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RETAILER NEW PRODUCT EVALUATION AND NEW

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TOWARD AN INTEGRATED CONCEPTUAL MODEL OF RETAILER NEW PRODUCT EVALUATION AND NEW PRODUCT SUCCESS

By

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ABSTRACT

TOWARD AN INTEGRATED CONCEPTUAL MODEL OF RETAILER NEW PRODUCT EVALUATION AND NEW PRODUCT SUCCESS

By

Ying Huang

The main objective of this study is to establish a link between two different streams of literature devoted to new products in the consumer market: the first is new product (NP) literature, which focuses on manufacturers' strategies and procedures in launching new products; the second is retail buying (RB) literature, which focuses on retailers' buying behavior in relation to new products. To achieve this goal, we propose an integrated model of retailer new product evaluation and new product success focusing on two stages in the retail buying process: (1) the evaluation stage and (2) the post-evaluation stage.

Using a sample collected from China, we tested the model. The results of this study suggest that the retail buyer derives his/her evaluation of a new product from new product advantage to consumers, new product advantage to retailers, and retailer trust of the supplier. Further, this evaluation influences the extent of the retailer's collaboration with the supplier, and in turn, influences new product performance and retailer market performance and retailer financial performance. Due to the critical role retailers play in the potential market success of a new product, this study is an initial step in exploring the importance of retailer new product buying in the new product development chain—an area that connects RB literature with NP literature.

To Yingzi, Franklin, Jefferson, and William Wu, whose enduring love and support will be cherished forever.

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CHAPTER 1

INTRODUCTION

New products are crucial to the survival and prosperity of modern firms. According to the American Productivity & Quality Center (2003), new products launched in the last three years account for more than one fourth of company sales. Because successful new products help entice new customers and increase sales, profit, and market share, generating a continuous stream of new products is important to every firm striving to stay competitive and successful (Brown and Eisenhardt 1995; Cooper 2005; Hamel and Prahalad 1991). Therefore, some companies, such as 3M, have been known for having policies requiring that new products account for at least 30 percent of total sales (see Kono and Lynn 2007).

Every year, a great number of new consumer products are introduced into the market. In the U.S. alone, consumer product manufacturers introduce 15,000 to 20,000 new products including food and non-food items each year (Gallo 1997). The process of introducing a new product into the market is referred to as the term "new product launch". The new product launch is risky and typically the most expensive stage in the new product development process (NPD), thus representing a pivotal factor in determining the success of new consumer products (Calantone, di Benedetto and Stank 2005). Unfortunately, many new products fail during the new product launch process (Kono and Lynn 200). The failure rate is found to vary from 40 to 90 percent depending on the firms studied and the definition of failure employed (Mahajan, Muller and Wind 2000). The reasons for failures are many and range from the inferior technology of a new product to intense competition to insufficient marketing support (Calantone and di

Benedetto 1988). Among the different factors relevant to new product failure, very little attention is paid to distribution (Pellegrini and Zanderighi 1991). The literature tends to underestimate the role played by distribution in the success/failure of new consumer products.

Distribution has been traditionally viewed as a variable within the marketing mix: something that is totally controlled by manufacturers through investment in marketing support and the effort of a sales force (Crawford 1977; Kotler 1997). In this manner, retailers and other distributors have been treated simply as intermediaries, passing products to consumers in the distribution channel. For many years manufacturers have dictated what retailers[1] should stock and have decided pricing, promotion, and presence of merchandise in stores (Corstjens and Corstjens 1995). However, this picture is completely out of date. Since the mid-1990s, the talk in both academic and practitioner journals as well as in the popular press has been that channel power has increasingly shifted from manufacturers to retailers and it now rests with retailers (Kadiyali, Chintagunta and Vilcassim 2000), particularly as retail concentration becomes more prevalent. Moreover, in the conventional marketing view, distribution is assumed to be transparent and passive (Corstjens and Corstjens 1995). It is assumed that retailers pass back to the manufacturers all information of the consumer market, and, as a result, retailers' initiatives and behaviors are mostly ignored. In reality, retailers have their own marketing strategies, and they do not necessarily conform to those of manufacturers (Pellegrini and Zanderighi 1991). Equipped with advanced information technologies, retailers can now choose to collaborate through sharing information such as scanner data

[1] In this dissertation, "retailer" is used interchangeably with "buyer" unless otherwise specified and "manufacturer" is used interchangeably with "supplier".

and loyalty programs with manufacturers or simply keep the information for their own benefits—for example, retailers may choose to promote their own private labels. Today, modern retailers select products, allocate shelf space, plan promotion activities, and price products according to their own objectives rather than following the manufacturer's recommended selling price (MRSP). Having totally changed the traditional view of distribution, such retailers are called "power retailers" (Lusch and Vargo 1998). Accordingly, during the new product launch process, today's retailer needs to be considered as an independent and integral force in the marketing channel who possesses a dual role: (1) as a gatekeeper determining new products' access to the market in the marketing channel (Rao and McLaughlin 1989), and (2) as a value-added co-producer determining the success of new products in the market (Vargo and Lusch 2004).

The retailer's first role as a gatekeeper has caught the attention of researchers and has been examined by previous studies. For a new product, gaining entry into stores is important in its initial introduction into the market because this determines the level of consumer accessibility. Every week, hundreds of new consumer products are presented to retailer buyers. For example, Wal-Mart receives about 2000 inquires each week asking for adding a new product (Sebenius and Knebel 2006). The Progressive Grocer study reports that, on average, buyers turn down about 65 to 70 percent of all products presented to them (Desiraju 2001; McLaughlin and Rao 1991). Two major reasons explain this relatively high rejection rate. First, risks related to the high failure rate of new products and uncertainties associated with the potential demand of new products explain retailers' reluctance to accept new products (Desai, 2000). Each year, new products that fail in the market cost food retailers in the U.S. an average of $956,800 per

store (Desiraju 2001). Second, scarce shelf space limits retailers' capacity for stocking new products. From 1970 to 1990, new store size has increased by only 47 percent, while the number of new product introduced has grown by 795 percent (McLaughlin and Rao 1991). There is simply not room for all the new products. Therefore, previous studies have been centered on developing models to predict retailers' decisions about whether to accept or reject a new product. However, these models in general proved to be poor predictors of the accept decision. As a result, researchers have called for a better model for explaining the accept decision (e.g. Rao, McLaughlin and Hawkes 1995). Indeed, examining a dichotomous accept/reject decision fails to disclose the richness of the accept decision. Such an approach seems to ignore the likelihood of different evaluations given to different new products. For example, one new product might be evaluated as "average", and thus may be only marginally accepted, whereas another new product might be evaluated as "superior", and thus is accepted without reservation. Consequently, retailers may exert different behavior (e.g. providing a large amount of promotional support vs. providing no promotional support) after stocking new products based on their evaluations of new products. Therefore, the extant approach to new product buying seems to have a limited understanding of the retailer's role of a gatekeeper in new product introduction. To solve this problem, the first objective of this dissertation is to propose a realistic model of new product evaluation rather than the dichotomous accept or reject model. As such, factors at the construct level instead of decision criteria at the item level that influence new product evaluation will be identified. For example, one factor identified in our model is new product advantage, a construct representing an overall assessment of new product attributes.

The second role of the retailer as a co-producer in determining the success of a new product launch has been virtually overlooked in the literature. Although previous studies allude to the importance of retailers in determining new product success, they usually "treat the variable in an ad hoc way or do not consider it at all" (Rao and McLaughlin 1989, p. 81). Little research has been dedicated to investigating how retailers influence new product performance. In this dissertation, we contend that retailers' behavior towards new products influences new product performance in the market. The retailer, being the customer of the manufacturer, is not only a receiver of a new product but also a co-producer of the new product offering to consumers. When consumers make a purchase from stores, they buy not only a physical item produced by the manufacturer, but also the "service" (e.g. location, store brand, ambience, customer service, etc.) produced by the retailer (Dawson 2000). The interaction of and coordination between the retailer and the manufacturer with respect to the new product offering is therefore important and determines the performance of the new product. This argument is consistent with strategic partnerships advocated in the relationship marketing paradigm (e.g. Anderson and Narus 1990; Cannon and Perreault 1999). Therefore, the second objective of this dissertation is to investigate the influence of the retailer's collaborative behavior on new product performance.

Further, though new product performance has been frequently investigated from the manufacturer's perspective in the literature, neither the construct nor its impact on retailer performance has been explored from the retailer's perspective. This is surprising given that the retail buyer's responsibility is profit generation. The performance of new products in stores is a major concern of buyers and is consistently monitored by retailers

because new product performance contributes to store sales (Montgomery 1975). Thus the third objective of this dissertation is to examine the impact of new product performance on retailer performance.

Specifically, this dissertation seeks to answer the following research questions:

1) What are the factors that determine a retail buyer's new product evaluation?
2) How does a retailer's new product evaluation influence the retailer's collaborative behavior?
3) How does a retailer's collaborative behavior influence new product performance?
4) How does new product performance influence retailer performance?

Significance of the Study

This dissertation is an attempt to answer the call for developing a theory of retail buying behavior (see Rao, McLaughlin and Hawkes 1995, p. 22). The main objective is to establish a link between two different streams of literature devoted to new products in the consumer market: the first is new product (NP) literature, which focuses on manufacturers' strategies and procedures in launching new products; the second is retail buying (RB) literature, which focuses on retailers' buying behavior in relation to new products. To achieve this goal, we propose an integrated model of new product evaluation and new product success focusing on two stages in the retail buying process: (1) the evaluation stage and (2) the post-evaluation stage. We propose our model of new product buying as a general model because Skytte and Blunch (2005) claim that it is possible to generalize retailers' buying behavior across countries after they conducted an analysis in 16 Western European countries, and Sternquist and Chen (2007) assert that Chinese retail buying behavior is similar to Western retail buying behavior. Thus, this

dissertation represents the first attempt to test our model in one country. We test the model with a national sample of China. Later studies will be conducted in other countries to validate the generalizability of this model. The results—from China as well as from other countries—will provide important theoretical and managerial implications for both retailers and manufacturers.

Organization of the Study

Chapter one introduces the objectives and the significance of this dissertation. An overview of this dissertation is then presented.

Chapter two reviews the previous literature on the areas of RB and NP. Relevant issues are identified in both areas in relation to new product buying behavior. A comparison of this dissertation to the previous studies is also provided. Theoretical underpinnings for the model are then presented. Drawn from the literature in both areas, hypotheses are developed for empirical testing.

Chapter three describes the study context for this dissertation and the research methods. Background information is provided regarding retailing in China. The development of the survey instrument, sources of the measures, and the process of data collection are described.

Chapter four deals with analyses and discusses results of hypotheses testing.

Chapter five delineates the contribution of this study and conclusions. Implications for academics and managers, limitations, and future research are also provided.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter consists of three parts. The first part deals with a review of literature in relevant areas. The second part provides theoretical underpinnings for the model. The third part encompasses the hypotheses development.

Part One: Literature Review

The literature review for this dissertation covers two areas: organizational buying (OB), in particular, RB and NP. We review previous studies of retail buying behavior in these two areas and identify relevant issues in relation to retail buying behavior.

A Review of Organizational Buying (OB) Behavior

In an OB context, a buying process is often a dynamic, intricate, and multi-phase process involving a complex set of variables affecting buying behavior (Johnson and Lewin 1996). Although retail and industrial buying both fall under the rubric of organizational buying (Wager, Ettenson and Parrish 1989), research on industrial buying has dominated the area of OB, generated proliferated results over decades, and greatly enriched our understanding of industrial buying behavior. In contrast, studies focusing on RB are scanty and relatively little is known about retailers' buying behavior (McLaughlin and Rao 1991).

Three seminal works of Robinson, Faris, and Wind (1967), Webster and Wind (1972), and Sheth (1973) together set the theoretical foundation for OB, or more accurately, industrial buying. These three works delineated nine sets of constructs that affect industrial buying behavior—environmental, organizational, group, participant, purchase, seller, informational, and conflict/negotiation characteristics as well as the

stages in the buying process. A large number of empirical studies have been conducted to test these three models and results have generally confirmed the validity of the models (see Johnson and Lewin 1996 for a comprehensive review).

In the area of RB, however, researchers have commonly noted the lack of a theory of retail buying behavior (McGoldrick and Douglas 1983; Wagner, Ettenson and Parrish 1989). Although researchers have made a few attempts at conceptualizing retail buying behavior (e.g. Sheth 1981), empirical studies on retail buying typically borrowed industrial buying models, in particular, the Sheth (1973) model (e.g. Silva and Davies 2002; Wagner, Ettenson and Parrish 1989). This may be due to a large degree of the similarity between Sheth's (1973) model and Sheth's (1981) model. However, there are several characteristics that differentiate RB from industrial buying:

1) *Retail buyer as profit center (Sternquist 1998) vs. industrial buyer as cost controller.* One important difference between industrial and retail buying is that retail buyers are responsible for generating revenue through their purchases whereas industrial buyers are responsible for controlling costs, which suggests that retail markup (i.e. profit margin) is important to retailer buyers while low price is imperative to industrial buyers (Wagner, Ettenson and Parrish 1989).

2) *Retail buying as an individual decision-making process vs. industrial buying as a group decision-making process.*[2] Unlike industrial buying decisions, which are often made within a buying center (Webster 1884), retail buying decisions are usually made autonomously by the individual retail buyer (Kline and Wager 1994). Many retailers use central buyers or store buyers responsible for buying, while in an industrial setting, at

[2] We acknowledge certain retailers may use a buying committee. However, the existence of a committee does not influence the buying decision in a major way because the buyer makes recommendations and the committee normally adheres to the buyer's recommendations (Hansen and Skytte 1998).

least the personnel from the purchasing, quality control, and manufacturing departments are involved in the joint decision-making process, and the individual purchasing agent is often a less critical member of the decision-making process in industrial buying (Sheth 1973).

3) *Retail buyers purchase finished goods for resale to the consumer vs. industrial buyers purchase raw materials and component parts for use in production.* Consequently, the right goods for industrial buyers are those necessary to support the production process, while the right goods for retail buyers are likely to be those which buyers expect to sell well (Wagner, Ettenson and Parrish 1989). Therefore, selling performance of products is a major concern of retail buyers while stability and availability of components are important factors to industrial buyers.

4) *Retail buying focuses on product selection vs. industrial buying emphasizes supplier selection.* Two important buying decisions are the selection of products and the selection of suppliers. While retail and industrial buying both involve consideration of product characteristics as well as supplier characteristics, products are likely to be the main focus of retail buying decisions because consumers buy products in stores.[3] In contrast, raw materials or components are more like commodities, thus industrial buyers are more likely to select vendors who can supply low-cost, reliable products.

5) *Retail buyers may require trial vs. industrial products do not require trial.* New products may be accepted by buyers for a trial period and will later be discontinued if they fail to move. For instance, Sternquist and Chen (2007) reported that in China new products are typically admitted for a three-month trial period. Similarly, McLaughlin and

[3] We acknowledge that, in some product categories such as cosmetics, the supplier is as important as the product.

Rao (1991) described that after a new product is accepted and stocked, its sales and performance are monitored for a certain period (e.g. 12 months) and a review is made at the end of the period to decide whether to continue carrying the new product or to withdraw it from shelves. Therefore, McLaughlin and Rao (1991) checked the continuity—whether the products remained on shelves after 12 months—to validate the buyers' acceptance decisions. Of the originally accepted products, 31.9 percent were still on shelves after two year while 69.1 percent were discontinued within the first two years. On the contrary, industrial buyers normally purchase products without a trial period.

In summary, it is clearly shown that RB and industrial buying are two distinct buying processes employing different stages and behaviors. As such, researchers have cautioned against blindly adopting the theory of industrial buying in the retail buying process (Johansson 2001; Pellegrini and Zanderighi 1991; Sheth 1981) and call for making the development of a theory of retail buying behavior as a high research priority (Rao, McLaughlin and Hawkes 1995).

Along with lack of a theoretical framework in RB literature, a review of extant empirical studies of new product buying also reveals eight issues in two main areas: conceptualization and methodology. Our review confirms Hansen and Skytte's (1998) assertion that the findings on retail buying behavior appear scattered and unrelated. Next we will discuss each of these issues and provide a brief argument as to how this dissertation attempts to solve the observed problems in literature. More detailed arguments will be provided in the third part—hypotheses development section. Table 2.1 summarizes a comparison of this dissertation to previous studies in retail buying.

