

## **Relational quality: further evidence of a single higher order construct in an industrial market.**

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### **Abstract.**

While there is some evidence for a single, higher order construct which captures satisfaction and trust, evidence of its existence in industrial markets remains scant and inconclusive. However, in the context of small, family owned businesses, where consumer behaviour and industrial purchasing behaviour overlap, a single construct may be a better predictor of a market intermediary's relational building activities. Two rival models are compared which, given the high degree of correlation between satisfaction and trust, support the existence of a single satisfaction/trust construct.

### **Introduction.**

While an extensive amount of literature has appeared in recent years identifying the factors impacting on the establishment and maintenance of long-term buyer-seller relationships (Ford 1980; Dwyer, Schurr and Oh 1987; Wilson 1995), the greatest support has emerged for the key constructs of satisfaction, trust and commitment (Anderson and Narus 1990; Anderson and Weitz 1992; Han, Wilson and Dant 1993; Morgan and Hunt 1994). However, since the majority of the research has been undertaken in large organisations in Europe and the USA, there is some doubt as to the extent to which these same constructs are present in the context of small family firms.

Because farmers purchase inputs to produce farm products, farm purchasing behaviour can be considered a specific form of industrial buying behaviour. However, from an organisational perspective, farm purchasing behaviour will be vastly different from buyer behaviour in other industrial organisations. One of the most important aspects of purchasing behaviour on family farms is the interdependence between the expenditure on household consumption and production inputs. Given a particular level of income, an increase in the expenditure on farm production inputs can only be made at the expense of household consumption and vice versa (Kool 1994). As a result, farm families are highly risk averse because, in making the decision to purchase, family interests and needs are also at stake. File, Mack and Prince (1994) describe family businesses as being more suspicious of unfamiliar exchange partners and exerting more effort in pre-purchase search and qualifying behaviours before contemplating new transactions.

However, the net profitability of farming operations is influenced not only by the farmer's ability to reduce costs, but also by the farmer's efforts to improve gross returns through maximising yield and market price. In a market where prices have traditionally been determined by supply and demand, due to increasing costs, the auction is becoming

increasingly less common as the primary price setting mechanism. With prices determined more by private treaty than auctions, farmers can be expected to spend as much time, if not more, in selecting those market intermediaries who offer the best net returns. Selection of the best market intermediary may become even more important in the current business environment, where, over the last decade, rationalisation of the supply chain has seen several market intermediaries fail leaving farmers as the major creditors.

Where there is some uncertainty surrounding a channel member's ability to place its outputs, channel members will seek to reduce that uncertainty by either employing multiple channels of distribution or becoming better organised (Achrol, Reve and Stern 1983). In other situations, it would seem equally conceivable that just as buyers reduce uncertainty by purchasing from well known preferred suppliers (Anderson, Chu and Weitz 1987), farmers would choose to sell to those market intermediaries who were reputable market leaders or with whom they had previously dealt.

Frazier (1983) indicates that firms can be expected to choose that market intermediary who offers the highest level of valued rewards at the most acceptable level of risk and investment over time. Anderson and Weitz (1992) indicate that suppliers can be expected to allocate a greater proportion of their business to those market intermediaries who they perceive treat them more equitably. In either instance, commitment to the preferred market intermediary will demand a high degree of trust and satisfaction with the transaction.

For a number of reasons, but no doubt because of the high degree of correlation between satisfaction, trust and commitment, Dorsch, Swanson and Kelley (1998) describe relationship quality as a higher-order construct containing dimensions of all three constructs. Conversely, while Crosby, Evans and Cowles (1990) and Leuthesser (1997) model relational quality as a composite measure derived from both satisfaction and trust, Kumar, Scheer and Steenkamp (1995) conceptualise relational quality as being comprised primarily of trust and commitment. As yet, there is no consensus as to which dimensions constitute relationship quality.

### **The research setting.**

With a coastline extending for more than 12,500 km and encompassing an area approaching 2.5 million square kilometres, the State of Western Australia is approximately one third of the Australian land mass. With a climate ranging from tropical to temperate, Western Australia produces a diverse range of fruit and vegetable crops for both domestic and export markets. According to the Australian Bureau of Statistics (2000), some 1,260 farming enterprises are involved in the production of over 400,000 tonnes of fresh fruit and vegetables per annum.

In order to provide a central market for the efficient distribution of the fresh fruit and vegetables produced in the state, the Metropolitan Markets Act No. 55 was passed in 1926 which foreshadowed the establishment of the Perth Metropolitan Market Trust as a corporate body to administer the central market and all it encompassed (Caddy 1978). The Trust owns and maintains all the buildings in the central market, whereupon it leases out space to various wholesalers who dispose of the fresh produce consigned to the market by various growers. These wholesalers are licensed under the Metropolitan Market Trust Lease and Covenant to conduct the business of commission agents. Keen rivalry and competition between the agents has generally seen growers benefit from the agents endeavours to maintain and develop their individual businesses.

However, more recently, as the costs of conducting the auction have steadily increased and buyers have sought to conduct their business as early as possible to either return to their shop or in the case of the supermarket buyers, to have the produce distributed to the stores, private treaty has emerged as the principal method of sale (Caddy 1978).

