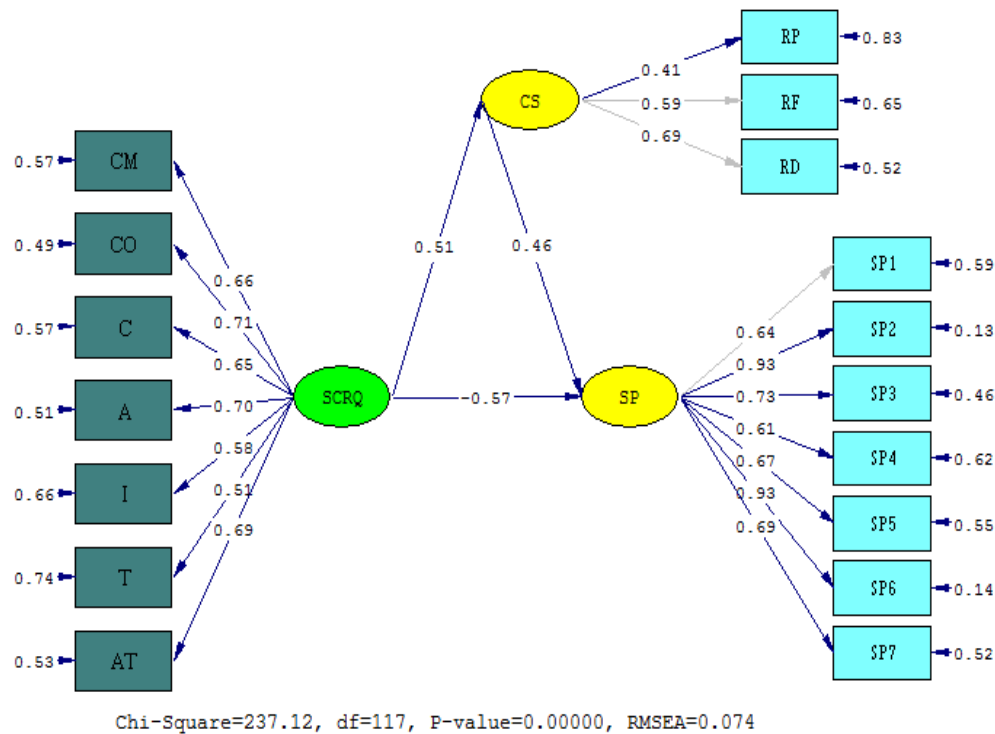


Figure 5. Structural path analysis

Table 7. Path model coefficients

Hypothesis	Path	Standardized path estimate γ	t-value	Result
H4	SCRQ \rightarrow CS	0.51	3.971	supported
H5	CS \rightarrow SP	0.46	2.648	supported
H1	SCRQ \rightarrow SP	0.57	4.964	Supported

In Table 7, the direct effect is $SCRQ \rightarrow SP = 0.57$. The indirect effect is $SCRQ \rightarrow CS \rightarrow SP = (0.51) \times (0.46) = 0.2346$. So, the total effect, which is the sum of these two effects, is 0.8046.

The main hypothesis (H1), and also H4 and H5 hypotheses are supported and SCRQ can determine up to 68.07 per cent (0.8046^2) of SP variances, which is significant. Fitness' indices in Table 7 show that the structural model fits well.

analysis is performed by SPSS 18. LISREL is then used for structural equation modelling.

Based on our result, enhancing SCRQ could lead to an improved level of Cooperative Strategy and strategic purchasing in recycling industry. Adaptation, among other factors, has the highest effect on SCRQ; and the significant factor in Adaptation is tailoring the production system to meet the requirements of the supplier.

The same procedure was repeated for CS and Relationship persistence was found the most important factor in CS; and the unceasing cooperation with supplier is the most important issue in Relationship persistence.

In SP, a sound knowledge of the firm's strategic goals and focus on longer term issues that involve risk and uncertainty are both considered as the most important factors in strategic purchasing.

6. Conclusions

The main purpose of this study was presenting a conceptual model to discover the effects of the indicators of supply chain relationship quality and cooperative strategy on strategic purchasing. Having identified the factors of SCRQ, CS, and SP in the recycling industries after a thorough literature review and some interviews with experts, a questionnaire was distributed among experts.

Exploratory factor analysis is used for the identification of relationships among variables. These variables are then properly factored and put into structural equation modelling (SEM). Through confirmatory factor analysis in SEM, factoring is either accepted or rejected. Exploratory factor

REFERENCES

- [1] ANDERSON, E. & WEITZ, B. 1992. The use of pledges to build and sustain commitment in distribution channels. *Journal of marketing research*, 18-34.
- [2] ANDERSON, J. C. & NARUS, J. A. 1990. A model of distributor firm and manufacturer firm working partnerships. *the Journal of Marketing*, 42-58.
- [3] BARNEY, J. B. 2012. Purchasing, supply chain management and sustained competitive advantage: The relevance of resource-based theory. *Journal of Supply Chain Management*, 48, 3-6.