In the area of conceptualization:

1) In terms of the framing of RB situations, product and supplier evaluation are not readily seen as occurring simultaneously. Among a handful of studies investigating retail buying behavior, some focused on supplier (e.g. McGoldrick and Douglas 1983) while others focused on product buying (e.g. Skytte and Blunch 2005). To this end, the literature appears to have supplier or vendor decision on the one hand and product decision on the other.

This dissertation argues that new product buying involves simultaneous consideration of both the new product and the supplier. Therefore, both factors relevant to the new product and the supplier need to be integrated into the new product buying model.

2) Most of studies on RB have adopted the accept/reject decision as a dependent variable.[4] For example, Grashof (1970) uses computer simulation experiments to examine accept and reject criteria associated with alternative products for one product category. Rao and McLaughlin (1989) and Rao, McLaughlin and Hawkes (1995) are by far the most comprehensive studies in attempting to develop a model of predicting retailer accept/reject decisions regarding new products. However, their models were considerably more successful in accurately predicting the reject decision than the accept decision. For instance, Rao, McLaughlin and Hawkes (1995) achieve a correct hit rate of 94 percent of reject decisions compared to 54 percent of accept decisions, while Rao and McLaughlin (1989) obtain a correct hit rate of 87 percent of reject decisions compared to 42 percent of

[4] Two exceptions were Sternquist (1994), whose focus was on the buyers' attitudes towards imported items, and Skytte and Blunch (2005), who asked how likely it was that the respondents would buy a hypothetical product from a hypothetical supplier.

accept decisions.[5] The poor prediction of the accept decision seems to signal an inappropriate tool used by previous studies.

This dissertation proposes to use new product evaluation as a dependent variable in the new product buying model. We argue that the accept/reject decision is a simplistic approach to the buying decision and thus fails to reveal the richness of the result of new product evaluation by retail buyers.

3) Most studies of RB have focused on decision criteria as independent variables. The earlier studies have been focused on determining an array of decision criteria used by retail buyers to make new product accept/reject decisions (e.g. Grashof 1970; Nilsson and Host 1987; Pellegrini and Zanderighi 1991) and more recent ones have concentrated on investigating the impact of one particular criterion—slotting allowances—on new product acceptance (e.g. Rao and Mahi 2003; White, Troy and Gerlich 2000). One study conducted by Nilsson and Höst (1987) collects a detailed list of decision criteria and identifies a total of 394 decision criteria used by retail buyers in 34 studies. The large amount of decision criteria, however, may reduce their practical implications (i.e. too cumbersome for manufacturers to target) because different buyers are likely to adopt different criteria for decision-making (Hansen and Skytte 1997). Moreover, the dominant focus on decision criteria identification seems to signify that much of the research to date is exploratory in nature, rather than explanatory (i.e. emphasizes testing hypotheses of effects and differences).

This dissertation seeks to test hypotheses and identifies factors at construct level rather than decision criteria at item level that affect retail buyers' evaluation of new

[5] The authors followed up with buyers and found that "special characteristics seem to be associated with some of those items accepted by buyers but predicted as rejects by the model" (Rao and McLaughlin 1989, p.86).

products. Two factors identified are the product factor and the supplier factor. This approach is considered more parsimonious than using a pool of decision criteria.

4) Most studies treat the RB process as one stage—the decision stage in which retail buyers make accept or reject decisions, thus almost all of the models stop at the decision point; little is known after new products are accepted. For example, White, Troy and Gerlich (2000) study the impact of slotting fees and introductory allowances on new product acceptance moderated by other variables such as gross margin and competition.

This dissertation represents an integrated model consisting of both new product evaluation and post-evaluation stages. We contend that among new products accepted in stores, retail buyers have different evaluations of the potential success of new products and therefore exert different behavior in coordinating with suppliers.

5) New product performance and its impact on retailer performance were rarely examined in RB literature. McLaughlin and Rao (1991) was the only study that examined new product performance in stores. However, they used continuity—whether new products are still on the retail shelves after two years of acceptance—as a proxy of new product performance. This is an unsophisticated measure of new product performance.

In this dissertation, we argue that new product performance is an important driver of retail performance. New products make a substantial contribution to total retail sales; about one sales dollar in eight is due to extremely new products (Montgomery 1975). Since retail buyers are responsible for generating revenue, new products that fail to achieve the expected performance will be delisted. Therefore, examining the impact of new product performance on retailer performance represents a logical further step of understanding retailer new product buying behavior. Accordingly, this dissertation

includes new product performance and retailer performance as dependent variables in the model as well.

In the area of methodology:

1) Logistic regression is by far the most frequently used method for model testing in RB literature. This is related to the issue of using the accept/reject decision as the dependent variable. For example, Rao and McLaughlin (1989) use data collected on new products presented to a large supermarket chain to estimate logistic regression models to describe the retailer's accept/reject decisions. Similarly, Gerlich, Walters and Heil (1994) use logistic regression to test accept/reject decisions by buyers from one supermarket chain. Although regression has its merits in identifying the predictors, the method shows relationships rather than causation between independent and dependent variables. Further, the interrelationships among the independent variables are not readily revealed.

In this dissertation, the new product buying model is tested by using the structural equation model (SEM). This method provides testing of hypotheses in relation to constructs as well as testing of model fit of the whole model.

2) Typical respondents in many previous studies are a small set of buyers from one or a few retailers. For example, Montgomery (1975) studied the accept/reject results of three supermarket buyers in the Boston area. Rao, McLaughlin and Hawkes (1995) studied the accept/reject decisions of five buyers from a packaged grocer.

In this dissertation, we conducted a national survey of retail buyers from multiple retail organizations.

3) Previous studies are mainly conducted in the U.S., European countries, and other developed countries such as Japan (e.g Alpert et al. 2001) and New Zealand (e.g. Marr

and Thomas 1999). Only two studies took place in a developing country (Hansen 2001; Sternquist and Chen 2007).[6] This is probably because most of developing countries are classified as sellers' markets (Frazier, Gill and Kale 1989; Kale 1986); investigating retailer new product buying behavior is meaningless because manufacturers dictate what retailers sell.

This dissertation is conducted in China—a developing country in a stage of economic transition. Chapter three will describe the study context.

In summary, past studies of new product buying behavior in the area of RB typically examined accept/reject decisions made by buyers on either actual or hypothetical products from a small number of retailers based on decision criteria identified by retail buyers in developed countries.

A Review of New Product (NP) Literature

Among the stages of new product development, new product launch is relatively under-researched in NP literature despite its importance in driving new product success and high associated implementation cost (di Benedetto 1999). The literature reviewed focuses on the area of new product launch and new product performance and reveals the following characteristics:

1) Although distribution has been identified as one of the success factors in new product launch (di Benedetto 1999), the majority of empirical studies have focused on manufacturer strategies and procedures (e.g. Li & Calantone 1998). This is probably because in NP literature, distribution is treated as a tactical decision rather than a strategic decision. The only study involving retailers was Hultink, Thölke and Robben (1999).

[6] Hansen (2001) reported an empirical study on supplier selection criteria as rated by seafood buyers for Chinese supermarkets. Sternquist and Chen (2007) conducted a qualitative study on the new product buying of Chinese retailers.

However, they followed the approach of Rao and McLaughlin (1989), which is typical in RB literature, i.e., identifying decision criteria of Dutch retailers' adoption of new consumer durables.

2) The majority of studies investigating new product performance examine the issue from the manufacturer's perspective (see Montoya-Weiss and Calantone 1994 for a review). To date, none of the studies has measured new product performance from the retailer's perspective.

In summary, a review of the literature in the area of NP introduction draws the same conclusion as did Doyle and Weinberg (1973) more than 30 years ago, who claim that research on NP introduction has focused on the decisions and strategies of manufacturers, virtually ignoring the retailer's role. The retailer is truly a neglected link in the new product development chain.

A Synthesized Conclusion of Literature Review

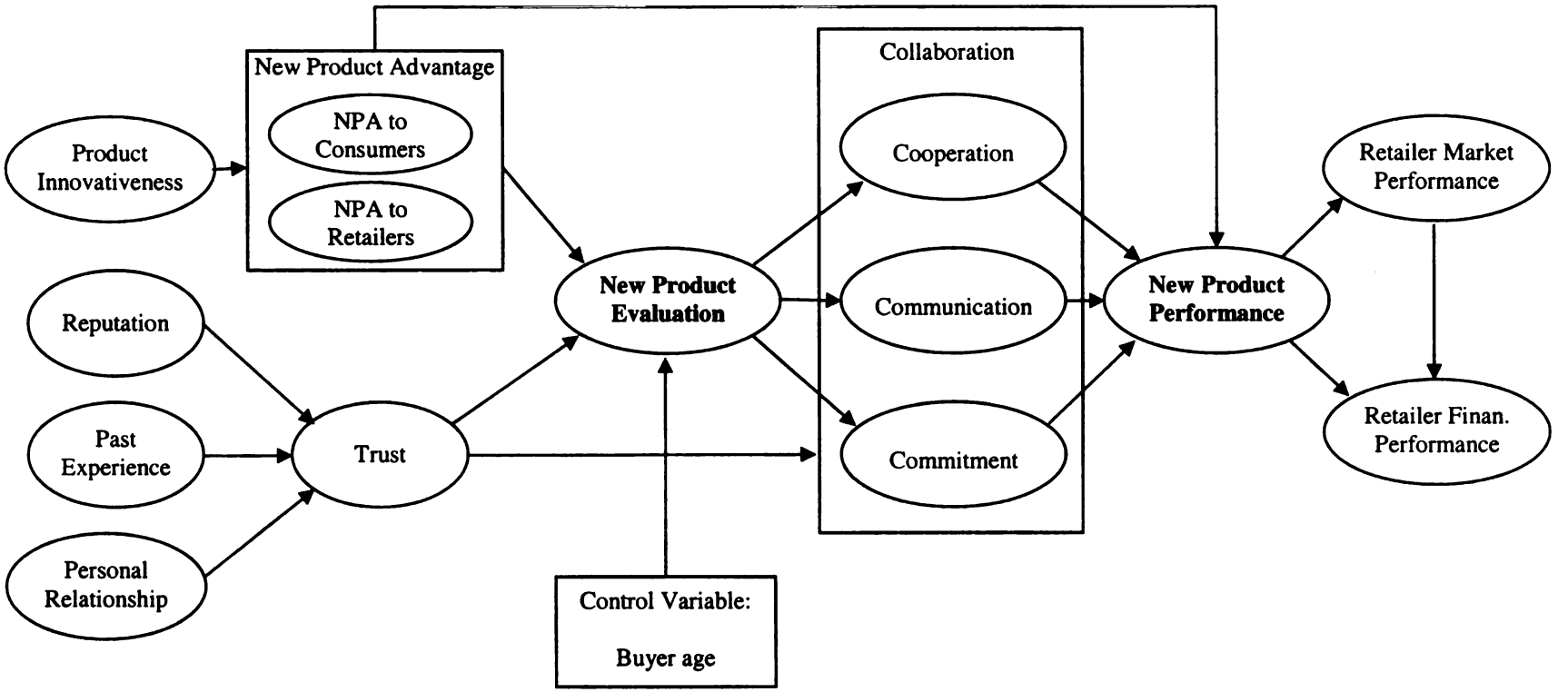
Quite surprisingly, despite researchers' call for an expanded incorporation of RB in NP research (see Rao, McLaughline and Hawkes 1995; Wind and Mahajan 1987), little effort has been made so far in the NP area. The two sets of studies (RB and NP) appear to run parallel to one another (Pellegrini and Zanderighi 1991) speaking their own languages. For example, while new product performance is well-researched in NP literature, it has not been examined in RB literature despite its obvious importance to retailers. Further, although strategic factors such as new product advantage are among the most studied factors in NP literature, new product advantage as a construct never appeared in RB literature. However, some of the items included in new product advantage have been frequently used as decision criteria (e.g. quality; uniqueness) in RB

literature. Therefore, RB and NP studies have the potential to be and should be integrated to reflect the retailer's involvement in the process of new product introduction. This dissertation represents an attempt at achieving this goal.

Table 2.1 – A Comparison of this Dissertation to Previous Studies

Issues in Previous Studies	Examples	In this dissertation
Conceptualization:		
Product and supplier evaluation are examined separately.	Wagner, Ettenson and Parrish (1989) examined retailer supplier selection decision while Skytte and Blunch (2005) studied retailer product selection decisions.	Both the product factor and the supplier factor are considered.
Accept/reject decision as a dependent variable.	Grashof (1970) used computer simulation experiments to examine addition and deletion of criteria associated with alternative product for one particular product category, dog food.	New product evaluation used as a dependent variable.
Decision criteria as independent variables.	Thomas and Marr (1993) asked respondents to rate the importance of 41 criteria compiled by authors.	The product factor (i.e. new product advantage) and the supplier factor (i.e. trust) are independent variables.
Only the decision stage is included.	White, Troy and Gerlich (2000) studied the impact of slotting fees and introductory allowances on new product acceptance.	Both retail new product evaluation and post-evaluation stages are included. Retailer relational behaviors are examined.
New product performance has not been examined from retailers' perspective.	One study that touched on new product performance was McLaughlin and Rao (1991) who checked whether new products were still on shelves two years after the acceptance.	New product performance and its impact on retail performance are examined.
Methods:		
Majority use logistic regression analysis.	Gerlich, Walters and Heil (1994) used logistic regression to test one supermarket chain's accept/reject decisions.	The structural equation model is used.
Respondents are typically a small set of buyers from one or a few retailers.	Rao, McLaughlin and Hawkes (1995) studied five buyers from a retailer in packaged grocery.	186 buyers from more than 40 retailers are studied.
Focuses are developed countries in the Western.	Hansen (2001) reported an empirical study on supplier selection of Chinese supermarkets.	Focus is on a large developing country—China.

Figure 2.1 – An Integrated Model of New Product Evaluation and New Product Performance



Part Two: Theoretical Framework

With the intention to connect two bodies of literature on RB and NP, we propose an integrated conceptual model of retailer new product evaluation and new product success (Figure 2.1). By "integrated", we mean that (1) concepts from both RB literature and NP literature are incorporated, and (2) the model includes both an evaluation stage and a post-evaluation stage. Next we describe the theoretical underpinnings that provide rationale for this model.

Theoretical Underpinnings

Focus on Evaluation

The central focus of our model is the evaluation of a new product formed by the retail buyer, which stems from Mowen and Gaeth's (1992) scheme of the evaluation stage in marketing decision-making. Decision-making is vital to any firm facing choices of investment, management, and deployment of resources in a competitive environment (Crozier and Ranyard, 1997). For the retailer, new product buying decision are essentially decisions of the re-allocation of resources (e.g. shelf-space), which offer both significant problems and substantial profit opportunities (Doyle and Weinberg 1973). Therefore, prior to making important buying decisions, an evaluation stage needs to occur in which judgments about the new product are made.

Mowen and Gaeth (1992) contend that the evaluation stage is fundamental to any marketing decision-making because judgments form the foundation of the decision. Drawing from the decision-making models found in the behavioral decision theory literature, Mowen and Gaeth (1992, p.178) define "evaluation" in marketing decision-making as "the judgment of probability, the judgment of value, and the integration of

these two components into an overall assessment of the outcome." This definition is consistent with Hogarth's (1987) argument that there are two different types of judgment tasks in the evaluation process: the valuation of outcomes and the estimation of probabilities. According to Mowen and Gaeth (1992), the judgment of value involves the assessment of the goodness or badness of an event whereas the judgment of probability refers to making a prediction about how likely an event is to occur or about how frequently it will occur. Together, evaluation denotes the overall utility or assessment of an option as well as its probability of occurrence.