Private treaty is a system of selling whereby the commission agents receive consignments for sale on behalf of the growers on an agency basis, returning to the grower the gross price, less selling charges, but under which the gross price is determined by private negotiation with the buyer (Caddy 1978). However, in the absence of the auction as the principal mechanism for setting price, growers have become increasingly dissatisfied with their relationship with market agents. An underlying atmosphere of distrust between the growers and market agents is apparent, although the Perth Metropolitan Markets are not unique in recording distrust and disputation between growers and the intermediaries who sell their produce in the market.

### **Developing the theoretical model.**

According to Kotler and Armstrong (1999), to succeed in the industrial market, a supplier must understand the wants and needs of its customers and aim to satisfy those needs more effectively than competitors. To become more competitive, firm's need to provide augmented products (and services) which offer customers more than they think is necessary or have come to expect.

### ***Satisfaction.***

According to the disconfirmation of expectations model, customer satisfaction is the result of a comparison between the firm's performance and customer's expectations (Oliver 1980; Tse and Wilton 1988). Whenever performance exceeds expectations, satisfaction will increase. Conversely, whenever performance falls below expectations, customers will become dissatisfied.

Expectations are beliefs about the likelihood that a product is associated with certain attributes, benefits or outcomes (Spreng, MacKenzie and Olshavsky 1996). Expectations will relate, either favourably or unfavourably, to whatever prior consumption experience the customer has had of the firm's offer and a forecast of the supplier's ability to deliver in the future (Fornell *et al* 1996). Especially in mature, stable markets, expectations should not only reflect the quality of the firm's current offer, but the buyer's ability to learn from their experience and to accurately predict the levels of quality and value they will receive.

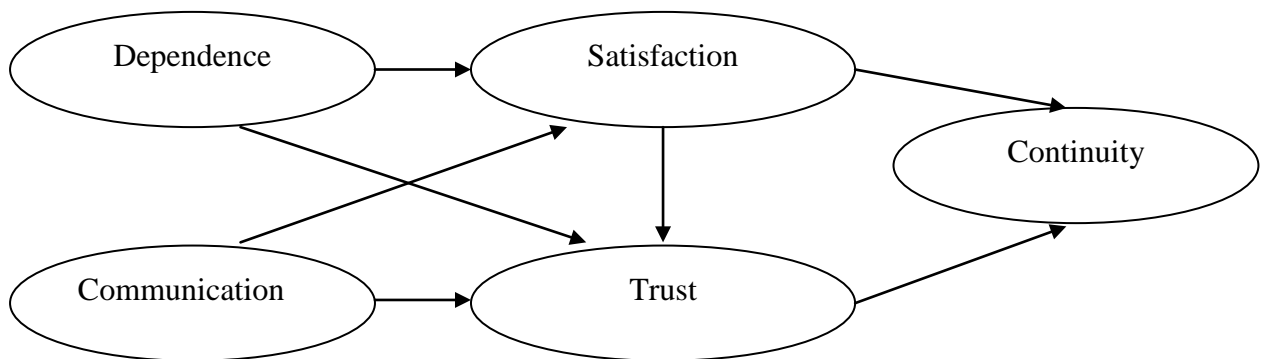
Perceived value is the perceived level of product quality relative to the price paid. Value is achieved when the proper function is secured for the proper cost (Hutt and Speh 1995). Because functions can be accomplished in a number of different ways, the most cost efficient way of fully accomplishing a function will establish its value. Here, the concept of value-in-use constitutes the price that will equalise the overall costs and benefits of using one product over another. Since channel member satisfaction has been defined as a positive affective state resulting from an appraisal of all aspects of a firm's working relationship with another (Frazier, Gill and Kale 1989), satisfaction can be defined as the channel member's positive affective response to the economic rewards that flow from the relationship with its partner (Geyskens, Steenkamp and Kumar 1999).

Satisfaction has been defined variously as the buyer's cognitive state of being adequately rewarded for the sacrifices undergone in facilitating the exchange (Frazier 1983). From an economics perspective, performance could be viewed as the key reward and price as the key sacrifice associated with an exchange (Voss, Parasuraman and Grewal 1998). However, where potential customers use price as a cue in forming performance expectations, if the price charged is the same as the price quoted prior to purchase, the extent to which pre-purchase expectations influence post-purchase evaluations will depend on the degree of consistency between price and performance. In other words, the extent to which pre-purchase expectations are met by performance must be consistent with the price.

High levels of satisfaction will have positive consequences for both channel members (Frazier 1983). Customer satisfaction usually results in higher repeat purchases, referrals to other customers, positive word-of-mouth and lower transaction costs (Evans and Laskin 1994). High customer satisfaction results in increased loyalty, reduced price elasticities, reduced failure costs and an enhanced reputation for the firm (Fornell 1992). An enhanced reputation can be beneficial in establishing and maintaining relationships with key suppliers, distributors and potential allies. Therefore it is hypothesised that;

*H<sub>1</sub> there will be a significant positive relationship between the grower's satisfaction with the exchange and the grower's desire to maintain their relationship with their preferred market agent (Figure 1).*

**Figure 1. Model of buyer-seller relationships in the Western Australian fresh fruit and vegetable industry**



Lehmann and O'Shaughnessy (1974) indicate that when making the decision to purchase, company reputation and thus source credibility may become an important decision variable. Cunningham and White (1973) suggest that a supplier's reputation may be used to differentiate between those suppliers with whom the firm will interact and those who will no longer be considered. To be considered, a supplier's reputation must be no worse than average, but be as good as or better than the alternatives. In other situations, potential buyers may seek to reduce uncertainty by only considering well-known suppliers. These suppliers may be reputable market leaders, or alternatively, the buyer may seriously consider only those suppliers with whom it has previously dealt. Jackson (1985) suggests that customers feel more exposed when they purchase from less well-known suppliers. Anderson and Weitz (1992) suggest that purchasing from reputable, trustworthy suppliers may reduce the buyer's risk of being mistreated.