- [4] BAYAT, A. 2008. Supply Chain Performance Evaluation with FMADM Approach. Master, Tarbiat Modares University.
- [5] CASTALDI, C., TEN KATE, C. & DEN BRABER, R. 2011. Strategic purchasing and innovation: a relational view. *Technology Analysis & Strategic Management*, 23, 983-1000.
- [6] CHANG, C.-W., CHIANG, D. M. & PAI, F.-Y. 2012. Cooperative strategy in supply chain networks. *Industrial Marketing Management*, 41, 1114-1124.
- [7] CHEN, I. J., PAULRAJ, A. & LADO, A. A. 2004. Strategic purchasing, supply management, and firm performance. *Journal of operations management*, 22, 505-523.
- [8] CHIANG, C.-Y., KOCABASOGLU-HILLMER, C. & SURESH, N. 2012. An empirical investigation of the impact of strategic sourcing and flexibility on firm's supply chain agility. *International Journal of Operations & Production Management*, 32, 49-78.
- [9] CHOI, T. Y. & KRAUSE, D. R. 2006. The supply base and its complexity: Implications for transaction costs, risks, responsiveness, and innovation. *Journal of Operations Management*, 24, 637-652.
- [10] FRAZIER, G. L. & RODY, R. C. 1991. The use of influence strategies in interfirm relationships in industrial product channels. *The Journal of Marketing*, 52-69.
- [11] FYNES, B., DE BÚRCA, S. & MANGAN, J. 2008. The effect of relationship characteristics on relationship quality and performance. *International Journal of Production Economics*, 111, 56-69.
- [12] FYNES, B., DE BÚRCA, S. & MARSHALL, D. 2004. Environmental uncertainty, supply chain relationship quality and performance. *Journal of Purchasing and Supply Management*, 10, 179-190.
- [13] FYNES, B., VOSS, C. & DE BURCA, S. 2005a. The impact of supply chain relationship dynamics on manufacturing performance. *International Journal of Operations & Production Management*, 25, 6-19.
- [14] FYNES, B., VOSS, C. & DE BÚRCA, S. 2005b. The impact of supply chain relationship quality on quality performance. *International Journal of Production Economics*, 96, 339-354.
- [15] GLOCK, C. H. & HOCHREIN, S. 2011. Purchasing Organization and Design: a literature review. *BuR-Business Research*, 4, 149-191.
- [16] GUMMESSON, E. 1987. The new marketing—developing long-term interactive relationships. *Long range planning*, 20, 10-20.
- [17] GUNDLACH, G. T., ACHROL, R. S. & MENTZER, J. T. 1995. The structure of commitment in exchange. *The Journal of Marketing*, 78-92.
- [18] GUNDLACH, G. T. & CADOTTE, E. R. 1994. Exchange interdependence and interfirm interaction: research in a simulated channel setting. *Journal of Marketing Research*, 516-532.
- [19] HÅKANSSON, H. & GROUP, I. 1982. International marketing and purchasing of industrial goods: An interaction approach.
- [20] HEIDE, J. B. & JOHN, G. 1988. The role of dependence balancing in safeguarding transaction-specific assets in conventional channels. *The Journal of Marketing*, 20-35.
- [21] HUNTLEY, J. K. 2006. Conceptualization and measurement of relationship quality: linking relationship quality to actual sales and recommendation intention. *Industrial Marketing Management*, 35, 703-714.
- [22] KALWANI, M. U. & NARAYANDAS, N. 1995. Long-term manufacturer-supplier relationships: do they pay off for supplier firms? *The Journal of Marketing*, 1-16.
- [23] KOCABASOGLU, C. & SURESH, N. C. 2006. Strategic sourcing: an empirical investigation of the concept and its practices in US manufacturing firms. *Journal of Supply Chain Management*, 42, 4-16.
- [24] KWON, I.-W. G. & SUH, T. 2005. Trust, commitment and relationships in supply chain management: a path analysis. *Supply chain management: an international journal*, 10, 26-33.
- [25] LAGES, C., LAGES, C. R. & LAGES, L. F. 2005. The RELQUAL scale: a measure of relationship quality in export market ventures. *Journal of Business Research*, 58, 1040-1048.
- [26] LANDEROS, R. & MONCZKA, R. M. 1989. Cooperative buyer/seller relationships and a firm's competitive posture. *Journal of Purchasing and Materials Management*, 25, 9-18.
- [27] MENDONÇA TACHIZAWA, E. & GIMÉNEZ THOMSEN, C. 2007. Drivers and sources of supply flexibility: an exploratory study. *International Journal of Operations & Production Management*, 27, 1115-1136.
- [28] MENTZER, J. T., FOGGIN, J. H. & GOLICIC, S. L. 2000a. Collaboration: the enablers, impediments, and benefits. *Supply chain management review*, 4, 52-58.
- [29] MENTZER, J. T., MIN, S. & ZACHARIA, Z. G. 2000b. The nature of interfirm partnering in supply chain management. *Journal of Retailing*, 76, 549-568.
- [30] MOHAGHAR, A., GHASEMI, R., ABDULLAHI, B., ESFANDI, N. & JAMALIAN, A. 2011. Canonical correlation analysis between supply chain relationship quality and cooperative strategy: A case study in the Iranian industry. *European Journal of Social Sciences*, 26, 132-145.
- [31] MOHAGHAR, A. GHASEMI, R., 2011. A Conceptual Model for Supply Chain Relations Quality and Supply Chain Performance by Structural Equation Modeling: A Case Study in the Iranian Automotive Industry. *European Journal of Social Sciences*, 21, 456-470.
- [32] MOHR, J. & NEVIN, J. R. 1990. Communication strategies in marketing channels: a theoretical perspective. *The Journal of Marketing*, 36-51.
- [33] MOHR, J. & SPEKMAN, R. 1994. Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic management journal*, 15, 135-152.
- [34] MONCZKA, R. M., CALLAHAN, T. J. & NICHOLS, E. L. 1995. Predictors of relationships among buying and supplying firms. *International Journal of Physical Distribution & Logistics Management*, 25, 45-59.