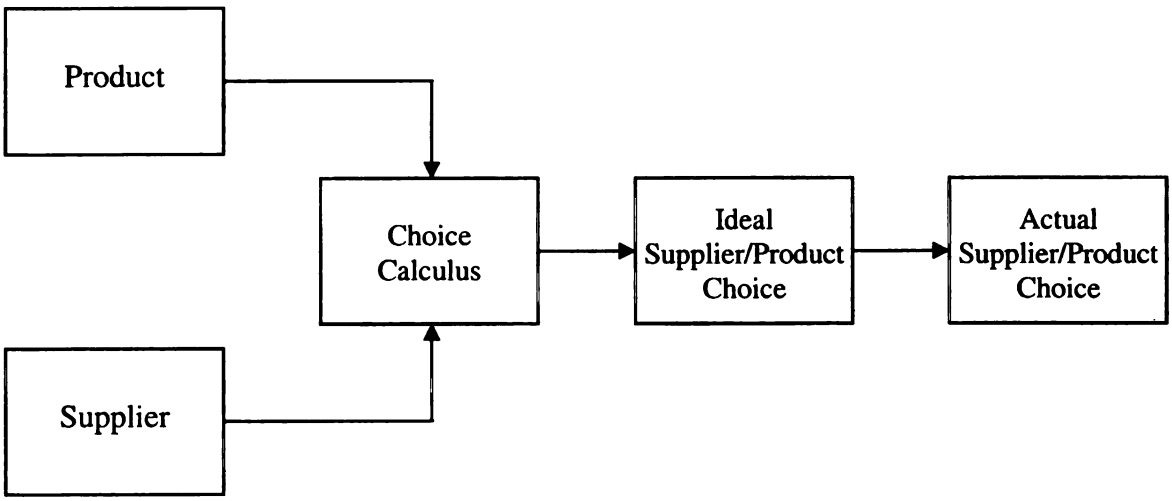
In a new product buying setting, new product evaluation signifies the assessment of the attributes of a new product (i.e. the valuation judgment of superiority or inferiority of a new product) and the prediction of its performance (i.e. the probability judgment of the likelihood of future success). Attribute assessments and performance estimates are integrated to form an overall evaluation of a new product. Consequently, we contend new product evaluation is a broader and more central concept than the accept/reject decision in understanding retailer new product buying behavior and therefore adopt new product evaluation as the focus construct in our model.

The Evaluation Stage

A reduced form of Sheth's (1981) model (see Figure 2.2) of merchandising buying behavior is adopted as a general framework representing the evaluation stage of our model. Sheth's (1981) model of merchandising buying behavior is similar to Sheth's (1973) model of industry buying behavior in that both buying behaviors are affected by two factors: "merchandise requirement" and "supplier accessibility" in Sheth's (1981) model and "product-specific factor" and "company-specific factor" in Sheth's (1973).

These two models explicitly demonstrate that a buying process is an assessment of both the product and the supplier. Moreover, the choice calculus process prior to the actual choice in Sheth's (1981) model is actually an evaluation stage. Based on our aforementioned discussion about the importance of the evaluation stage in new product buying, we use this reduced form of Sheth's (1981) model to represent the new product evaluation stage in our model. Consistent with the Sheth model, two factors that affect new product evaluation are the product factor and the supplier factor.

Figure 2.2 – A Reduced Form of the Sheth Model



Source: Sheth (1981).

The product factor is denoted by new product advantage because new product advantage refers to differences in important attributes between a new product and alternatives (Day and Wensley 1988), and these attribute differences are the base upon which value judgment is assessed in the evaluation stage (Mowen and Gaeth 1992). The supplier factor is denoted by retailer trust of the supplier in our model. Transaction Cost Analysis (TCA) provides a theoretical explanation for using trust as a supplier factor.

Transaction Cost Analysis belongs to the "New Institutional Economics" paradigm. The theory was first suggested by Coase (1937) and further developed by Williamson (1975; 1985; 1991; 1993). Earlier works by Williamson (1975, 1985) polished the TCA framework by adding considerable precision to Coase's general arguments, and more recent works by Williamson (1991; 1993) expanded Coase's initial proposition of firms and markets as polar modes of governance structures to a relative continuum consisting of market, hierarchy, and a variety of hybrid forms in between. Although derived from economics, its substantive focus on exchange and transaction makes TCA particularly relevant to a wide range of marketing phenomena (Rindflech and Heide 1997). Over the past two decades, TCA has received considerable attention in the marketing literature covering vertical integration in channel (e.g. Anderson and Weitz 1983), sales force management (e.g. Atuahene-Gima and Li 2002), foreign market entry (e.g. Anderson and Coughlan 1987), buyer-seller relationship (e.g. Dwyer, Schurr and Oh 1987), and industrial purchasing strategy (e.g. Stump and Heide 1996). None of this attention, however, has been paid to retail buying behavior as yet. This is somewhat surprising because two main assumptions of human behavior (Rindflech and Heide 1997)

make the theory particularly suitable for the context of the retailer new product buying situation.

The first assumption, *bounded rationality*, is the cognitive assumption that decision makers have constraints on their information collecting and processing capabilities and limits on their rationality (Simon 1957). This is a common phenomenon for decision makers during the evaluation stage (Mowen and Gaeth 1992). For example, the retail buyer may not have the complete information to assess all of the attributes of a new product because they are not privy to the entire research and development (R&D) process behind each new product (Patterson and Richards 2000). This type of problem is also called *hidden information*. Further, a retail buyer might have difficulty in predicting the future performance of the supplier in areas such as reliable delivery *ex ante*. To the extent that a new product success is partially dependent on a supplier's collaboration and performance, the behavior uncertainty related to the supplier may augment the problem caused by the bounded rationality of the buyer. This type of problem is also called *hidden action*.

The second assumption, *opportunism*, is the behavioral assumption that a party may seek to serve self-interest given the chance, leading to such behaviors as lying, cheating, violating agreements, and/or other more subtle forms of dishonesty (Williamson 1993). For example, a supplier may break an exclusive selling contract. The opportunistic behavior may happen particularly when there is asset specificity involved. For example, a retailer may have already invested in advertising or promotion for selling an exclusive product. This "lock-in" situation may prompt the manufacturer's opportunistic behavior. In a new product buying setting, the potential problems associated with bounded

rationality of the retail buyer and opportunistic behavior of the supplier increase transaction costs of accepting a new product. In order to minimize transaction costs, exchanges need to be organized so as to economize on bounded rationality of the buyer while simultaneously safeguarding them against the hazards of the potential opportunism of the supplier (Williamson 1993). According to the current theory of TCA, retailer trust of the supplier may serve as a hybrid governance mechanism that reduces transaction costs and mitigates opportunism in the new product buying context characterized by uncertainty and bounded rationality. Williamson (1991) refers to such trust as "calculative trust",[7] which is essentially inferred trust, because an individual or organization calculates the costs and/or rewards of another party cheating or not cheating and decides whether the other party is trustworthy. For example, a supplier with a good reputation may be perceived by a retailer as trustworthy because of the efficacy of reputation in the business community—the immediate gain from opportunism in the field must be traded off against future costs and sanctions (Williamson 1991). In other words, the retailer weights the cost and infers that, for the supplier, the repercussions of being caught cheating are larger than the rewards of cheating, and the supplier would rather not cheat and therefore stay trustworthy.

In the literature, trust serving as an alternative to formal control mechanisms has been validated in many studies (e.g. Bradach and Eccles 1989; Doney and Cannon 1997). Therefore, we propose trust as a supplier factor that helps to mitigate risks associated with the opportunism of a supplier and the uncertainties related to the retail buyer's bounded rationality in new product buying.

[7] Williamson (1991) argues that personal trust is nearly noncalculative, thus, nonexistent in commercial exchange relationships.

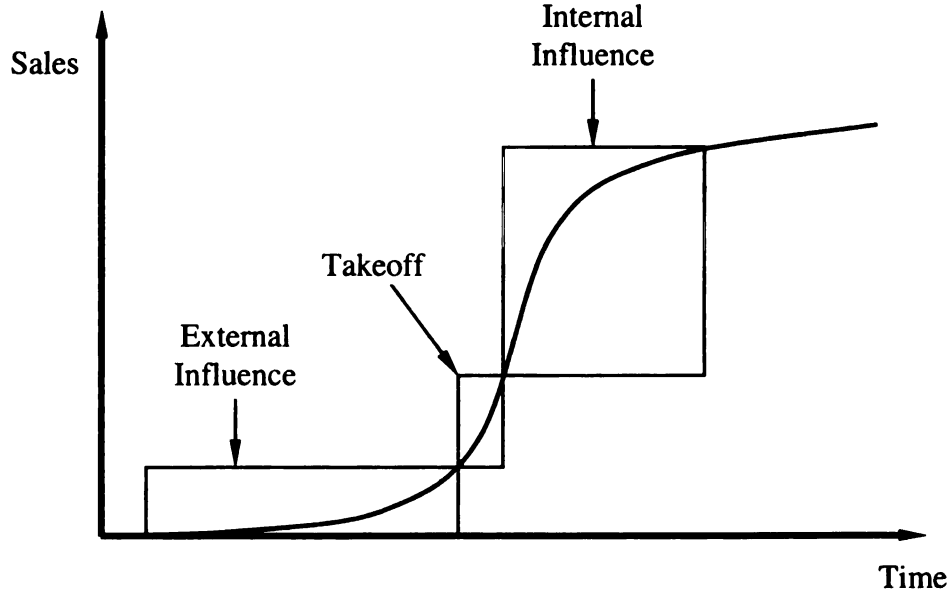
The Post-Evaluation Stage

The success of new products depends ultimately on consumers accepting them (Hauser, Tellis and Griffin 2006). The theory of the diffusion of new products argues that the sales of successful new products typically follow an S-shaped developmental curve as Figure 2.3 shows: the sales start slowly in the initial introduction stage; after some time, sales take off, showing a strong increase in growth rate; finally, sales flatten as the market saturates when a certain level of marketing penetration has been reached (Rogers, 2003). When a new product enters the market, sales increase slowly. During this time, sales are mostly driven by external influences, such as promotions and mass media advertising aimed at making the product take off (Delre et al. 2007). Many promotional and advertising activities are co-planned with retailers. Therefore, the behavior of the retailer after stocking a new product is vital to the new product's success as well.

Further, in arguing that the foci of economics and marketing have shifted from the producer to the customer, Vargo and Lusch (2004) propose a new logic of market—"service marketing"—in which intangibility, exchange processes, and relationships are keys to gaining competitive advantage. A service marketing orientation embraces a view of involving the customer as a co-producer of a market offering; thus, the value of the market offering is co-determined by both the producer and the co-producer. Applying this logic to our context, we argue that the manufacturer and the retailer co-create the value of a new product offering, and the behavior of both parties will determine the success of the new product in the market. Moreover, Vargo and Lusch's (2004) viewing of a customer as co-producer is also consistent with the relationship marketing paradigm. The

philosophy of relationship marketing maintains that developing strategic partnerships characterized by coordination and collaboration between buyers and sellers is crucial to firm success. Retailers and suppliers typically have tended to deal with each other at arms-length, viewing each other as adversaries where one party wins at the expense of the other (Willson 1994). The view is now obsolete and especially wrong during the new product introduction situation. A successful new product brings benefits to both manufactures and retailers. Therefore, coordinating retailer and supplier behaviors during the introduction of a new product and emphasizing cooperation, information-sharing, and commitment are likely to bring mutual benefits and drive the success of the new product.

Figure 2.3 – The S-Shaped Curve of New Product Diffusion.



Source: Delre et al. (2007)

Part Three: Hypotheses Development

New Product Advantage, its Antecedents, and its Effect

New product advantage. New product advantage is defined as "the customer's perception of product superiority with respect to quality, cost-benefit ratio, or functions relative to alternatives" (Montoya-Weiss and Calantone, 1994, p. 415), or "the benefits that customers get from the new product" (Langerak, Hultink and Robben 2004, p. 82). The construct has been extensively studied in NP literature. Though the definitions of new product advantage embrace the customer's perception, almost all studies examining this construct have been from the manufacturer's perspective (e.g. Li and Calantone 1998; Song and Parry 1994). Our approach to new product advantage however differs from the one in NP literature. We take the perspective of a retailer, a customer of the manufacturer.

Retailers not only buy new products but also sell new products to consumers. In deciding on new product selection, the retailer takes into account the ability of the new product in generating store traffic, margin, cannibalization, etc. (Desiraju 2001). As such, during the new product evaluation stage, the retailer buyer considers product advantages to retailers as well as to consumers. A new product that provides an opportunity for a higher margin is a product advantage to retailers, while a new product with a new feature may represent a product advantage to consumers. For example, Sony's PlayStation followed Nintendo into the market, but it used CDs instead of tapes, which allowed the consumer a wider array of content. Similarly, Canon successfully followed Konica into the market for automatic focus cameras by adding a device that made it possible for the auto focus to work at night (Kono and Lynn 2007). Product advantage to consumers and

product advantage to retailers are also interrelated. A new product generating high store traffic—a product advantage to retailers—does so may because the new product meets a previously unmet need of consumers—a product advantage to consumers. Corstjens and Corstjens (1995) argue that consumer product manufacturers can improve their new product success rates if they put more effort into creating product value for retailers as well as differential product advantage for consumers. Consequently, we propose new product advantage as a second-order construct with two dimensions—product advantage to consumers and product advantage to retailers.

The Antecedents of New Product Advantage

Product Innovativeness. Product innovativeness is defined as the degree of newness of a new product, or the degree to which a new product differs from other existing products (White, Troy and Gerlich 2000). In RB literature, product innovativeness is usually represented by one item: either newness (e.g. Grashof 1970) or uniqueness of a new product (Rao and McLaughlin 1989). For instance, in one study, Montgomery (1975) studies retail buyers for a supermarket chain and finds that the newness of a new product is one of the top criteria used by retail buyers in new product acceptance decisions. In another study, Rao, McLaughlin and Hawkes (1995) examine the buying decisions of both actual products and hypothetical products and find that product uniqueness is a significant factor in determining new product acceptance. In contrast, the conceptualization of product innovativeness in NP literature is much more complex. For instance, Lee and O'Connor (2003) conceptualize product innovativeness as a multidimensional construct consisting of four dimensions: product newness to the firm, market newness to the firm, product superiority to the customer, and adoption

difficulty for the customer. Yet, Garcia and Calantone (2002) classify new product innovativeness as having two dimensions: a macro (i.e. industry) level and a micro (i.e. firm) level. Nevertheless, despite different conceptualizations adopted by researchers, past studies in general found a positive relationship between new product innovativeness and new product advantage (Calantone, Chan and Cui 2006; Gatignon and Xuereb 1997). This logic is intuitive because an innovative new product created with the purpose of being superior to the existing products must possess certain product advantages to be superior. Thus, consistent with the literature, we posit:

H1: Product innovativeness is positively related to a) new product advantage to consumers and b) new product advantage to retailers.

The Effect of New Product Advantage

The effect of new product advantage on new product evaluation. The retailer's evaluation of a new product includes the judgment of the total utility value of the new product represented by the attributes of the new product and the likelihood of its potential success (Mowen and Gaeth's 1992). The attribute superiority of a new product increases the likelihood of its success. Based on a synthesis of over 3000 studies, Rogers (1983) concludes that a new product will be successful when it has a relative advantage over existing products. The Theory of Innovation Diffusion (Rogers 1995) also holds that there will be an increased rate of diffusion if consumers perceive the new product to have a relative advantage. On the contrary, new products without a relative advantage do not meet consumer needs and are likely to fail. For example, many food manufacturers have recently been launching new low-carbohydrate products. In 2004, the number of new low-carbohydrate products jumped from around 500 to over 5,000. However, many of those were "me-too" products and thus failed quickly. Not surprisingly, now the talk in

the industry is of products being axed and of truckloads of unsold low-carbohydrate snacks and meals being donated to charities for the homeless (Economist 2005).

New superior and differentiated products are products with superior advantages delivering unique benefits and greater value to the customers (Cooper 2005); new products without advantages imply product parity. Product parity often happens when several competitors produce "me-too" products with almost identical quality and indistinguishable attributes, which leads to substitutability and therefore provides less incentive for retailers to stock the product (Corstjens and Corstjens 1995). Empirical studies also provide evidence of the retailer's preference of new products with product advantage. For example, gross profit margin, a product advantage to retailer, is found as a highly significant factor in determining retailer new product acceptance (Rao, McLaughlin and Hawkes 1995; Wagner, Ettenson, and Parrish 1989). Similarly, Alpert, Kamins and Graham (1992) study the retailer preference of new products and find that a pioneer brand, which is defined as a new product that is significantly different from any other products in the judgment of a retail buyer, is greatly preferred by retailer buyers than a "me-too" product, which is defined as a new SKU that the retail buyer perceives to be about the same as a previously introduced item. Thus, we propose that new product advantage is positively related to the retailer's evaluation of the new product.

H2: New product advantage— a) new product advantage to consumers and b) new product advantage to retailers—is positively related to retailer new product evaluation.