### ***Trust.***

Anderson and Narus (1990) view trust as the belief that a partner will perform actions that will result in positive outcomes for the firm and not to take unexpected actions that may result in negative outcomes. Moorman, Deshpande and Zaltman (1993) define trust as the willingness to rely upon an exchange partner in whom one has confidence. Both of these definitions view trust as a behavioural intention that reflects reliance on the other partner, but in so doing, involves uncertainty and vulnerability.

Trust is the critical determinant of many factors related to performance including the more open exchange of relevant ideas and emotions, greater clarification of goals and problems, more extensive search for alternative courses of action, greater satisfaction with efforts, and, greater motivation to implement decisions (Achrol 1997). Buyers who trust their suppliers are less likely to use alternative sources of supply and are more likely to accept any short-term inequities arising in the exchange relationship (Kumar 1996). Both Frazier (1983) and Anderson and Narus (1990) suggest that satisfaction with past outcomes indicates equity in the exchange. Equity generally refers to the fairness or rightness of something in comparison to other entities (Halstead 1999). Equitable outcomes provide confidence that neither party has been taken advantage of in the relationship and that both parties are concerned about their mutual welfare (Ganesan 1994). Therefore it is hypothesised that;

*H<sub>2</sub> there will be a significant positive relationship between the grower's satisfaction with the exchange and the trust the grower places in their preferred market agent.*

Trust also results from the expertise, reliability or intentionality of the partner. Swan, Trawick and Silva (1985) indicate how competence, customer orientation, honesty, dependability and likeability are the key dimensions in developing trust between sales representatives and their customers. Moorman, Deshpande and Zaltman (1993) argue that the interpersonal factors that most affect trust include perceived expertise, sincerity, integrity, tactfulness, timeliness and confidentiality. Trust increases the partners tolerance for each others behaviour, facilitating the informal resolution of conflict, which in turn, allows the partners to better adapt to the needs and capabilities of the counterpart firm (Hakansson and Sharma 1996).

However, trust between firms does not occur automatically. Experience with the channel partner breeds trust (Dwyer, Schurr and Oh 1987; Anderson and Weitz 1989). Achieving a trusting relationship and a reputation for trustworthiness requires a deliberate strategy of forbearance with a view towards future pay-offs and accumulated evidence of non-renegeing behaviour (Parke 1993). With trust, there is an increasing willingness to put oneself at risk, be it through intimate disclosure, reliance on another's promises or sacrificing present rewards for future gains. Once trust is established, firms learn that coordinated joint efforts lead to outcomes that exceed those that the firm could achieve if it acted solely in its own best interests (Han, Wilson and Dant 1993). High levels of trust enable both firms to focus on the longer-term benefits of the exchange (Ganesan 1994; Doney and Cannon 1997).

### ***Commitment.***

Firms that trust their partner are more committed to their relationship (Anderson and Narus 1990; Morgan and Hunt 1994; Gundlach, Achrol and Mentzer 1995; Kumar 1996). Moorman, Deshpande and Zaltman (1993) define commitment as an enduring desire to maintain a valued relationship.

Morgan and Hunt (1994) propose that a firm will commit to an exchange partner when the relationship is considered so important as to warrant maximum efforts to maintain it. Such implies that the relationship is important and that there is a desire to continue the relationship into the future (Wilson 1995). Therefore, it is hypothesised that;

*H<sub>3</sub> there will be a significant positive relationship between the trust the grower places in their preferred market agent and the grower's desire to maintain the relationship.*

### **Communication.**

In situations characterised by high uncertainty, potential buyers will form a complex communications network involving many different organisations who have regular contact with the firm (Hakansson, Johanson and Wootz 1977). In the case of high value, highly complex products, communication will take place regarding a wide range of topics, at a variety of levels in the firm, over a long period of time (Cunningham and Turnbull 1982). Communication enables information to be exchanged which may reduce certain types of risk perceived by either firm involved in the transaction. Any uncertainty about a customers or suppliers organisational structure, viability, methods of operation, technical expertise or competence, can be resolved by personal contact between the parties.

Communication has been described as the glue that holds together a channel of distribution (Mohr and Nevin 1990). Communication in marketing channels serves as the process by which persuasive information is transmitted (Frazier and Summers 1984), participative decision making is fostered, programs are coordinated (Anderson and Narus 1990), power is exercised (Gaski 1984) and commitment and loyalty are encouraged (Anderson and Weitz 1992). Communication not only improves the supplier's credibility, but may also provide a convenient and simple means of gaining knowledge of the supply market. Communication facilitates other elements of the interaction such as adaptations by suppliers and customers to the design or application of a product, or, the modification of production, distribution and administrative systems by either party.

Personal contact serves as the medium through which most communication between buying and selling firms occur. In the majority of cases, personal contacts and information exchange precedes the exchange of money and products (Cunningham and Turnbull 1982; Ford 1982). Personal contacts are the normal means of persuasion and negotiation in organisational buying and selling. Both buyers and sellers prefer personal contact to written communication; face-to-face meetings are more desirable and negotiations between parties are best conducted on a person-to-person basis. However, personal contacts may also be established as a form of crisis insurance. In times of extreme difficulties, firms may utilise these contacts as a means of obtaining more rapid or dramatic action. Other relationships may exist purely for social reasons and are not necessary for the business objectives of either firm.