- [35] MOON, J.-W. & KIM, Y.-G. 2001. Extending the TAM for a World-Wide-Web context. *Information & Management*, 38, 217-230.
- [36] MORGAN, R. M. & HUNT, S. D. 1994. The commitment-trust theory of relationship marketing. *the journal of marketing*, 20-38.
- [37] NAIR, A., JAYARAM, J. & DAS, A. 2015. Strategic purchasing participation, supplier selection, supplier evaluation and purchasing performance. *International Journal of Production Research*, 1-16.
- [38] NGAI, E. W., POON, J. & CHAN, Y. 2007. Empirical examination of the adoption of WebCT using TAM. *Computers & education*, 48, 250-267.
- [39] Paulraj, A., Chen, I. J. & Flynn, J. Levels of strategic purchasing: impact on supply integration and performance. *Journal of Purchasing and Supply Management*, vol. 12, pp. 107-122. 2006.
- [40] PFEFFER, J. & SALANCIK, G. R. 2003. *The external control of organizations: A resource dependence perspective*, Stanford University Press.
- [41] RAUYRUEN, P. & MILLER, K. E. 2007. Relationship quality as a predictor of B2B customer loyalty. *Journal of business research*, 60, 21-31.
- [42] ROEHRICH, G., Spencer, R. & FLORENCE, P. V. The nature of relationship atmosphere and links with the value of relationships: the case of Asia and Europe. *Conference Proceedings, 18th Annual IMP Conference, Perth, Australia, 2002*. Free Press.
- [43] SAKO, M. 1992. Price, quality and trust: Inter-firm relations in Britain and Japan, Cambridge University Press.
- [44] SARKAR, A. & MOHAPATRA, P. K. 2006. Evaluation of supplier capability and performance: A method for supply base reduction. *Journal of Purchasing and Supply Management*, 12, 148-163.
- [45] SEKARAN, U. 2006. *Research methods for business: A skill building approach*, John Wiley & Sons.
- [46] SIMCHI-LEVI, D. 2005. *Designing and managing the supply chain*, Mcgraw-Hill College.
- [47] STADTLER, H. 2005. Supply chain management and advanced planning—basics, overview and challenges. *European journal of operational research*, 163, 575-588.
- [48] SU, Q., SONG, Y.-T., LI, Z. & DANG, J.-X. 2008. The impact of supply chain relationship quality on cooperative strategy. *Journal of Purchasing and Supply Management*, 14, 263-272.
- [49] WALTER, A., HÖLZLE, K. & RITTER, T. Relationship functions and customer trust as value creators in relationships: a conceptual model and empirical findings for the creation of customer value. *Proceedings of the Eighteenth IMP-Conference, Dijon, France, 2002*.
- [50] WOO, K.-S. & ENNEW, C. T. 2004. Business-to-business relationship quality: an IMP interaction-based conceptualization and measurement. *European Journal of Marketing*, 38, 1252-1271.
- [51] YOUNG, J. A. 2000. *Strategic alliances: are they relational by definition*. Indiana State University, Working Paper.
- [52] ZUCKERMAN, A. 2002. *Supply Chain Management: Operations 06.04*, Wiley.