The effect of new product advantage on new product performance. The superior product is its own promoter.[8] The sensory experience of a product is a key factor determining consumer response and evaluation of a new product (Mooy and Robben 2002). Therefore, new product advantage consistently appears as the most important factor in explaining the adoption and success of the new product (Montoya-Weiss and Calantone 1994). Empirical studies in NP literature show that new product advantage leads to superior product performance. For example, one study shows that superior new products contribute to incremental sales, generate excitement about going shopping, meet an unmet need, and have potential to achieve high volume (Alpert, Kamins and Graham 1992). And another study reports that superior new products have five times the success rate, more than four times the market share, and four times the profitability of products without product advantage (Cooper and Kleinschmidt 1990). Cooper (2005) synthesizes numerous research studies on new product development and concludes that the number one driver of new product success is the product itself—superior and differentiated products. Thus, we propose:

H3: New product advantage— a) new product advantage to consumers and b) new product advantage to retailers—is positively related to new product performance.

Trust, its Antecedents, and its Effect

Trust. Trust is generally defined as the belief by one party that the other party is reliable and will fulfill obligations in an exchange relationship (Morgan and Hunt 1994). In short, trust refers to the buyer's belief that the seller is reliable. In a new product buying situation, the buyer may not have complete information about the new product;

[8] Though it is generally true, some of the innovative products may be too radically different from existing products; thus lack of familiarity from consumers and results in low consumer acceptance (Calantone, Chan and Cui 2006).

thus, the buyer's trust toward the supplier serves an important role in reducing transaction costs and mitigating opportunism in exchange contexts characterized by uncertainty (Doney and Cannon 1997).

Trust as an important construct has received a great deal of attention from sociology, social psychology, economics, and marketing. Trust literature suggests that trust can be individual-to-individual (Rotter 1967), individual-to-institution (La Porte and Metlay 1996), individual-to-organization (Morgan and Hunt 1994), organization-to-individual (Doney and Cannon 1997), and organization-to-organization (Zucker 1986). Dooney and Cannon (1997) maintain that trust in the context of buyer-seller relationships mainly take two forms: buyer's trust of the supplier firm and buyer's trust of the salesperson.

Buyer's trust of the salesperson is indeed personal trust, which is different in nature from interorganizational trust (Anderson and Narus 1990). Williamson (1991) argues that personal trust is not likely to exist in commercial exchange relationships. Other researchers often have a similar opinion. For example, Zucker (1986) contends that personal trust is by no means sufficient to produce the quantity and quality of trust needed in highly differentiated socio-economic systems. In other words, trust based on an individual's integrity can only fulfill a supplementary function, compared with interorganizational trust. In the same vein, Lane and Bachmann (1996) show that trust-based relations between buyer and supplier firms rarely evolve spontaneously on the level of individual interaction, but, rather, emerge at organizational level. Interestingly, although claiming that both buyer's trust of the supplier firm and buyer's trust of the salesperson are important in affecting industrial buyer's purchasing behavior, Dooney

and Cannon (1997) fail to find a direct influence of buyer's trust of the salesperson on buyer's behavior in their empirical study. Therefore, in this dissertation, we examine interorganizational trust in retailer new product buying behavior. Nevertheless, we do acknowledge the influence of a salesperson on interorganizational trust. However, we suspect the influence is likely in the form of personal relationships between buyers and salespersons and therefore treat the variable as an antecedent of buyer's trust of the supplier.

The Antecedents of Trust

Williamson (1991) suggests that trust primarily involves a calculative process, that is, one party calculates the costs and/or rewards of the other party cheating or staying in the relationship. To the extent that the benefits of cheating do not exceed the costs of being caught, one party infers that it would be in the other party's best interest not to cheat and therefore the other party can be trusted (Akerlof 1970). As such, calculative trust is in effect an inferred trust that can be derived from personal and indirect experiences.

Supplier Reputation. Supplier reputation is defined as the extent to which firms and people in the industry believe a supplier is honest, reliable, and caring for its customers (Doney and Cannon 1997). Supplier reputation is a risk-reducing factor in retail buying decisions (White, Troy and Gerlich 2000), and thus serves as a mechanism to enforce agreements (Boyd and Richerson 1985). A good or bad reputation of a supplier is easily spread across firms in the industry. A retail buyer thus "knows" a supplier through interactions with others. Granovetter (1985) argues that economic action is embedded in structures of social relations. In other words, firms do not behave or act as

atoms outside a social context; instead, their actions are influenced by interactions with others and between others. In this way, retail buyers can acquire information from the words and experience of other firms and people. Using this indirect experience, buyers can infer the trustworthiness of a supplier (Doney and Cannon 1997).

Further, to the extent that a good reputation takes a long time to build, buyers can also calculate whether the costs of a supplier acting opportunistically exceed the rewards of maintaining a good reputation, and if they do not, the buyer can infer that the supplier will keep acting in a trustworthy manner (Telser 1980). The positive relationship between supplier reputation and buyer trust has been well supported by empirical results in previous studies. For example, a study of retail buyers and their suppliers finds that a supplier's favorable reputation leads to the retailer's trust (Ganesan 1994). Likewise, Anderson and Weitz (1989) find that a manufacturer's reputation is positively related to its channel partner's trust. Thus, we posit:

H4: Supplier reputation is positively related to retailer trust of the supplier.

Past Experience. A retailer's past experience with a supplier is defined as the length of relation between the buyer and the supplier. The retailer's past experience implies that the retailer has a prior relationship with the supplier. Manufacturers constantly develop and introduce a stream of new products into the market. Therefore, not all new products are introduced by new suppliers. Many times, a new product presented to a retailer is from a long-time supplier. For example, P&G introduces many new products to Wal-Mart every year. Retailers treat old and new suppliers differently. A study of all Italian major retailers finds that new products introduced by established suppliers have one in two chances of being accepted, while those by new suppliers have

less than a one in five chance (Pellegrini and Zanderighi 1991). A prior relationship between the buyer and the supplier helps reduce the perceived level of purchase related risk (Johnson and Lewin 1996) because over time, two parties become well acquainted with each other, which allows them to predict each other's actions (Anderson and Weitz 1989). Long time relationships lay a foundation for trust because adjustments are made and only satisfactory and trustful relationships are maintained (Anderson and Weitz 1989). Thus, we propose:

H5: Retailer's past experience with the supplier is positively related to retailer trust of the supplier.

Personal Relationships. Personal relationships refer to the social relationships between buyers and salespersons. Granovetter's (1985) seminal work provides an argument on the ubiquity of social embeddedness in economic exchange. "Most behavior is closely embedded in networks of interpersonal relations" (Granovetter, 1985, p.504). His insight highlights a simple but critical regularity in economic exchange that is commonly observed (Moran 2005): social relations and economic relations are often intertwined.

Because it is personal experience and known to be accurate, a buyer's personal relationship with a salesperson is the best source of information that he can obtain to make inferences about the seller (Williamson 1991). Personal relationships between buyers and salespersons facilitate problem solving and are important in overcoming barriers to communication (Metcalf, Frear and Krishnan 1992). In the literature, Weitz and Jap (1995) argue that personal relationships between boundary-spanning members play an important role in aiding and enhancing interorganizational exchange. Personal

relationships between individuals are found to shape the context for new exchanges between firms by reducing risks and uncertainty about the motives and intentions of the other member (Larson 1992). From a transaction cost perspective, Standifird and Marshall (2000) claim personal relationships help to reduce transaction costs in an exchange and ensure the other firm's trustworthiness and abstention from opportunism. Therefore, we propose:

H6: Personal relationships between the retail buyer and the salesperson are positively related to retailer trust of the supplier.

The Effect of Trust

Effect of trust in new product evaluation. Trust has been widely recognized as a mechanism to reduce risk and uncertainty in the literature. Three studies have been found to examine the role of trust in buying/purchasing decisions. Using in-depth face-to-face interviews with retail buyers and managers in five European markets (Germany, Greece, Italy, Netherlands, UK), Knight, Holdsworth and Mather (2007. p. 121) conclude that "trust appears to be the central component that enhances perceived quality while minimizing perceived monetary sacrifice—thereby leading to enhanced perceived value, and therefore a willingness to buy." Banting and Blenkhorn (1988) conduct a study on non-food chain store buyers in Canada and find trustworthiness of suppliers is among the highest ranked criteria of chain store buyers in decisions of new product selection. In the situations of buying food products from a foreign country, Knight, Holdsworth and Mather (2007) find that trust in integrity of production and supplier appears to the central determining factor of the retailer's buying food imports.

Retailers argue that stocking new products is risky because new products incur extra costs, which retailers consider fairly high, at both warehouse and store level, and new product failure rates are quite high (Pellegrini and Zanderighi 1991). Therefore, during the new product evaluation stage, retailers carefully assess the value of a new product and the probability of its success. The trustworthiness of the supplier helps to increase the buyer's confidence in the new product's success and reduces the perceived transaction costs. Thus, we posit:

H7: Retailer trust of the supplier is positively related to retailer new product evaluation.

Effect of trust on collaboration. Trust—or confidence in the reliability and integrity of an exchange partner (Morgan and Hunt 1994) and a willingness to rely on that confidence (Moorman, Deshpande, and Zaltman 1993)—is thought to be a building block or foundation for collaboration including such behavior as cooperation, communication, and commitment. In prior studies, trust had a positive effect on cooperation (Morgan and Hunt 1994), communication (Dwyer, Schurr and Oh 1987), and commitment (Geyskens et al. 1999). Retailer trust of the supplier positively influences a retailer's cooperation with, communication with, and commitment to a long-term relationship with the supplier. In buyer-seller bargaining situations, Schurr and Ozanne (1985) find trust to be central to the process of achieving cooperative problem solving and constructive dialogue. Ganesan (1994) argues that a retailer's trust in a supplier affects the retailer's commitment in three ways: 1) it reduces the perceived risk related to possible opportunistic behavior by the supplier, 2) it lowers costs in exchange transactions, and 3) it increases the chances of forming a long-term relationship with the supplier. Trust in a relationship builds the desire to strengthen and continue—that is, to

cooperate and to communicate with each other, and to commit to a relationship (Andaleeb 1996). Thus, consistent with prior research, we posit that:

H8: Retailer trust of the supplier is positively related to retailer collaboration with the supplier.

New Product Evaluation and its Effect on Collaboration

Modern retailers do not act simply as intermediaries passing products to consumers; they also "manufacture the service" to consumers (Dawson 2000) and co-produce the product offering in-store through in-store display, promotion, and communication with consumers in and/or out of stores (Corstjens and Corstjens 1995). For example, a similar style of shoes sold at Target and Nordstrom will have different sales records because different service levels and store images are likely to influence the quality perception and image of the shoes.[9] In other words, similar shoes sold in these two stores actually represent different product offerings and thus render different values in the eyes of consumers. Consequently, we can say that retailers have leverage over the perceived value of a product. The retailer can also influence the sales of a product through local advertising and other selling efforts such as a selling presentation, personal recommendation or advice solicited by the consumer (Porter 1974). Therefore, the retailer's collaborative behavior affects product performance. A Harvard Business case reports how collaboration between Wal-Mart and P&G helps to reduce operational costs and increase revenues for both parties (Sebenius and Knebel 2007). Wal-Mart and P&G have developed a collaborative relationship through the development of sophisticated programs such as JIT (Just-In-Time) delivery, EDI (Electronic Data Interchange), and

[9] We acknowledge that Target and Nordstrom are not likely to sell the same shoes. However, we use this imaginative example to illustrate different values added by different retailers on the same product.

ECR (Efficient-Consumer-Response) Systems. Because of these programs, P&G is able to monitor sales of products in Wal-Mart stores as well as promote and ship its goods in response to actual consumer demands. In this way, P&G and Wal-Mart have turned what used to be an adversarial, win-lose situation—with no sharing of information, no coordination—into a win-win situation—with a partnership beneficial to both. Thus, collaborative behavior creates financial linkages that make firms dependent upon mutual performance (Calantone, diBenedetto and Stank 2005).

After a new product is accepted in stores, the performance of the product is likely to be influenced by the retailer. A new product evaluated as highly favorable by the retail buyer indicates the perceived superiority of the product with a high probability to contribute to retailer profitability, and thus is likely to induce a higher degree of cooperation and receive more support from retailers. A study by Besanko, Dubé and Gupta (2005) finds that retailers provide more local advertising support to products that contribute more to the profit of stores. Thus, the extent of the retailer's collaborative behavior towards a new product seems dependent on the evaluation of the new product. We therefore propose the following:

H9: Retailer new product evaluation is positively related to retailer collaborative behavior including cooperation, communication, and commitment.

The Effect of Retailer Collaboration on New Product Performance

Retailers perform a critical role in the initial sales of a new product (Ottum 1996). The actions of retailers can have a major effect on the diffusion of a new product launched in the market (Kuester, Gatignon and Robertson 2000). Collaborative relationships between manufacturers and retailers are crucial to a successful new product launch (Bowersox, Closs and Stank 1999). Collaborative relationships require the

retailers and manufacturers to participate in strategic co-planning and encourage cross-organizational coordinating behavior such as coordinating with daily operation, sharing information, and staying committed to the relationship. Therefore, cooperation, communication between the retailer and the supplier and mutual commitment to the relationship are alike manifesto of collaboration between the retailer and the supplier.

Cooperation. Cooperation between the manufacturers and retailers in the consumer products industry may include collaborative planning, forecasting, and replenishment. Poor cooperation in these activities between the manufacturer and channel members can induce new product failure (Kono and Lynn 2007). For example, in many consumer product industries, manufacturers provide promotional support in various forms to retailers, including promotional material (e.g. display fixtures), monetary support (e.g. trade promotion), selling aids in stores, and motivated manufacturer salespeople (Kincade, Woodard and Park 2002). Promotional activities that support the launch of a new product play a crucial role in the success of the new product because they determine to a large extent the diffusion of a new product and drive the sales of the product (Walters and MacKenzie 1988; Tellis 1998). The absence of promotional support may lead to the failure of a new product (Delre et al. 2007).

However, not all of the promotion activities provided by manufacturers are supported by retailers (Walters 1988). It is reported that retailers sometimes do not pass trade-promotion money provided by manufacturers on to consumers (Besanko, Dubé and Gupta 2005). Further, retailers are able to influence the new product performance through withholding selling effort, which might entail not providing local advertising for a new product or influencing the consumer to purchase another product (Huang, Li and

Mahajan 2002). Ensuring retailers' cooperation in the new product introduction process is therefore critical to new product performance. As an example, Nabisco's Planters saw its sales rise by 40 percent as a result of better-planned promotions and joint replenishment with Wegmans stores (as cited in Lee 2002). Similarly, Useem, Schlosser and Kim (2003) report how Wal-Mart contributed to the success of Shrek, an animated film by DreamWorks. The movie was a big hit in summer 2001 and later released on DVD on November 2001. Wal-Mart's nation wide promotion—its stores bristling with displays of the green ogre—helped Shrek become the year's bestselling DVD. All of these examples demonstrate that retailers' cooperative actions can lead to new product success.

Communication. Communication includes the ways in which information is exchanged and shared between partners and the openness between partners in their exchanges of information (Fontenot and Wilson 1997). Communication is a vital factor for a good coordination between retailers and suppliers in new product introductions (Kumar and Phrommathed 2005), especially when high environmental uncertainty and competition are involved (Frazier 1999). A meta-analysis of 47 empirical studies in the area of new product performance conducted by Montoya-Weiss and Calantone (1994) conclude that one determinant of new product performance is the communication and information exchange between the manufacturer and other firms in the distribution channel. Having gathered and analyzed managerial perceptions regarding the key success factors in launch activities pertaining to new product performance, di Benedetto (1999) concludes that information-gathering activities even after the new product is launched into the market are important to new product success. The rationale is that continuous updating and modification of both marketing and production plans are necessary

throughout the product launch and post-launch phases in response to customer and competitive reactions, and technological or economic environment changes. Therefore, information about consumers and the effectiveness of the marketing activities undertaken is important to the ultimate new product performance.