As channel members in relational channel structures are more interdependent, a higher level of communication is necessary because the firms need to share more information in order to coordinate more closely shared activities. The exchange of information allows the firms to stabilise and to coordinate their interdependence leading to a credible commitment between both firms (Landeros and Monczka 1989). Since the parties in a long-term relationship are more likely to trust one another and to share compatible goals, communication occurs with a higher frequency and more bi-directional flows, more informal modes and more indirect content (Mohr and Nevin 1990).

Dwyer, Schurr and Oh (1987) hypothesize that trust results in improved communication, whereas Anderson and Narus (1990) contend that communication leads to trust. While meaningful communication between firms in a working partnership is a necessary antecedent to trust, in subsequent periods, trust leads to better communication. Through communication, firm's obtain better knowledge about their counterparts activities and resources, which increases the possibility of identifying other combinations of resources and activities that may further increase effectiveness (Hertz 1992). Therefore it is hypothesised that;

*H<sub>4</sub> there will be a significant positive relationship between communication and the trust the grower places in their preferred market agent.*

Communication difficulties are the prime cause of channel conflict (Mohr and Nevin 1990). Ineffective communication leads to misunderstandings, incorrect strategies and mutual feelings of frustration. The establishment of various structural mechanisms that provide real-time information and accurate feedback regarding each partners actions, including effective recognition, verification and signalling systems between firms, will minimise misperceptions, enhance behavioural transparency and strengthen cooperation. Reliable, prompt and relatively low cost information can enhance performance in a wide variety of relationships.

Channel conflict is the only construct that is considered to have a direct effect on satisfaction (Frazier, Gill and Kale 1989). Firms that are able to lower the overall level of conflict in their working relationship generally experience greater satisfaction (Anderson and Narus 1990). Channel members that are highly satisfied with the economic rewards that flow from their relationship will perceive their partner as advancing their goal attainment as opposed to impeding or preventing it. Relational disagreements tend to elicit frustration, thereby causing feelings of unpleasantness, dissatisfaction with the relationship and eventually distrust towards the partner. Therefore, it is hypothesised that;

*H<sub>5</sub> there will be a significant positive relationship between communication and the grower's satisfaction with the exchange.*

### ***Dependence.***

When the outcomes obtained from the relationship are important or highly valued, when the outcomes from the relationship are higher or better than the outcomes available from alternative suppliers and, when fewer alternative sources of exchange are available to the firm, dependence is said to increase (Heide and John 1988). A firm is considered to be more dependent upon another when its partner provides a larger proportion of its business. The higher the percentage of sales and profits that are achieved by handling a partners product line and the greater the sales and profit expectations in the future, the more the focal firm is dependent (Frazier, Gill and Kale 1989).

Dependence will also increase when the outcomes from the relationship are comparatively higher than or better than the outcomes available from alternative relationships. Firms dealing with the best supplier are more dependent because the outcomes associated from dealing with that supplier are better than those available from alternative suppliers (Heide and John 1988). In this respect, Anderson and Narus (1990) view dependence in the relationship as the outcomes given comparison level for alternatives. In this context, dependence is a measure that represents the overall quality of the outcomes available to the focal firm from the best alternative exchange relationship.

However, the need to interact with a specific seed supplier will depend on the number of alternatives available (Hakansson and Wootz 1979; Anderson and Weitz 1986). Where there are many alternatives, the need to interact is reduced, but as the number of alternative partners decline, the need to interact will increase. Dependence therefore refers to the firm's need to maintain the channel relationship in order to achieve its desired goals. Dependence could be regarded as the price the focal firm has to pay for the benefits that the relationship bestows (Easton 1992). As such, dependence is partly a matter of choice and partly a matter of circumstances.

However, it is the firm's perception of its dependence relative to its partner which is of most interest in channel relationships. Relative dependence determines the extent to which a firm will have influence over or be influenced by its partner (Anderson and Narus 1990). With increasing dependence comes greater vulnerability (Krapfel, Salmond and Spekman 1991). Dependence in an exchange relationship may make one firm more susceptible to the power and influence of another firm. While the more powerful partner may be in a position to create more favourable terms of trade for itself (Heide and John 1988), should the more powerful partner choose to exercise its power and the opportunism be detected, the other partner will seek to terminate the relationship (Lohtia and Krapfel 1994). Therefore, it is hypothesised that;

*H<sub>6</sub> there will be a significant negative relationship between the grower's dependence on their preferred market agent and the grower's trust in that market agent.*

Dependence is also a function of the magnitude of the transaction specific investments made (Heide 1994; Lohtia and Krapfel 1994). By making idiosyncratic investments in a relationship the firm creates an incentive to maintain the relationship. Furthermore, the making of such investments may also provide a powerful signal to the other party. Observing the other party's pledges may cause the channel member to be more confident in the other party's commitment to the relationship, because the other party will sustain considerable economic loss if the relationship is terminated (Heide and John 1988). Transaction specific investments therefore offer tangible evidence that the partner can be believed, that it cares for the relationship and is willing to make sacrifices (Ganesan 1994).

However, the making of transaction specific investments is not sufficient to develop a long-term relationship (Ganesan 1994). Long-term relationships bound only by dependence and investments indicate forced collaboration rather than cooperation. Cooperation reflects the firm's ability to collaborate and work together in a joint fashion to achieve their respective goals (Frazier 1983). High levels of ideological agreement, goal compatibility, role satisfaction and the restrained use of power contribute to high levels of cooperation.

Relationships occur for the purpose of pursuing mutually beneficial goals and interests. The essence of a cooperative relationship is that both parties anticipate that any disadvantages that may arise from the loss of independence, plus the costs of managing the relationship, are more than compensated for by the benefits that arise. However, if the benefits achieved compare poorly to those expected, the firm may become dissatisfied and will seek to find more attractive alternatives (Frazier 1983). Parke (1993) describes how the expectation of positive outcomes both now and in the future motivates firms to pursue cooperative relationships. Cooperation is maintained when each firm compares the immediate gains from engaging in opportunistic behaviour with the possible sacrifice of future gains.



Nevertheless, the incentive to engage in opportunistic behaviour will arise in cooperative relationships because one party will find it advantageous to maximise its own gains at the expense of the relationship (Parke 1993). If either party to an exchange relationship chooses to behave opportunistically, it is likely to provoke retaliatory behaviour. Opportunism begets opportunism. With trust and confidence in the relationship undermined, the aggrieved party will seek to withdraw or to limit their commitment to the relationship over time. Furthermore, developing the reputation as a selfish, exploitative and unreliable exchange partner will decrease the likelihood of participating in future cooperative relationships. Since the majority of growers claim market agents are engaging in opportunistic behaviour, it is hypothesised that;

*H<sub>7</sub> there will be a significant negative relationship between the grower's dependence on their preferred market agent and the grower's satisfaction with the exchange.*

### **Methodology.**

In February 2000, using the customer list provided by the Chamber of Fresh Fruit and Vegetable Industries, all fresh fruit and vegetable growers dealing with the market agents in the Perth Metropolitan Market were asked to complete a mail questionnaire. Divided into three parts, the questionnaire sought information about the nature of the grower's farming enterprise including its location, size, the nature of the crops cultivated and an estimate of production.

Part Two began with a series of open-ended questions about the nature of the grower's relationship with their most preferred market agent, the duration of that relationship and whether the growers intended to continue with the relationship. Growers were then asked to respond to 40 prepared statements about the nature of their relationship with their preferred market agent. Growers were asked to respond on a 7 point scale from 1 (I disagree a lot) to 7 (I agree a lot).

To reduce possible halo or multi-collinearity problems, the questions were grouped into one of five blocks. Those items being used to measure a single construct were grouped together and each construct was spatially separated (Garbarino and Johnson 1999). Information was sought on the grower's satisfaction, trust and commitment to the relationship, the nature and the extent of communication in the relationship and one moderating variable (dependence).

Satisfaction was evaluated by 7 items. With minor modifications to reflect the nature of the industry and the participants, the measures were adapted from previous research reported by Anderson and Narus (1990), Anderson and Weitz (1992), Ford (1984), Frazier (1983) and Ganesan (1994).

Trust was assessed by 8 items based on the literature reported by Anderson and Narus (1990), Anderson and Weitz (1992), Doney and Cannon (1997), Ganesan (1994), Moorman, Deshpande and Zaltman (1993) and Morgan and Hunt (1994).

Commitment was measured by 6 items, developed from the literature reported by Ganesan (1994), Gundlach, Achrol and Mentzer (1995), Moorman, Deshpande and Zaltman (1993) and Morgan and Hunt (1994).

Communication was measured by 14 items developed from the literature reported by Athaide, Meyers and Wilemon (1996), Anderson and Narus (1990), Anderson and Weitz (1992) and Ford (1984).

Finally, dependence was measured using 5 items developed from the literature reported by Frazier, Gill and Kale (1989), Ganesan (1994) and Morgan and Hunt (1994).

The questionnaire concluded by asking the growers to respond to a number of demographic questions.

The grower's responses to the 40 relational questions were first analysed using principal component analysis (with varimax rotation and Kaiser normalisation). Those items with factor loadings below 0.5 or with cross-loadings greater than 0.4 were excluded. Further clarification of the items contributing to each factor was achieved by applying the reliability coefficient (Cronbach's alpha). Where the alpha coefficient was below 0.5, the factor was excluded from further analysis (Nunnally 1978).

Using the resultant factor means, the hypotheses were then empirically tested using linear regression. Finally, the resultant model was tested in its entirety using Amos (version 4.01).

## **Results and discussion.**

A total of 198 useable responses were received from the mail-out of approximately 1,100 questionnaires, representing a response rate of just 18%. The majority of respondents were growers of temperate fruit crops (63%). Most respondents (65%) were managing production enterprises smaller than 10 hectares, from which more than 55% of respondents drew more than 71% of their total household income.

While most respondents (68%) had been growing fresh fruit and vegetables for more than ten years, 71% had been dealing with their most preferred market agent for less than ten years. Furthermore, more than one half of respondents (51%) dealt with more than one market agent. While the major reason given for trading with more than one market agent was to obtain a competitive analysis of the returns received from the grower's most preferred market agent, other growers found it necessary to use more than one agent because it provided access to different markets, the preferred market agent was unable to accommodate all of the growers output, or the grower preferred to consign some lines to those agents who had the necessary expertise (or infrastructure) to accommodate the produce.