More recently, researchers (e.g. Bowersox, Stank and Daugherty 1999; Calantone, Benedetto and Stank 2005) illustrate the importance of manufacturers' using "lean launch" methods to support new product launch success. Lean launch methods emphasize the use of a flexible supply chain system to react quickly to customer needs and market demands. Such a flexible supply chain system requires extensive communication and information-sharing with retailers. As an illustration, the VF Corporation, a manufacturer of jeans and lingerie, works with Wal-Mart to develop an artificial intelligent software program that automatically adjusts the assortment models (as cited in Ganesan 1994). If a particular Wal-Mart outlet sells, for example, more large sizes than the norm, VF's software changes the assortment at that particular store accordingly. Without point-of-sale (POS) information, suppliers cannot monitor sales fluctuations to adjust production. This may lead to products being either out-of-stock causing lost sales or overstocked, leading to high inventory costs. Nowadays, modern retailers equipped with advanced technologies (e.g. ECR system, RFID technology) possess sophisticated marketing research abilities that draw on information such as scanner data as well as proprietary data based on loyalty programs (Fisher, Raman and McClelland 2000). Retailers are also taking control of their information: they do not pass information automatically to manufacturers as assumed before (Corstjens and Corstjens 1995). Therefore, the retailer's willingness to communicate with the manufacturer regarding the new product through

information sharing is an important factor determining the new product performance in stores.

Commitment. Commitment is an implicit or explicit pledge of the continuity of a relationship between channel members (Dwyer et al. 1987), and is based on one party's desire to maintain a valued relationship with another (Andaleeb 1996). Ganesan (1994) refers to such a commitment in a relationship as long-term orientation and indicates that long-term relationships anchored by commitment result in two independent parties working together for the betterment of both. The more committed partners are to the relationship, the greater the chance for each firm to achieve their individual and mutual goals without the overshadowing risk of engaging in opportunistic behavior (Fontenot and Wilson 1997). Committed partners are willing to invest in valuable assets specific to an exchange relationship and to work together to serve customer needs better and thus increase mutual profitability (Anderson and Weitz 1992). Retailers who are committed to suppliers can help new product performance by providing better cooperative advertising, offer special displays, providing information on market and competitive activity, or training salespeople to sell such products (Ganesan 1994). For example, RadioShack was committed to a 10-year agreement with Sprint for receiving the exclusive right to sell Sprint's residential telephone products, and a non-exclusive right to sell its wireless digital PC service. In order to promote the product and create consumer awareness, RadioShack participated in a multi-million dollar co-op advertising campaign with Sprint and invested in extensive training for its sale associates on new products and services. As a result, customers who walked through RadioShack's door daily were introduced

immediately to an area dedicated to Sprint products and Sprint products immediately received large leads over its competitors' (Rangan, Moon and Bell 2000).

Based on the above arguments, we posit:

H10: Retailer collaboration with the supplier is positively related to new product performance.

New Product Performance and Retailer Performance

The effect of new product performance on retailer performance. New products are important contributors to the growth and profitability for manufacturers (Crawford 1994). The NP literature has examined the role of new product success in driving the business performance of manufacturers. However, few studies are dedicated to the role of new product performance in driving retailers' business performance. New product success is crucial to retailers' performance; otherwise, retailers would not allocate scarce resources to new products that are known to have high failure rates. Just like successful new products bring benefits for manufacturers, they also bring benefits to retailers. One study reports that new products are the most profitable items in the supermarket product mix (Heeler, Kearney and Mehaffey 1973). Another study confirms that new products made a substantial contribution to total retail sales; about one sales dollar in eight was due to new products (Montgomery 1975). The successful market performance of new products helps to increase customer satisfaction, drive category growth, and build a positive store image. For example, P&G's introduction of its Scentstories air freshener, which was launched in June 2004, helped to drive sales of the scent holder category in stores. As such, new product performance contributes to retailer business performance.

Increasingly, studies of business performance are adopting a two dimensional view of the performance construct to reflect its complexity. A firm's market performance is differentiated from its financial performance (Homburg and Pflesser 2000). Business market performance refers to the relative effectiveness of a firm in market domain, whereas business financial performance indicates the relative effectiveness of a firm in financial measures. In our study context, retailer market performance is related to such variables as customer satisfaction, market share, and positive store image (Homburg, Hoyer and Fassnacht 2002), and retailer financial performance is associated with profitability and sales growth. Consistent with the literature, we posit that new product performance contributes to both retailer market performance and financial performance.

H11: New product performance is positively related to retailer market performance.

H12: New product performance is positively related to retailer financial performance.

The effect of market performance on financial performance. The literature in general supports the notion that market performance leads to improved financial performance (Anderson, Fornell and Rust 1997). Anderson and Sullivan (1993) and Fornell (1992) find a positive link between customer satisfaction and firm profitability. Similarly, Homburg, Hoyer and Fassnacht (2002) conduct an empirical study of clothing and furniture retailers in both the U.S. and Germany and find that retailer market performance leads to higher profitability. Further, empirical studies have shown that retailer market performance such as customer loyalty increases firm financial performance through the absence of acquisition costs, lower operating costs, repetitive buying, referrals, and higher price tolerance (Loveman 1998). Therefore, we posit:

H13: Retailer market performance is positively related to retailer financial performance.

Control Variable

Buyer age has been found to have a significant influence on new product buying behavior (Marr and Thomas 1999; Silva and Davis 2002). For example, Silva and Davis (2002) find younger, less experienced buyers tend to use more "objective" criterion in their decision-making. Thus buyer age is used as a control variable in the model.

CHAPTER 3

METHODS

This chapter is organized into six sections. The first section justifies the context for this study, and the second section presents background information about retailing in China. The third section introduces how the survey instrument was developed. The fourth section discusses measures for the constructs, and the fifth section covers data collection. The last section describes the sample characteristics.

Study Context

We chose China as a research context to study retail new product evaluation and new product performance for the following reasons:

1) China is one of the largest developing countries in the world, and its retail sector is growing rapidly and represents one of the best retail opportunities in the world (Retail News Letter 2005). With its average economic growth ranked among the highest in the world in the past two decades, China is becoming one of the most important markets in the world (Luo, Sivakumar, and Liu 2005). An investigation of Chinese retail buying behavior is thus an important and worthwhile means for extending our understanding of retailers and the consumer product market in China.

2) Retail buying behavior in China resembles that of the West (Sternquist and Chen 2007). Similar to the situations in the U.S. and the European countries, channel power also rests with retailers in the Chinese distribution channel. This suggests that China is an appropriate country to test our model because factors affecting new product evaluation and new product performance in China are probably consistent with those found by studies in the West, though there may be some differences in strength.

3) The Chinese retail market is a buyers' market characterized by strong consumer spending growth (Luk 1998). Chinese firms are generally active in new product development (Li and Atuahene-Gima 1999). Despite being plagued by resource deficiency in general, the growth rate of new products reached 14.8% and the firms in China developed a total of 68,633 new products in 2003 according to the National Statistics Bureau of China (as cited in Li, Liu and Zhao 2006). NPD in China has been well studied by researchers (e.g. Atuahene-Gima and Li 2000; Beverland, Ewing and Matanda 2006; Calantone, Schmidt and Song 1996).

Background Information of Retailing and New Product Development in China

Before 1979, the year when economic reform was initiated, China was a shortage economy constructed by central planning and political and administrative allocation (Luk 1998), known as *fenpei* system. Consumer goods were produced as commodities by state-owned units, distributed through a central, three-tier distribution system to state-owned stores in city districts or co-operatives in the countryside, and the price and the amount were controlled by the central government (Luk 1998). Market forces were restrained and suppressed; retailers and manufacturers needed not, and could not, respond to changing consumer needs. Because demand exceeded supply to a large degree, retailers and manufacturers had virtually no competition. As a result, retailing was perceived by the Chinese government as a nonproductive business activity with no value-added function (Sternquist 2007).

During 1980s, the Chinese government started introducing market competition (Wing 1996). A dual distribution system was formed under which manufacturers could produce at their own discretion according to the market needs and sell products to state-

owned stores at market price after fulfilling the production contract placed by the government (Luk 1998). Consequently, the undersupply situation was gradually eliminated. In addition, foreign manufacturing firms were allowed to set up joint ventures in China after the economic reform. These joint ventures provided upgraded production technology and product design. Meanwhile, competition from these joint ventures also provides impetus for state-owned manufacturers to change from product oriented to market oriented (Sternquist, Huang and Chen 2003). As a result, increasing competition over products and quality prompts new product development. Jefferson et al. (2003) report that new product sales accounted for 24.5 percent of total sales of China's large and medium-size manufacturers in 1999. Although there are no actual data available in China, Ozer and Chen (2006) report that the new product success rate in Hong Kong is 44.91%, which is comparable to that of 59% in the U.S. (griffin 1997).

Competition over product quality and efficient distribution among manufacturers also prompted changes in the retail system (Sternquist 1998). The retail sector in China has been dramatically transformed after the reform and especially after foreign investment in retailing was approved by the Chinese government. Foreign investment was allowed first in the form of joint ventures in 1992 and then foreign wholly-owned-subsidiaries in 2004. The arrival of foreign retailers provided a major impetus in the modernization of the retail system of China through "supermarketization"—replacing old style traditional retail formats with modern retail formats (Gale and Reardon 2004). The first supermarket emerged in Guangdong province in 1990, but by 2003, Chinese supermarkets skyrocketed to approximately 60,000 stores, according to the China Chain Store and Franchise Association (see Hu et al. 2004). The intense competition forces

retailers to develop a differential advantage. A study by Sinclair, Lyer and Anderson (1998) reports that supermarkets in Shanghai introduce 10% to 30% new products each year. Between 1999 and 2005, China's total retail market grew 157 percent in current terms to USD832 billion, indicating an annual growth rate of 19.68 percent (China Statistical Yearbook 2006). A recent report ranked China as the most attractive place for retail expansion (Retail News Letter 2005).

Survey Instrument

A questionnaire was used to collect data in this dissertation. The development of construct measures in the questionnaire followed Churchill's (1979) recommendation. The questionnaire was developed in three stages. In the first stage, previous research and relevant literature were reviewed. Scales in previous studies were collected and categorized so that well-established scales appropriate to this study could be used. New measures were developed if there were no existing scales in the literature. Items were generated based on in-depth face-to-face interviews with 16 Chinese retail buyers from a previous project (see Sternquist and Chen 2007) and discussions with academic experts in retailing. The first draft of the questionnaire was then reviewed by two U.S. and two Chinese academic experts in retailing and changes were made based on their recommendations.

In the second stage, the questionnaire was translated into Chinese using the back translation method. A pretest was conducted with 19 retail buyers in Beijing. Four changes were made based on this pretest including (1) rewording items because of ambiguous and double-barrel questions, (2) deleting reverse-worded items, (3) redesigning the order of items and the format of the questionnaire, and (4) fitting the

scale of one item to the habit of Chinese usage—changing from "50 to 100" to "60 to 100" because Chinese custom.[10] The second draft of questionnaire was thus formed.

In the third stage, a pilot study of the second draft of the questionnaire with a sample of 56 retail buyers in Beijing was conducted. The pilot study did not reveal any major problems, and the subsequent analyses of data demonstrated good construct validity and reliability.

Measures

Overall, constructs were measured by seven-point Likert-type scales with multiple items. The unit of analysis is individual retail buyers evaluating a new product. Consistent with the retailer's definition and with previous studies (e.g. McLaughlin and Rao 1991; White, Troy and Gerlich 2000), a new product was defined as a single stock-keeping unit (SKU) that had not previously been carried by the retailer. Consistent with supermarket industry sources and previous studies (e.g. Desiraju 2001), new products are classified into four categories: new concept for the category, brand extension, line extension, and upgrade or replacement items. In this dissertation, we focus on new consumer products. Table 3.1 provides a summary of constructs and measurement items.

Product innovativeness was measured by five items selected from Lee and O'Connor (2003) and Calantone, Chan and Cui (2006). New product advantage consists of two dimensions: *product advantage to consumer* and *product advantage to retailer*. Three items for new product to consumer were selected from Langerak, Hultink and Roben (2004) and the other three items were newly developed. Items for new product advantage to retailer were developed based on field notes with retail buyers and

[10] In China, scores over 60 is considered "pass", and scores under 60 is considered "fail".

discussions with industry experts. The resulting scales for product advantage to consumer and product advantage to retailer contain six items and five items respectively.

Supplier reputation was measured by four items from Ganesan (1994). Past *experience* was operationalized by one item: "How many years have you been doing business with this supplier?" *Personal relationships* between buyers and salespersons was measured by four items based on field notes with retail buyers

Retailer *trust* of the supplier was measured by seven items from Morgan and Hunt (1994). Retailer *cooperation* with supplier was measured by three items from Anderson and Narus (1999). Retailer *communication* with supplier was measured by four items from Anderson and Weitz (1992) Retailer *commitment* to supplier was measured by five items from Anderson and Weitz (1992).

Retail *new product evaluation* was operationalized by one item asking respondents to give a score from 0 to 100 to the new product relative to other products s/he has evaluated in general. Sixty is the pass score indicating that a new product was accepted in stores and 100 is a perfect score.

New product performance was measured by seven items asking the respondents to rate how well the new product has performed on each of the performance indicator. Items were adapted from Langerak, Hultink and Roben (2004). Consistent with prior studies, we use perceptual measures of new product performance.

Retailer performance was operationalized by asking how well the retailer performed compared with its competitors over the last year. In particular, *retailer market performance* was measured by four items from Homberg, Hoyer and Fassnacht (2002),

and *retailer financial performance* was measured by two items from Homberg, Hoyer and Fassnacht (2002).

Data Collection

Collecting data in an international setting is a trade-off between cost, time, availability, and response rate. The nonresponse issue is a major concern in cross-cultural survey research (Couper and De Leeuw 2003). Following Jobber and Saunders's (1988) suggestion of collaborating with researchers in foreign countries, we collaborated with China Retail Research Center (CRRC) for data collection.

Since a national list of retailers in China was not available, the CRRC generated a list of consumer products retailers in China based on information collected from multiple sources including the China Chainstore and Franchise Association (CCFA), the National Bureau of Statistics of China, and business directories. 300 retailers were randomly chosen from the list. The first packet included two questionnaires in Chinese and a letter from the CRRC with the endorsement of a reputable university in China asking each president /contact person to forward the questionnaires to the company's buying department. The buyers in the buying department were asked to complete the questionnaires. Two weeks after the mailing, a personal telephone call was made to confirm that the questionnaires had been forwarded to individual buyers. However, no complete questionnaires were mailed back even after a second phone call after another two weeks. Although we anticipated the challenge of collecting data in China (e.g. Calantone, Schmidt, and Song 1996), we were still surprised by the difficulties of collecting firm-level data in China. This confirms previous studies about suggesting extremely low response rates from a large sample of mail survey in China (see Lukas,

Tan and Hult 2001). Since the data collection through mail survey failed, we had to find another more effective method. Many studies recommended an interview approach (see Atuahene-Gima and Li 2002; Li and Atuahene-Gima 1997) for effective data collection. However, this method is most effective and efficient when collecting data from local or regional areas. Since our intention was to collect data from a national sample, the cost and time involved in using this method would be tremendous. Therefore the method needed to be adjusted. We decided that, rather than we go to where every retailer corporate office is located across the country, we would go to meet many retailers at one location. The China Chain Store Expo 2006 provided a good venue for our purposes. The China Chain Store Expo is an annual convention held by the China Chainstore and Franchise Association (CCFA), a national organization founded in 1997. The theme of China Chain Store Expo 2006 was "Retail Innovation". The convention provided retailers and suppliers with a platform to meet each other and to learn about new trends, new products and new technologies in the retail industry (CCFA website). More than one thousand retail buyers/managers participated in the convention. The CRRC randomly distributed 300 questionnaires to retail participants and 132 questionnaires were returned. Two blank questionnaires were discarded, which reduced the number to 130. This represents a response rate of 44%.

In order to improve the validity of the data collected, three actions were taken. First, an interview approach was used to collect data. The interviewers ensured that the respondents were either retail buyers or managers who were responsible for selecting products. Second, the respondents were asked to focus on a new product they personally

evaluated and accepted in their stores the previous year (i.e. 2005)[11], so that the retailer had carried the new product for at least nine months (the convention was in October 2006), and the respondents could assess new product performance after entering into the market. The common trial period for a new product in China is 3 months (Sternquist and Chen 2007). Third, the respondents were guaranteed of anonymity and confidentiality and were informed that the results were to be published for research purposes only. This is important because Chinese managers are more willing and more likely to provide accurate information under the condition of anonymity (Alder, Campbell, and Laurent 1989).

Sample

We compared means of key variables (i.e. new product evaluation and new product performance) between data collected at the China Chain Store Expo 2006 convention and data from the pilot study and found no significant differences. Therefore, both data are pooled. The resulting sample size is 186.