In examining the nature of the grower's relationship with their most preferred market agent, principal component analysis revealed four factors rather than the five factors anticipated (Table 1).

Factor 1 (relational quality) was found to be a composite measure of satisfaction and trust. The construct captured all 5 measures of satisfaction which included the grower's perceptions of being treated fairly and equitably, adequately rewarded, the extent to which the relationship met the partners expectations, cooperation and the speed with which the grower's most preferred market agent handled complaints. The construct also captured all 7 measures of trust including the extent to which the preferred market agent always kept their promises, always considered the partners best interest, the belief the grower had in the information provided by the market agent and the market agents reputation for being honest.

**Table 1. Relational factors in the Western Australian fresh produce industry.**

<b>Item</b>	<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>F4</b>
Treated fairly and equitably	0.736			
Agent quick to handle complaints	0.706			
Adequately rewarded by preferred market agent	0.678			
Good cooperation	0.669			
Agent often meets expectations	0.649			
Agent identifies suitable varieties		0.850		
Agent suggests grower should coordinate plans		0.829		
Spends time to advise what the market expects		0.694		
Agent frequently advises quality requirements		0.676		
Agent advises of potential market demand		0.617		
Preferred agent has a reputation for being honest	0.817			
Trust preferred supplier	0.810			
Confidence in preferred agent	0.784			
Agent not always honest	-0.731			
Believe the information provided by preferred agent	0.708			
Agent always considers growers best interests	0.707			
Agents always keeps promises	0.646			
Expect to continue to interact with agent			0.831	
Expect relationship to continue			0.801	
Preferred agent is less risky			0.617	
Relationship based on mutual benefit and trust			0.608	
Must adhere to agents demands				0.834
Agent has all the power				0.818
Agents controls all the information				0.755
Over time grower has become dependent on agent				0.712
Eigenvalue	7.20	3.89	3.47	2.76
Percent variance	28.79	15.34	13.90	11.03
Cumulative variance	28.79	44.13	58.03	69.06
Factor mean	4.83	3.82	5.24	2.96
Standard deviation	1.36	1.56	1.30	1.60
Alpha coefficient	0.953	0.862	0.854	0.809

Factor 2 (communication) was derived from 5 items which measured the extent to which the grower's most preferred market agent advised the grower of potential market demand, quality requirements and market expectations. The construct also captured the extent to which the market agent assisted the grower in identifying the most suitable varieties and to coordinate production schedules.

Factor 3 (continuity) captured 4 of the 6 items which sought to measure the grower's intention to maintain the relationship including the extent to which the relationship was based on mutual benefit and trust and the grower's expectation that the relationship with their most preferred market agent would continue.

Factor 4 (independence) suggested that most growers were able to make their own decisions without undue influence or duress. The majority of respondents indicated that they did not have to adhere to their preferred agent's demands, nor did the agents have all of the power. However, most growers agreed that their most preferred market agent generally possessed much greater market information.

With principal component analysis producing four rather than five factors, it was not possible to test the hypothesis as initially postulated. Since satisfaction and trust were found to exist as a single construct, it was proposed that there would be; (a) a significant negative relationship between dependence and the satisfaction-trust construct; (b) a significant positive relationship between communication and the satisfaction-trust construct; and, (c) a significant positive relationship between satisfaction-trust and the desire to maintain the relationship.

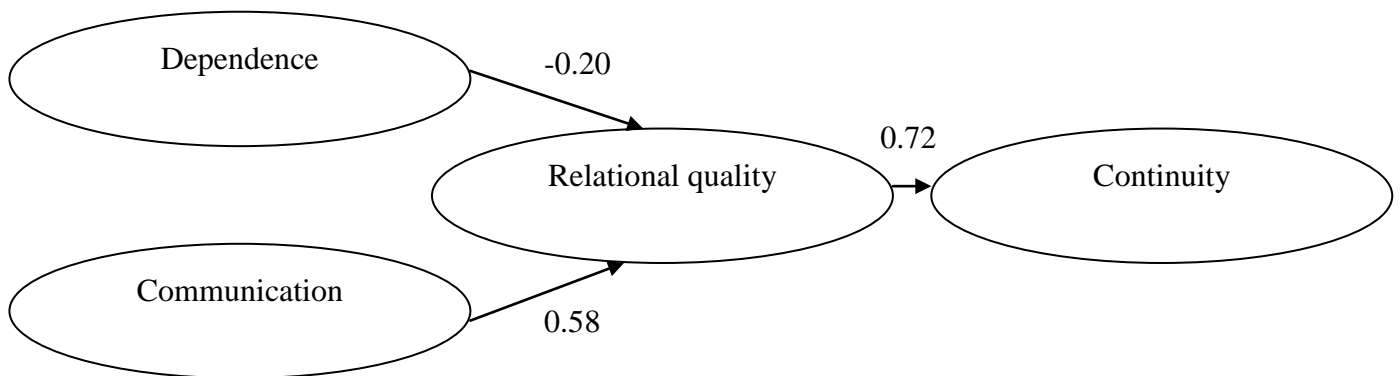
Regression analysis indeed confirmed each of the three revised hypothesis (Table 2)

**Table 2. Modelling buyer-seller relationships in the Western Australian fresh fruit and vegetable industry.**

<b>Independent</b>	<b>Dependent</b>	<b>Serror</b>	<b>Beta</b>	<b>R<sup>2</sup></b>	<b>t</b>
Relational quality	Continuity	0.891	0.727	0.526	14.563
Dependence	Relational quality	1.265	-0.343	0.113	-4.961
Communication	Relational quality	1.064	0.620	0.381	10.837

Further support for the satisfaction-trust construct was obtained from the application of the structural equation modelling program (Amos 4.1)(Figure 2).