Our sample consists of 186 retail buyers from more than 58 retailers located in 28 cities across China. China administers 33 province-level divisions, including 22 provinces, five autonomous regions, four municipalities, and two special administrative regions. Our sample represents 18 provinces, four autonomous regions, three municipalities, and one special administrative region. Table 3.2 lists the number of respondents is each division.[12]

[11] Respondents expressed no problem with recalling. Rao and McLaughlin (1989) also reported, in their study, that the buyers were able to recall vividly the circumstances surrounding the introduction of each new item.

[12] The total number is 173. There are 13 missing values.

Among the 186 respondents, 117 (63%) are male and 69 (37%) are female. Eighty-seven percent of the respondents' ages range from 20 to 40. The respondents represent buying managers, central buyers, store managers, store buyers, and department managers who are responsible for buying consumer products. The average (median) of the average monthly sales volume that the respondents are responsible for buying is 10 million RMB (US $1.28 million). The average (median) of the number of stores that the respondents are responsible for buying for is 5. Respondents had spent an average of 7.7 years working in retail. Table 3.3 provides a summary of the respondents' characteristics.

The companies that the respondents work for are composed of a variety of retailers with different ownership types. Among these different ownerships, domestic private firms account for half the sample. About 47 percent of our sample are among the top 100 retailers in China. The average (median) annual sales volume for the retailers reported is 100 million RMB (US $12.8 million). The percentage of sales contributed by new products during the previous year reported by the respondents ranges from 2 percent to 80 percent with an average (mean) of 25 percent. The percentage of profit generated by new products during the previous year ranges from 4.5 percent to 100 percent with an average (mean) of 27 percent. Fifty-eight percent of the respondents report that their stores possess a single store format while thirty nine percent report that their stores possess multiple formats. Supermarket, hypermarket, and convenience store are among the most frequently reported by the respondents. The average length of retailers' respective business relationships with their reported suppliers is about 4 years. In terms of channel power between the retailer and the supplier, 56 percent of the respondents report that their companies are more powerful than their respective suppliers, while 10 percent

of the respondents report that their companies are less powerful than their respective suppliers. More than 31 percent of the respondents report that their companies and their respective suppliers have equal power. Table 3.4 provides a summary of the companies' characteristics reported by the respondents.

New products reported by the respondents comprise items in food & beverage (49%), home & personal care (17%), consumer durables (15%), and apparel & footwear (18%). Among those items, 23 percent are classified as new concept, 27 percent are classified as brand extension, 33 percent are classified as line extension, and 15 percent are classified as upgrade or replacement items. Table 3.5 provides a profile of the new products reported by the respondents.

Table 3.1 – Constructs and Measurement Items

Construct	Measurement Items	Source
New Product Advantage to Consumers (1=Strongly Disagree, 7=Strongly Agree)	This new product ...	
	provides higher value for consumers.	New
	has a higher quality/price ratio.	
	will meet an unmet need of consumers.	
	is superior to competing products.	Langerak, Hultink and Robben (2004) α=0.72
	has higher quality than competing products.	
	offers unique features for consumers.	
New Product Advantage to Retailers (1=Strongly Disagree, 7=Strongly Agree)	This new product ...	New
	would provide us with a high gross margin.	
	would potentially achieve high sales volume.	
	would be in high demand.	
	would generate high store traffic.	
	would contribute incremental sales; not cannibalize.	
New Product Evaluation	You are asked to give a score to every product (including new products and non-new products) you have evaluated. Only scores above 60 out of 100 will be accepted in stores (0 is the lowest; 100 is a perfect score). What score would you give to this new product relative to other products you had evaluated in general at the time when you accepted it.	
	From 0 to 100, I would give this new product a score of _____.	New
Product Innovativeness (1=Strongly Disagree, 7=Strongly Agree)	Please indicate your extent of agreement at the time when you accepted the item.....	
	Overall, this new product was highly innovative compared to other products in the market.	Calantone, Chan and Cui (2006) α=N/A
	This new product was radically different from competitor products.	
	The technology this product incorporates was new to consumers.	Lee and O'Connor (2003) α=0.84
	This product offered dramatic improvements in existing product features.	
	This product introduced many completely new features to the market.	
Buyer Age	Your age?	

Table 3.1 (Cont'd)

Construct	Measurement Items	Source and its Reliability
Reputation (1=Strongly Disagree, 7=Strongly Agree)	Please indicate your extent of agreement at the time when you accepted the item.....	
	This supplier has a reputation for being honest.	Ganesan (1994) α=0.82
	This supplier has a reputation for being concerned about retailers.	
	This supplier has a good reputation in the market.	
	Most retailers think that this supplier has a reputation for being fair.	
Personal Relationship (1=Strongly Disagree, 7=Strongly Agree)	Please describe the relationship you have with the salesperson from this supplier at the time when you accepted the item.....	
	I have a very close personal relationship with the salesperson.	New
	This salesperson is like a friend to me.	
	I am willing to help this salesperson.	
	I am familiar with this salesperson.	
Trust (1=Strongly Disagree, 7=Strongly Agree)	Please indicate your extent of agreement at the time when you accepted the item.....	
	We can count on this supplier to do what is right.	Morgan and Hunt (1994) α=0.95
	The supplier can always be trusted.	
	This supplier has high integrity.	
	This supplier is honest and trustful with me.	
	I feel that I can trust this supplier completely.	
	This supplier is truly sincere in their promise.	
	This supplier treats me fairly and justly.	
Cooperation (1=Strongly Disagree, 7=Strongly Agree)	Please indicate your extent of agreement.....	
	Our company tries our best to help out this supplier.	Anderson and Narus (1990) α=N/A
	This supplier tries their best to help our company out.	
	This supplier is very cooperative.	
Communication (1=Strongly Disagree, 7=Strongly Agree)	This supplier keeps us well informed about what is going on in this distributorship and with customers.	Anderson and Weitz (1992) α=0.84
	We are quite involved in the marketing and planning efforts of this supplier.	
	This supplier seeks our advice and counsel concerning their marketing efforts.	
	This supplier is willing to let us know their weakness as well as their strengths.	

Table 3.1 (Cont'd)

Construct	Measurement Items	Source
Retailer Financial Performance (1=Much Worse, 7=Much Better)	Compared with your competitors, how well has your company performed over the last year?	
	Attaining desired sales growth.	Homberg, Hoyer and Fassnacht (2002) α=0.87
	Attaining desired profitability	
Retailer Market Performance (1=Much Worse, 7=Much Better)	Compared with your competitors, how well has your company performed over the last year?	
	Achieving customer satisfaction.	Homberg, Hoyer and Fassnacht (2002) α=0.87
	Attracting new customers.	
	Building a positive store image.	
	Attaining desired market share.	
Commitment (1=Strongly Disagree, 7=Strongly Agree)	Please indicate your extent of agreement.....	
	We are committed to this supplier.	Anderson and Weitz (1992) α=0.83
	We are quite willing to make long-term investment in selling this product.	
	Our relationship with this supplier is a long-term alliance.	
	We are patient with this supplier when they make Mistakes that cause us trouble.	
	We are willing to dedicate whatever people and resources it takes to grow sales of this product.	
New Product Performance (1=Very Poor, 7=Very Good)	How well has this product performed on each of the performance indicators?	
	Met volume goals.	Langerak, Hultink and Robben (2004) α=0.88
	Met sales growth goals.	
	Met market share goals.	
	Met profitability goals.	
	Consumer satisfaction.	
	Consumer acceptance.	
	Met margin contribution goals.	New
Past Experience	How long have you been doing business with this supplier?	

Table 3.2 – A Profile of the Respondents' Locations

Provinces	Number of Respondents	Autonomous Regions	Number of Respondents
Auhui	3	Guangxi	2
Fujian	0	Inner Mongolia	3
Gansu	1	Ningxia	1
Guangdong	4	Xinjiang	2
Guizhou	1	Tibert	0
Hainan	0		
Hebei	14	**Municipalities**	
Heilongjiang	4	Beijing	77
Henan	2	Chongqing	0
Hubei	1	Shanghai	12
Hunan	1	Tianjin	1
Jiangsu	6		
Jiangxi	2	**Special Administrative Regions**	
Jilin	2	Hong Kong	2
Liaoning	2	Macau	0
Qinghai	0		
Shannxi	2		
Shanxi	9		
Shandong	13		
Sichuan	0		
Yunnan	2		
Zhejiang	4		

Table 3.3 – Characteristics of the Respondents

Respondents	Percentage or Range
Job Titles	
Buying manager	36%
Central buyer	9%
Store manager	14%
Store buyer	3%
Department manager	24%
Others	13%
Sex	Male: 63%; Female: 37%
Age	20-30: 41% 30-40: 46% 40-50: 11% > 50: 2%
Years in retailing	Less than 1 year–28 years (Mean= 7.73; SD= 5.80)
Years personally doing business with the supplier	Less than 1 year–30 years (Mean= 4; SD= 3.29)
Years personally doing business with the salesperson	Less than 1 year–17 years (Mean= 2.13; SD= 2.20)
Average monthly sales volume responsible for buying	RMB 1,000–1,500,000,000 (US$ 0.001–192.31 million) (Mean= $12.85 million; SD= $33.53 million)
Number of stores responsible for buying for	1 – 1300 (Mean= 36; SD= 126)

Note: Totals may not equal 100% because of rounding or missing values.

Table 3.4 – Characteristics of Companies as Reported by the Respondents

Retailers	Percentage or Range
Ownership type	
State-owned Enterprise	11%
Privatized state-owned	8%
Joint Venture with FDI	11%
Domestic Private Firm	50%
Foreign-owned Subsidiary	13%
Others	7%
Sales volume	RMB 10000–30,000,000,000 (US $ 0.001–3846 million) (Mean= 87.83 million; SD= 341.05 million)
Sales accounted for by new products	2%–80%
Profit accounted for by new products	4.5%–100%
Store format reported by respondents[a]	Hypermarket: 73 Supermarket: 105 Department Store: 25 Warehouse Club: 17 Specialty Store: 22 Convenience Store: 61 Others: 9
Company ranking on the Top 100 retailers List	
1–30	27%
31–100	30%
> 100	43%
Years doing business with the reported supplier	Less than 1 year–16 years (Mean= 3.94; SD= 3.18)
Retailer's channel power compared to the reported supplier	More powerful: 56% Equally powerful: 31% Less powerful: 10%

Note: Totals may not equal 100% because of rounding or missing values.
[a] The total exceeds 186 because respondents reported multiple formats.

Table 3.5 – A Profile of New Products Reported

New Products	Percentage or Range
Product category	
Food and beverage	49%
Home and personal care	17%
Consumer durables	15%
Apparel and footwear	18%
Classification	
New concept	23%
Brand extension	27%
Line extension	33%
Upgrade or replacement item	15%

Note: Totals may not equal 100% because of rounding or missing values.

CHAPTER 4

ANALYSES AND RESULTS

Initial Data Analysis

First, we examined the data to ensure quality. We checked missing data for each variable and found that less than 5 percent of the data are missing. A further investigation using missing value analysis in SPSS 14.0 suggests that the missing data are completely random. Thus, a replacement of missing data is appropriate (Hair et al. 1998). Missing values are replaced following the procedure in Wilson and Collier (2000). The measurement items are grouped in constructs based on the model. If one question item is not answered, the average score of the answered questions of the scale is used to replace the missing value.

Second, we checked the normality of the data. The means, standard deviations, kurtosis and skewness of each item are computed. The kurtosis and the skewness of almost all items are below 2, falling within the specified range of univariate normality. Only one item, which asks the respondents about the number of years they have been conducting business with the supplier, has a skewness of 4.38 and a kurtosis of 28.7. After a square root transformation, the skewness of this item reduces to 1.38 and the kurtosis to 4.78, both below 5. Therefore, the univariate normality of the data is acceptable.

Third, in order to increase measurement quality and purify the measures, we conducted an Exploratory Factor Analysis (EFA) for all the items in the hypothesized model. Items with high cross-loadings and/or low factor loadings were dropped if they do not contribute to the construct's explanation or provide added insight into the domain of

interest. As a result, 5 items were deleted. Cronbach's alpha was computed for each construct to assess the reliability of existing construct measurements. Alpha values for all the constructs in the hypothesized model ranged from 0.72 to 0.89 and are thus well above the acceptable minimum standard of .60 (Nunnally 1967). See Table 4.1 for each construct's reliability and item information.

Fourth, common method variance was tested since our study involved survey data collection using the single-informant method. If information on the dependent and independent variables is collected from the same respondents, common method variance may pose a serious problem. The respondents in our study were asked to answer both the questions about the situations when new products were accepted and the survey questions regarding the performance of new products. Thus, the potential problem of common method variance may occur. Following Podsakoff and Organ (1986), we conducted Harman's one-factor test. If common method bias exists in our data, a single factor should emerge or one general factor should account for most of the variance. We conducted a principal components factor analysis of all measures, and the result yielded 13 factors with eigenvalues greater than 1.0, with total explained variance of 73 percent. The first factor accounted for only 26 percent of the variance. Further, we used SEM to test the effect of common method bias among measures. Since our sample size does not allow us to conduct a full test with all measures, we broke measures into three groups and conduct a confirmatory factor analysis (CFA) separately. The results showed an extremely bad fit in all three groups. This suggests that the common method variance may not be a serious problem in the sample. Next, we use CFA to assess convergent validity and discriminant validity of measurement scales.

Table 4.1 – Construct Reliability and Item Information

Construct	Measurement Items	Mean	S.D.
New Product Advantage to Consumers $\alpha = 0.81$	V1: Provides higher value for consumers.	5.07	1.34
	V2: Has a higher quality/price ratio.	4.85	1.41
	V3: Will meet an unmet need of consumers.	5.02	1.48
	V4: Is superior to competing products.	5.10	1.29
	V5: Has higher quality than competing products.	5.31	1.50
	V6: Offers unique features for consumers. (D)	Deleted	
New Product Advantage to Retailers $\alpha = 0.80$	V1: Would provide us with a high gross margin.	5.24	1.36
	V2: Would potentially achieve high sales volume.	5.23	1.24
	V3: Would be in high demand.	4.98	1.18
	V4: Would generate high store traffic.	4.72	1.37
	V5: Would contribute incremental sales; not cannibalize.	5.14	1.23
Product Innovativeness $\alpha = 0.89$	V1: Overall, this new product was highly innovative compared to other products in the market.	4.89	1.31
	V2: This new product was radically different from competitor products.	4.48	1.54
	V3: The technology this product incorporates was new to consumers.	4.61	1.54
	V4: This product offered dramatic improvements in existing product features.	4.61	1.46
	V5: This product introduced many completely new features to the market.	4.67	1.49
Commitment $\alpha = 0.85$	V1: We are committed to this supplier.	4.06	1.42
	V2: We are quite willing to make long-term investment in selling this product.	4.40	1.34
	V3: Our relationship with this supplier is a long-term alliance.	4.71	1.29
	V4: We are patient with this supplier when they make mistakes that cause us trouble.	4.25	1.32
	V5: We are willing to dedicate whatever people and resources it takes to grow sales of this product.	4.27	1.41
New Product Performance $\alpha = 0.87$	V1: Met volume goals.	4.72	1.02
	V2: Met sales growth goals.	4.73	1.13
	V3: Met market share goals.	4.69	1.07
	V4: Met profitability goals.	4.82	1.11
	V5: Met margin contribution goals.	4.88	1.14
	V6: Consumer acceptance.	5.14	1.17
	V7: Consumer satisfaction. (D)	Deleted	

Table 4.1 (Cont'd)

Construct	Measurement Items	Mean	S.D.
Reputation $\alpha = 0.87$	V1: This supplier has a reputation for being honest.	5.06	1.32
	V2: This supplier has a reputation for being concerned about retailers.	4.98	1.28
	V3: This supplier has a good reputation in the market.	5.10	1.21
	V4: Most retailers think that this supplier has a reputation for being fair.	5.06	1.15
Personal Relationship $\alpha = 0.86$	V1: I have a very close personal relationship with the salesperson.	3.6	1.63
	V2: This salesperson is like a friend to me.	4.04	1.80
	V3: I am willing to help this salesperson.	4.16	1.65
	V4: I am familiar with this salesperson.	4.09	1.72
Trust $\alpha = 0.89$	V1: We can count on this supplier to do what is right.	4.90	1.26
	V2: The supplier can always be trusted.	4.81	1.03
	V3: This supplier has high integrity.	4.87	1.15
	V4: This supplier is honest and trustful with me.	4.91	1.18
	V5: I feel that I can trust this supplier completely.	4.68	1.28
	V6: This supplier is truly sincere in their promise. (D)	Deleted	
	V7: This supplier treats me fairly and justly. (D)	Deleted	
Cooperation $\alpha = 0.72$	V1: Our company tries our best to help out this supplier.	4.12	1.33
	V2: This supplier tries their best to help our company out.	4.70	1.24
	V3: This supplier is very cooperative.	4.96	1.10
Communication $\alpha = 0.76$	V1: This supplier keeps us well informed about what is going on in this distributorship and with customers. (D)	Deleted	
	V2: We are quite involved in the marketing and planning efforts of this supplier.	4.29	1.42
	V3: This supplier seeks our advice and counsel concerning their marketing efforts.	4.60	1.38
	V4: This supplier is willing to let us know their weakness as well as their strengths.	4.38	1.62
Retailer Market Performance $\alpha = 0.83$	V1: Achieving customer satisfaction.	5.26	1.13
	V2: Attracting new customers.	5.27	1.17
	V3: Building a positive store image.	5.55	1.16
	V4: Attaining desired market share. (D)	Deleted	
Retailer Financial Performance $\alpha = 0.74$	V1: Attaining desired sales growth.	4.74	1.18
	V2: Attaining desired profitability.	4.75	1.19

Measurement Validation

Because the number of items is large, fitting all items in a confirmatory factor model is not feasible. To assess convergent validity and discriminant validity of our constructs, we follow Hunter and Perreault's (2007) suggestion and divide our model into several subsystems (e.g. trust and antecedents), and then use CFA to test items across sets of scales that constitute the proposed subsystems in the model. As mentioned in Chapter 2, we propose new product advantage as a second-order factor construct with two sub-dimensions: product advantage to consumers and new product advantage to retailers. Before we assess the CFA measurement model involving new product advantage, we first conduct a CFA analysis for this construct alone to assure factorial validity (Byrne 2001).

CFA of New Product Advantage

Before conducting a CFA analysis, an EFA is conducted to examine the factor structure of the construct of new product advantage. Two components are extracted with eigenvalues larger than 1.0. The rotated component matrix shows that items of new product advantage to consumers and new product advantage to retailers loaded on the proposed respective components (see Table 4.2).

Two first-order factor CFAs are first conducted. Mardia's coefficient (Mardia 1970) is used to measure multivariate normality. Mardia's normalized estimate of 12.67 is above the minimum cutoff point of the multivariate normality of 1.96 (Byrne 2001), indicating multivariate non-normality of the original data at a one-tail .05 level. Therefore, a robust transformation is used to reduce kurtosis and skewness. The maximum likelihood method with robust transformation (ML ROBUST) is used and the

robust statistics are reported next. We report fit indices such as CFI and RMSEA because they are least sensitive to sample size (Fan, Thompson, and Wang 1999).

LM statistics are examined for cross-loading items. No cross-loading items are detected. The model fit is good (S-B $\chi 2$ = 59.43, p= .004, df = 34, CFI= .952; IFI= .953; NNFI= .905; RMSEA= .065; 90% CI (.036, .092)). See Figure 4.1 for the CFA measurement model of new product advantage. Although two items of new product advantage to retailers (i.e. V1: this new product would provide us with a high gross margin; V5: this new product would contribute to incremental sales; not cannibalize) have item-factor loadings of less than .60 (i.e. V1=.57; V5=.59), these items are retained because Gerbing, Hamilton and Freeman (1994) argue that removing psychometrically acceptable items may weaken content validity and narrow the domain of the construct. We contend that in a new product buying setting, a new product proving a high gross margin and/or not cannibalizing are product attributes that are perceived important by retailers. Thus, these two items are kept to reflect the domain of new product advantage to retailers.

Convergent validity is assessed using three criteria based on the results of CFA tests: individual item lambda coefficients greater than .5, a significant (.05 level) t-value for each path, and the loading of each path with greater than twice its standard error (Anderson and Gerbing, 1988). The CFA results show that all the item-factor loadings are larger than .57 (see Figure 4.1) with all t-values are greater than 5.59 ($p< .01$), and each path loading is greater than twice its standard error. Therefore, convergent validity of product advantage to consumers and product advantage to retailers is confirmed.

Discriminant validity between product advantage to consumers and product advantage to retailers is examined by fixing the covariance between two latent factors at 1.00. The result shows that the χ^2 of the unconstrained model is significantly lower ($p<$ .001 for χ^2 difference) than that of the constrained model, supporting the discriminant validity between new product advantage to consumers and product advantage to retailers.

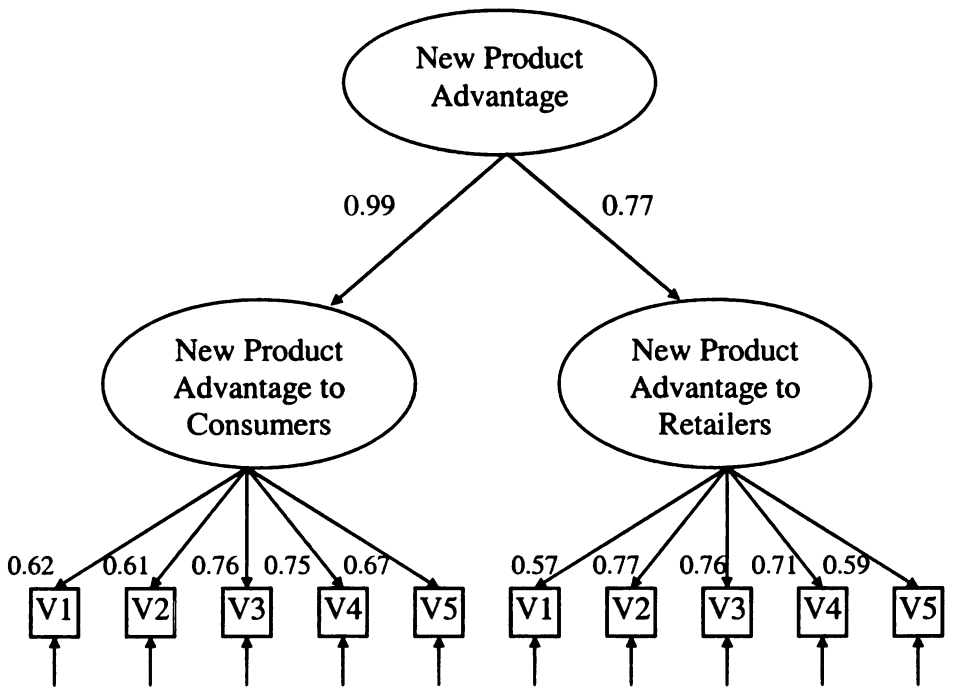
Table 4.2 – EFA Analysis of New Product Advantage

Component	Item	Factor Loading	
Product Advantage to Consumers	V1: Provides higher value for consumers.	**0.51**	0.36
	V2: Has a higher quality/price ratio.	**0.76**	0.30
	V3: Will meet an unmet need of consumers.	**0.72**	0.33
	V4: Is superior to competing products.	**0.76**	0.19
	V5: Has higher quality than competing products.	**0.66**	0.07
Product Advantage to Retailers	V1: Would provide us with a high gross margin.	0.38	**0.51**
	V2: Would potentially achieve high sales volume.	0.20	**0.82**
	V3: Would be in high demand.	0.24	**0.77**
	V4: Would generate high store traffic.	0.33	**0.68**
	V5: Would contribute to incremental sales; not cannibalize.	0.11	**0.71**

The second-order factor CFA is then conducted and results in the same model fit (S-B $\chi 2 = 59.43$, p= .004, df = 34, CFI= .952; IFI= .953; NNFI= .905; RMSEA= .065; 90% CI (.036, .092)). Thus, the evidence confirms the second-order factorial structure of

the new product advantage construct with two sub-dimensions: product advantage to consumers and product advantage to retailers. However, in order to test the potentially differing impacts of these two dimensions, new product advantage to consumers and new product advantage to retailers are retained as separate constructs in the subsequent measurement model assessment and model testing.

Figure 4.1 – CFA Measurement Model of New Product Advantage



S-B $\chi 2$ = 59.43, p = .004, df = 34, CFI= .952; IFI= .953; RMSEA= .065

CFA of Product Innovativeness and New Product Advantage

Mardia's normalized estimate is 16.02, thus the robust statistics are reported. The model fit is good (S-B $\chi 2$ = 118.28, p= .0008, df = 74, CFI= .954; IFI= .954; NNFI=

.943; RMSEA= .060; 90% CI (.039, .080)). See Table 4.3 for standardized loadings of the CFA measurement model. No cross-loading items are detected.

Table 4.3 – CFA Results of Product Innovativeness and New Product Advantage

Construct	Measurement Items	Standar -dized Loading	t-value
F1: New Product Advantage to Consumers	V1: Provides higher value for consumers.	0.60	6.29
	V2: Has a higher quality/price ratio.	0.60	6.04
	V3: Will meet an unmet need of consumers.	0.78	7.31
	V4: Is superior to competing products.	0.74	7.06
	V5: Has higher quality than competing products.	0.67	6.65
F2: New Product Advantage to Retailers	V1: Would provide us with a high gross	0.56	5.34
	V2: Would potentially achieve high sales volume.	0.79	6.82
	V3: Would be in high demand.	0.75	6.67
	V4: Would generate high store traffic.	0.70	6.42
	V5: Would contribute incremental sales; not cannibalize.	0.58	5.71
F3: Product Innovativeness	V1: Overall, this new product was highly innovative compared to other products in the market.	0.72	8.12
	V2: This new product was radically different from competitor products.	0.73	8.93
	V3: The technology this product incorporates was new to consumers.	0.74	8.94
	V4: This product offered dramatic improvements in existing product features.	0.84	10.01
	V5: This product introduced many completely new features to the market.	0.83	9.96

Convergent validity of each of the three constructs is confirmed because all the item-factor loadings are significant (all t-values are greater than 5.34, $p < .01$) and larger than .56. Additionally, all path loadings are greater than twice their respective standard errors. Discriminant validity among product innovativeness, product advantage to

consumers, and product advantage to retailers is assessed by conducting a series of nested confirmatory analyses (Bagozzi and Philips 1982) fixing all possible combinations of covariances among these three latent variables (phi matrix) at 1.00, and then employing a χ^2 difference test on the values in the unconstrained model vs. each of the constrained models respectively. In all cases, the χ^2 of the unconstrained model is significantly lower ($p < .001$ for χ^2 difference) than that of the constrained model, supporting the discriminant validity of product innovativeness, product advantage to consumers, and product advantage to retailers.

CFA of Trust, Reputation, and Personal Relationships

Trust and its antecedents are one subsystem in our model. Since past experience is a one-item measure, this variable is not included in the CFA model. Similarly, Mardia's normalized estimate of 12.97 is above the cutoff point. The model fit is also good (S-B $\chi 2 = 104.41$, $p = .0006$, $df = 62$, CFI= .961; IFI= .961; NNFI= .951; RMSEA= .063; 90% CI (.041, .083)). See Table 4.4 for standardized loadings of the CFA measurement model. No cross-loading items are detected.

All the item-factor loadings are larger than .69 and significant (all t-values are greater than 6.45, $p < .01$). Each path loading is significantly greater than twice its standard error. Thus, convergent validity of each of these three constructs is confirmed.

Discriminant validity among trust, supplier reputation, and personal relationships is also assessed by conducting a series of nested confirmatory analyses fixing one, two, and all three of the covariances among these three latent variables at 1.00. Again, in all cases, the χ^2 of the unconstrained model is significantly lower ($p < .01$ for χ^2 difference) than that of the constrained model, supporting the discriminant validity among supplier

reputation, retailer trust of the supplier, and personal relationships. The discriminant validity between past experience and each of these three constructs is examined by checking the correlations among item variables. In all cases, the correlation between past experience and each of items is lower than correlations among items that belong to the same construct. Therefore, discriminant validity of past experience is confirmed as well.

Table 4.4 – CFA Results of Trust, Reputation, and Personal Relationship

Construct	Measurement Items	Standar-dized Loading	t-value
F1: Reputation	V1: This supplier has a reputation for being honest.	0.69	6.46
	V2: This supplier has a reputation for being concerned about retailers.	0.84	9.09
	V3: This supplier has a good reputation in the market.	0.88	9.54
	V4: Most retailers think that this supplier has a reputation for being fair.	0.70	8.75
F2: Personal Relationship	V1: I have a very close personal relationship with the salesperson.	0.73	8.89
	V2: This salesperson is like a friend to me.	0.69	6.45
	V3: I am willing to help this salesperson.	0.92	7.75
	V4: I am familiar with this salesperson.	0.85	7.25
F3: Trust	V1: We can count on this supplier to do what is right.	0.69	8.01
	V2: The supplier can always be trusted.	0.81	12.43
	V3: This supplier has high integrity.	0.90	11.64
	V4: This supplier is honest and trustful with me.	0.76	8.27
	V5: I feel that I can trust this supplier completely.	0.81	10.14

CFA of Cooperation, Communication, and Commitment

Cooperation, communication, and commitment are proposed as three components of a second-order factor—collaboration. The measurement scales of three first-order

factors are first assessed. Again, Mardia's normalized estimate is 12.51, indicating multivariate non-normality. The model fit is relatively good (S-B $\chi 2 = 77.21$, p= .0005, df = 41, CFI= .932; IFI= .934; NNFI= .909; RMSEA= .072; 90% CI (.047, .096)). See Table 4.5 for standardized loadings of the CFA measurement model. Again, the LM test does not detect any cross-loading items.

Table 4.5 – CFA Results of Cooperation, Communication, and Commitment

Construct	Measurement Items	Standar-dized Loading	t-value
F1: Commitment	V1: We are committed to this supplier.	0.72	7.21
	V2: We are quite willing to make long-term investment in selling this product.	0.75	8.99
	V3: Our relationship with this supplier is a long-term alliance.	0.71	7.18
	V4: We are patient with this supplier when they make mistakes that cause us trouble.	0.76	8.91
	V5: We are willing to dedicate whatever people and resources it takes to grow sales of this product.	0.71	8.59
F2: Cooperation	V1: Our company tries our best to help out this supplier.	0.63	6.54
	V2: This supplier tries their best to help our company out.	0.73	7.06
	V3: This supplier is very cooperative.	0.74	6.29
F3: Communication	V1: We are quite involved in the marketing and planning efforts of this supplier.	0.75	8.32
	V2: This supplier seeks our advice and counsel concerning their marketing efforts.	0.86	9.63
	V3: This supplier is willing to let us know their weakness as well as their strengths.	0.65	8.08

Similarly, convergent validity of each construct is confirmed because all the item-factor loadings are larger than .63, significant (all t-values are greater than 6.29, p< .01), and each path loading is significantly greater than twice its standard error.

Discriminant validity among cooperation, communication, and commitment is also assessed by conducting a series of nested confirmatory analyses fixing one, two, and all three of the covariances among these three latent variables at 1.00. In all cases, the χ^2 of the unconstrained model is significantly lower ($p < .01$ for χ^2 difference) than that of the constrained model, supporting the discriminant validity of the constructs.

The second-order factor of collaboration is also assessed. The results show that cooperation, communication, and commitment all load on collaboration with significant factor loadings larger than 0.6. In the next model and hypotheses testing, three scale scores (i.e. the average of the individual items) of cooperation, communication, and commitment are used as three indicators of the collaboration construct.

CFA of New Product Performance and Retailer Performance

New product performance and two types of retailer performance—retailer market performance and retailer financial performance—are the final subsystem in our model. Likewise, the multivariate non-normality is indicated by the Mardia's normalized estimate of 10.57. The results from the CFA model show that the model fit is also acceptable (S-B $\chi 2 = 94.76$, $p = .000$, $df = 41$, CFI= .922; IFI= .924; NNFI= .895; RMSEA= .087; 90% CI (.064, .109)). See Table 4.6 for standardized loadings of the CFA measurement model. Again, no cross-loading items are detected.

Convergent validity of these three constructs is also demonstrated by large and significant item-factor loadings (all item-factor loadings are larger than .61; all t-values are greater than 7.21 ($p < .001$); each path loading is considerably greater than twice its standard error). Discriminant validity among new product performance, retailer market performance, and retailer financial performance is also assessed by conducting a series of

nested confirmatory analyses fixing one, two, and all three of the possible covariances among these three latent variables at 1.00. In all cases, the χ^2 of the unconstrained model is significantly lower ($p < .01$ for χ^2 difference) than that of the constrained model, supporting the discriminant validity of these three constructs.