**Figure 2. Model of buyer-seller relationships in the Western Australian fresh fruit and vegetable industry**



The model proved not only to be significant (chi-square = 15.245, df = 3, probability = 0.002) but to satisfy the major empirical test (CFI = 0.994) (Bentler 1990).

Nevertheless, since the various items which formed the satisfaction-trust construct emerged so clearly from the principal component analysis in the two blocks of questions in which they had been asked, the satisfaction-trust construct was forced into the two constructs satisfaction and trust. For the five items measuring satisfaction, the reliability coefficient was 0.9234; for

trust, the reliability coefficient was 0.9195. The six original hypotheses were then tested (Table 3) and the revised model evaluated using Amos 4.1 (Figure Three).

**Table 3. Modelling buyer-seller relationships in the Western Australian fresh fruit and vegetable industry.**

Independent	Dependent	Serror	Beta	R <sup>2</sup>	t
Satisfaction	Trust	0.809	0.824	0.677	19.823
	Continuity	0.910	0.694	0.479	13.233
Trust	Continuity	0.943	0.688	0.473	12.921
Dependence	Satisfaction	1.284	-0.293	0.081	-4.149
	Trust	1.342	-0.356	0.122	-5.171
Communication	Satisfaction	1.098	0.604	0.362	10.393
	Trust	1.157	0.590	0.344	9.927

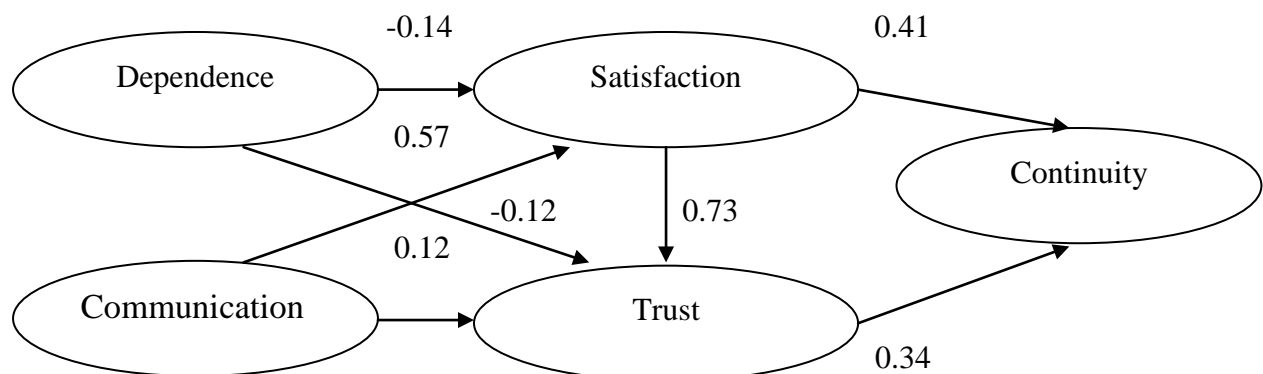
As predicted, there was a significant positive relationship between satisfaction and trust and a direct positive relationship between satisfaction and the grower's desire to maintain their relationship with their most preferred market agent. There was also a significant and positive relationship between trust and the grower's desire to maintain their relationship with their most preferred market agent.

The extent to which the market agent assisted the grower in meeting the needs of the market, to identify more suitable varieties and the extent to which the market agent advised the grower of potential market demand had a significant and positive effect on both satisfaction and trust.

As predicted, the more the grower was forced to adhere to the market agent's demands and the more power the market agent wielded, the less satisfied grower's were in their relationship and the less they trusted their most preferred market agent.

The alternative model also proved not only to be significant (chi-square = 14.879, df = 3, probability = 0.002), but to satisfy the major empirical test (CFI = 0.995) (Bentler 1990).

**Figure 3. Alternative model of buyer-seller relationships in the Western Australian fresh fruit and vegetable industry**



However, since these were not nested models, it was not possible to determine which model was significantly better than or worse than the alternative.

## **Conclusion and implications.**

It is abundantly clear that there is a high degree of correlation between satisfaction and trust. From a transaction-specific perspective, while satisfaction is most often seen as a post-choice evaluation of a specific purchase occasion (Oliver 1980), in the context of long-term buyer-seller relationships, satisfaction is a cumulative experience based on the total purchase and consumption experience over time (Fornell 1992).

Cumulative satisfaction is best described as a process which extends across the entire consumption period and within which a continual analysis of customer-product interactions is fundamental (Fournier and Mick 1999). Satisfaction is therefore an active, dynamic process from which satisfaction emerges as the result of continuous interactive negotiation between the customer and the product or service. Trust is also a cumulative experience arising from repeated interactions which, over time, enables the firm to predict or forecast how its partner will behave (Doney and Cannon 1997).

Throughout the extent literature on buyer-seller relationships, various measures of satisfaction have been used including the extent to which the respondent is contented/disgusted (Ganesan 1994), contented/frustrated (Spreng, MacKenzie and Olshasky 1996), delighted/terrible (Spreng, MacKenzie and Olshasky 1996), happy/unhappy (Frazier, Gill and Kale 1989; Anderson and Narus 1990), pleased/displeased (Crosby, Evans and Cowles 1990; Patterson, Johnson and Spreng 1997) and even the extent to which the respondent is satisfied/dissatisfied with their relationship (Frazier, Gill and Kale 1989; Crosby, Evans and Cowles 1990; Patterson, Johnson and Spreng 1997; Selnes 1998). In most cases, researchers have used one or more of these scales to develop a multi-item measure of satisfaction.

However, while these measures produce highly reliable scales, reliability is no guarantee of either the veracity or unidimensionality of the construct (Gerbing and Anderson 1988). Babin and Griffin (1998) contend that many of these measures represent the thoughts that cause satisfaction, more than they indicate satisfaction itself. Selnes (1998) argues that many of the various item measures used to evaluate both satisfaction and trust are antecedents to either construct, therefore preferring to use a single item measure for both trust and satisfaction. However, support for this approach is difficult to justify, for it is widely accepted that trust is comprised of at least two constructs (credibility and benevolence)(Ganesan 1994) and that both satisfaction and dissatisfaction are quite separate constructs (Babin and Griffin 1998).

More recently, Geyskens, Steenkamp and Kumar (1999) have sought to differentiate between what they describe as economic satisfaction and non-economic satisfaction. Economic satisfaction is defined as the channel member's positive affective response to the economic rewards that flow from the relationship such as sales volumes and margins. Conversely, non-economic satisfaction is defined as the channel member's positive affective response to the non-economic psychological aspects of the relationship. A channel member satisfied with the non-economic aspects of their relationship, appreciates the contact with its partner and on a personal level, likes working with the partner because the channel member believes the partner is concerned, respectful and willing to exchange ideas.

Geyskens, Steenkamp and Kumar (1999) report that trust is rather strongly correlated with non-economic satisfaction, conflict and commitment, so much so, that mean correlations among non-economic satisfaction, trust and commitment vary between 0.513 and 0.767 and may share between 23 - 59% of their variance in common.

However, if non-economic satisfaction and trust were essentially the same construct, each would exhibit an identical pattern of relationships with various antecedents and consequences. Such, however, is not the case, thereby suggesting that both satisfaction and trust exist as separate but inter-related constructs (Geyskens, Steenkamp and Kumar 1999).

From the grower's perspective, trust in their most preferred market agent is derived primarily from their satisfaction with the exchange. Satisfaction will reflect the grower's feelings of being adequately rewarded, but more importantly, in the context of the fresh fruit and vegetable industry, of being treated fairly and equitably. Equitable outcomes suggest that neither party has been taken advantage of in the relationship and that both parties are concerned about their mutual welfare.

In the fresh fruit and vegetable industry, where prices are determined primarily by supply and demand, growers may often feel that they have been inadequately rewarded, especially when high prices are achieved for rather mediocre quality produce when the market is under-supplied. However, such situations are becoming increasingly rare, for high prices attract produce from interstate and growers will divert produce destined to the export market to the domestic market if they feel they can achieve a higher price. Particularly in Western Australia, where supply generally exceeds demand, the grower's frustration with the market agent's performance is most apparent when the market is saturated.

The market agent's ability to continue to attract a grower's patronage will therefore depend upon their ability to provide consistent returns to the maximum extent that they are able. Since growers review each transaction with a market agent as a separate transaction and since growers may readily switch between alternative market agents, the grower's satisfaction with the performance of their most preferred market agent is a cumulative experience. However, while the grower and the market agent may have enjoyed a positive long-term relationship, the relationship is extremely vulnerable to what Tikkanen, Alajoutsijarvi and Tahtinen (2000) describe as a critical incident. Should the market agent fail at any time, the grower will, in all probability, terminate the relationship unless the market agent has taken various steps to build the grower's confidence.

The most significant investment a market agent can make is not to behave in any way that might be construed as opportunistic. The incentive to engage in opportunistic behaviour occurs because the market agent finds it advantageous to maximise their own gains at the expense of the relationship. However, while the desire to pursue individual interests may lead to behaviour that is entirely rational for the market agent, such will produce an outcome that is less than optimal. Opportunism begets opportunism. With trust undermined, growers will either withdraw from the relationship or limit their commitment to it. Developing a reputation as a selfish, exploitative and unreliable exchange partner will decrease the likelihood of the market agent participating in any future cooperative relationships (Parke 1993).

As the market agent is a market intermediary facilitating exchange between the grower and customers, the market agent has greater access to market information. While it is widely accepted that trust is developed from the constant and detailed exchange of information (Dwyer, Oh and Schurr 1987; Anderson and Narus 1990), in the context of the fresh fruit and vegetable industry, the sharing of market information builds satisfaction. Grower's receive market information from their market agent, other growers and other market agents, but to build trust, the market agent must be prepared to provide grower's with advanced information

about impending changes in the market and be open in sharing information about themselves, no matter how negative that might be. The intimate disclosure of such information, where there is some risk that the other party may disclose that information to competitors, establishes trust by providing tangible evidence that the market agent is willing to make itself vulnerable (Doney and Cannon 1997). Furthermore, the market agent's willingness to make idiosyncratic investments will also provide evidence that the agent can be believed, that it cares for the relationship and is willing to make sacrifices (Ganesan 1994). In the context of this particular study, in order to capture a greater share of the grower's business, the market agent may find it necessary to invest a considerable amount of time and effort in order to help growers improve the quality of the produce they consign to market.

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