Overall, the constructs in our model show good measurement properties.

Table 4.6 – CFA Results of New Product Performance and Retailer Performance

Construct	Measurement Items	Standar-dized Loading	t-value
F1: Retailer Market Performance	V1: Achieving customer satisfaction.	0.81	11.11
	V2: Attracting new customers.	0.80	10.63
	V3: Building a positive store image.	0.79	9.95
F2: Retailer Financial Performance	V1: Attaining desired sales growth.	0.77	7.21
	V2: Attaining desired profitability.	0.78	7.66
F3: New Product Performance	V1: Met volume goals.	0.86	15.01
	V2: Met sales growth goals.	0.85	15.26
	V3: Met market share goals.	0.77	12.45
	V4: Met profitability goals.	0.61	7.78
	V5: Met margin contribution goals.	0.64	7.50
	V6: Consumer acceptance.	0.67	10.33

The Path Model

Our model is tested using the structural equation model program (EQS 6.1; Bentler 1995). Due to the small sample size to parameter ratio, testing of the overall structural model with full scale items as indicators of constructs is not possible. Therefore, we test the fit of the path model and the statistical significance of the

hypothesized effects by using the average of the scale items for the latent constructs. In the model testing, product advantage to consumers and product advantage to retailers are retained as separate constructs using the average of their respective items. Collaboration is treated as a single construct using the average of cooperation, communication, and commitment.

Since the multivariate normality of the data with Mardia's normalized estimate of 4.09 (Mardia 1970) is 16.95, again above the minimum cutoff point of multivariate normality of 1.96 (Byrne 2001), we continue with using the maximum likelihood method with robust transformation (ML ROBUST) for path model testing and report the robust statistics. Covariance matrixes for the path model are reported in Table 4.7. Hypotheses are tested based on the standardized ML estimates using t-tests. Test results are reported in Table 4.8.

Results

The initial model fit is not satisfactory (S-B $\chi 2 = 534.13$, p= .000, df = 57, CFI= .776; IFI= .791; MFI= .693; RMSEA= .114; 90% CI (.094, .133)). Although all hypothesized paths are significant, the results of the LM test show that several additional links need to be added to the model. We explicitly considered each suggested link and only added a link when it could be justified by theoretical arguments from the literature. After adding four suggested links, we revised the model as shown in Figure 4.2. We retest the model and the overall model fit is good (S-B $\chi 2 = 77.27$, p= .006, df = 49, CFI= .934; IFI= .939; MFI= .910; RMSEA= .062; 90% CI (.034, .088)).[13] Although the χ^2 is

[13] We acknowledge that the revised model should be subject to further model validation from another sample. We include this in the Limitations and Directions for Future Research section.

significant, CFI is larger than .90, and RMSEA is smaller than .08. Next, we report the result of each hypothesis testing.

H1 posited the relationship between product innovativeness and new product advantage. Specifically, H1a proposed a positive relationship between product innovativeness and product advantage to consumers, and H1b proposed a positive relationship between product innovativeness and product advantage to retailers. The results of the t-test support H1a ($t = 6.24$, $p < .01$), but not H1b ($t = 1.26$, $p > .1$).

H2 posited the relationship between new product advantage and new product evaluation. H2a proposed a positive relationship between product advantage to consumers and new product evaluation and H2b proposed a positive relationship between product advantage to retailers and new product evaluation. The results of the t-test support both H2a ($t = 2.09$, $p < .05$) and H2b ($t = 2.01$, $p < .05$).

H3 posited the relationship between new product advantage and new product performance. Specifically, H3a proposed a positive relationship between product advantage to consumers and new product performance and H3b proposed a positive relationship between product advantage to retailers and new product performance. Although the result of the t-test does not support H3a ($t = .28$, $p > .1$), it supports H3b ($t = 2.79$, $p < .01$).

H4 proposed a positive relationship between supplier reputation and retailer trust of the supplier. The result of the t-test supports this hypothesis ($t = 3.23$, $p < .01$). H5 proposed a positive relationship between a retailer's past experience with a supplier and retailer trust of that supplier. The result of the t-test supports this hypothesis ($t = 2.53$, $p < .05$). H6 proposed the positive relationships between personal relationships (between a

retail buyer and a supplier salesperson) and retailer trust of the supplier. The result of the t-test does not support this hypothesis ($t = 1.85$, $p > .1$).

H7 hypothesized a positive relationship between retailer trust of a supplier and retailer new product evaluation. The result of the t-test supports this hypothesis ($t = 2.02$, $p < .05$). H8 hypothesized the positive relationship between retailer trust of a supplier and retailer collaboration with that supplier. The result of the t-test supports this hypothesis ($t = 6.00$, $p < .01$).

H9 hypothesized the positive relationship between new product evaluation and retailer collaboration with the supplier. The result supports H9 ($t = 2.70$, $p < .01$). H10 hypothesized the positive relationship between retailer collaboration with a supplier and new product performance. The result of the t-test supports this hypothesis ($t = 4.05$, $p < .01$).

H11 conjectured the positive relationship between new product performance and retailer market performance. The result of the t-test supports this hypothesis ($t = 4.60$, $p < .01$). H12 conjectured the positive relationship between new product performance and retailer financial performance. The result of the t-test supports this hypothesis ($t = 3.50$, $p < .01$). H13 conjectured the positive relationship between retailer market performance and retailer financial performance. The result of the t-test supports this hypothesis ($t = 4.60$, $p < .01$).

The four added links are as follows:

1) The link between product innovativeness and retailer collaboration with the supplier ($t = 3.85$, $p < .01$).

2) The link between product innovativeness and retailer market performance ($t = 3.06$, $p < .01$).

3) The link between product advantage to consumers and product advantage to retailers ($t = 6.77$, $p < .01$).

4) The link between personal relationships (between a retail buyer and a supplier) and retailer collaboration with that supplier ($t = 3.21$, $p < .01$).

Next we will discuss the revised model in light of all hypothesized and newly suggested links and provide relevant theoretical and managerial implications.

Table 4.7 – Covariance Matrix for the Path Model

	Mean	SD	BA	NPE	PE	NPP	FP	MP	PAC	PAR	PI	COL	REP	PER	TRU
BA	1.75	.754	.57												
NPE	78.16	9.561	.50	93.22											
PE	2.90	3.290	1.09	3.03	11.71										
NPP	4.84	.859	.02	3.97	.47	.67									
FP	4.75	1.056	.01	3.15	.39	.41	1.12								
MP	5.36	.997	.00	2.73	.07	.34	.61	.96							
PAC	5.07	1.015	.12	3.02	.22	.27	.20	.35	.94						
PAR	5.06	.949	.09	2.85	.45	.32	.22	.35	.59	.86					
PI	4.66	1.207	.10	3.15	.62	.35	.23	.43	.65	.50	1.47				
COL	4.45	.878	.14	2.94	.58	.32	.32	.34	.32	.27	.52	.78			
REP	5.05	1.043	.03	2.31	.46	.31	.38	.32	.32	.32	.44	.38	1.12		
PER	3.97	1.420	.26	1.00	1.31	.15	.09	.10	.23	.26	.33	.48	.54	2.04	
TRU	4.85	.981	.10	2.30	.69	.31	.24	.13	.28	.31	.26	.49	.43	.44	.93

Note: BA=Buyer Age; NPE=New Product Evaluation; PE=Past Experience; NPP=New Product Performance; FP=Retailer Financial Performance; MP=Retailer Market Performance; PAC=Product Advantage to Consumers; PAR=Product Advantage to Retailers; PI=Product Innovativeness; CAL=Collaboration; REP=Reputation; PER=Personal Relationships; TRU=Trust; SD= Standard Deviation

Figure 4.2 – A Revised Model

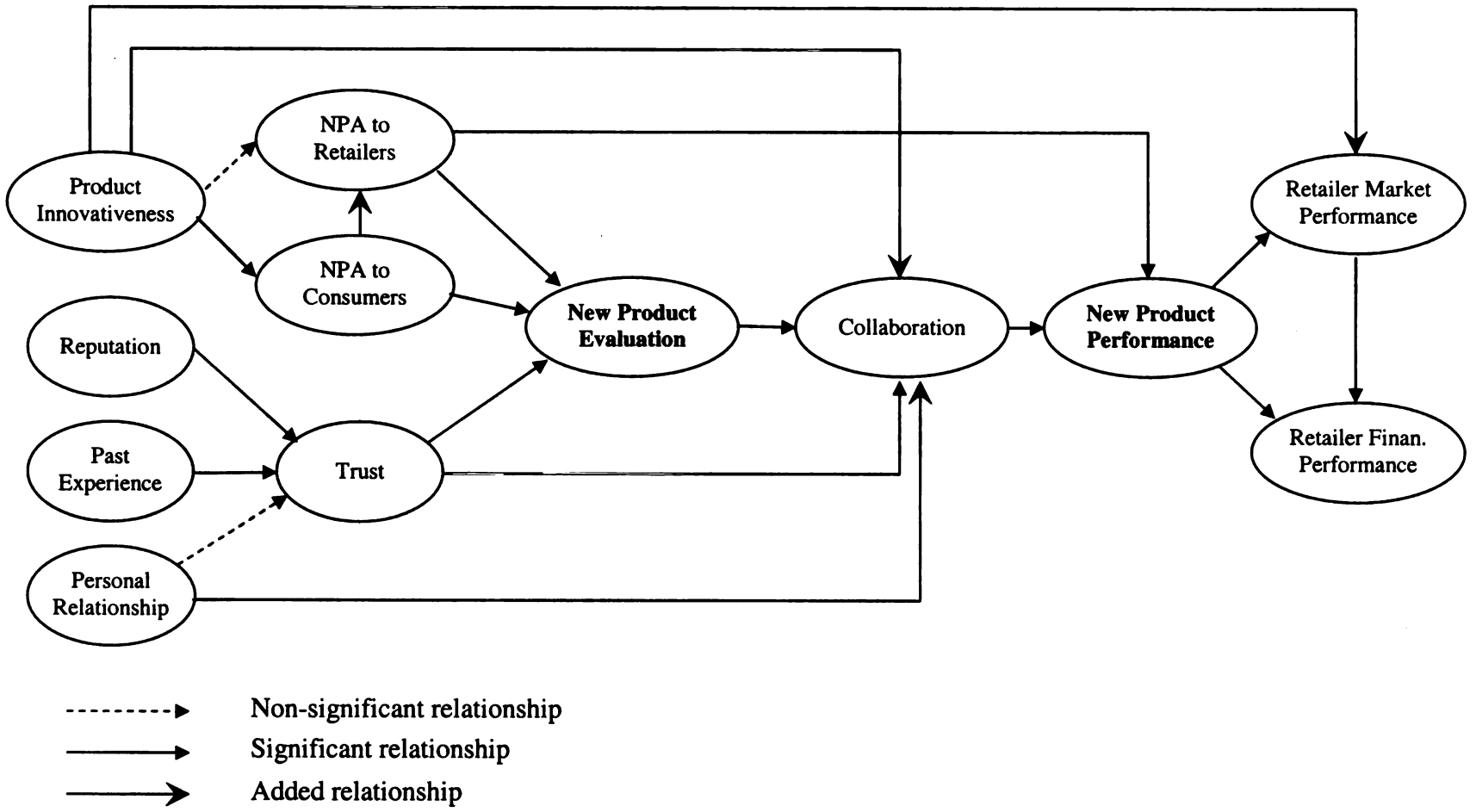


Table 4.8 – Results of the Path Model

Hypothesized Paths	ML Estimate	t-value	Hypotheses
Product Innovativeness → New Product Advantage to Consumers	0.38	6.238**	H1a supported
Product Innovativeness → New Product Advantage to Retailers	0.07	1.263	H1b not supported
New Product Advantage to Consumers → New Product Evaluation	1.82	2.089*	H2a supported
New Product Advantage to Retailers → New Product Evaluation	1.42	2.019*	H2b supported
New Product Advantage to Consumers → New Product Performance	0.03	0.284	H3a not supported
New Product Advantage to Retailers → New Product Performance	0.25	2.787**	H3b supported
Reputation → Trust	0.28	3.230**	H4 supported
Past Experience → Trust	0.03	2.527*	H5 supported
Personal Relationship → Trust	0.11	1.849	H6 not supported
Trust → New Product Evaluation	1.42	2.020*	H7 supported
Trust → Collaboration	0.35	5.998**	H8 supported
New Product Evaluation → Collaboration	0.02	2.696**	H9 supported
Collaboration → New Product Performance	0.31	4.047**	H10 supported
New Product Performance → Retailer Market Performance	0.41	4.604**	H11 supported
New Product Performance → Retailer Financial Performance	0.36	3.501**	H12 supported
Retailer Market Performance → Retailer Financial Performance	0.50	4.592**	H13 supported
Buyer Age → New Product Evaluation	-0.00	-0.002	Control variable (n.s.)
Non-Hypothesized Paths	**ML Estimate**	**t-value**	
Product Innovativeness → Collaboration	0.21	3.851**	
Product Innovativeness → Retailer Market Performance	0.20	3.062**	
Product Advantage to Consumers → Product Advantage to Retailers	0.51	6.772**	
Personal Relationship → Collaboration	0.12	3.206**	
S-B $\chi 2 = 77.27$, p=.006, df = 49, CFI= .934; IFI= .939; MFI= .910; RMSEA= .062; 90% CI (.034, .088)			

* $p < 0.05$
** $p < 0.01$
Note: n.s.=non-significant

CHAPTER 5

DISCUSSION

Discussion of the Results

Marketing scholars have paid little attention to examining the importance of retailers in determining new product success despite the critical role retailers play in new product introductions (Rao and McLaughlin 1989). In this study, we argue that retailers not only make buying decisions regarding new products but also influence the performance of new products in the market. Drawing theories from different disciplines, we proposed an integrated conceptual model explaining retailer new product evaluation and new product success and conducted an empirical study to test the model with data collected in China. Overall, the model showed good fit properties. Out of the 16 hypothesized paths (including a and b in H1, H2, H3), 13 paths (i.e. 81%) are confirmed. Therefore, it can be concluded that the results of this study support the proposed model.

New Product Advantage

This study incorporated the construct of new product advantage from NP literature in the retailer new product evaluation model. However, different from the unidimensional construct found in NP literature, we propose new product advantage as a second-order construct with two dimensions: product advantage to consumers and product advantage to retailers. The CFA results confirmed our proposition of the factorial structure of this construct. Further, the results of the path model showed that both product advantage to consumers and product advantage to retailers are important to retail buyers' consideration of new products. These findings imply that the construct of new product advantage may need to be redefined to reflect its importance to both types of customers:

end-consumers and retailers, because it is likely that retailers and consumers may seek different advantages from a new product. For example, consumers may purchase a new product because it appears to be of better quality than existing products while retailers may buy a new product because it provides an opportunity of obtaining a higher profit margin. In addition, as suggested by the revised model, product advantage to consumers is also positively related to product advantage to retailers. For instance, a new, high quality product may be perceived by retailers as a good opportunity to obtain a higher profit margin. Thus, the results of this study suggest that the construct of new product advantage and the interrelationship between its two dimensions are more complex and more interesting than specified in literature, and so deserve further investigation.

In NP literature, product innovativeness is usually posited as an antecedent of product advantage (Calantone, Chan and Cui 2006; Gatignon and Xuereb 1997). Our results confirmed this relationship through the linkage between product innovativeness and product advantage to consumers. In addition, the results also suggested that product innovativeness leads to product advantage to retailers through product advantage to consumers. The indirect path between product innovativeness and product advantage to retailers can be explained logically. An innovative product is designed for consumers; therefore, new product advantages are tailored to meet the desires of consumers (Montoya-Weiss and Calantone 1994). For retailers, however, only those product advantages that elicit consumer demand and bring profit to retailers are meaningful. Therefore, an innovative product itself is not attractive to retailers; it is only attractive to retailers when its innovative features are perceived as superior by consumers and are thus likely to benefit retailers as well.

Trust

In this study, following Williamson (1991), we examined organizational trust. Anderson and Weitz (1989) examine relationships between independent sales agents and their principals and find that the reputation of a principal enhances a sales agent's trust of the principal. Similarly, Ganesan (1994) conducts a field study involving both retailers and vendors and his findings confirm that one party's reputation leads to the other party's trust. The results of our study also support a positive relationship between a supplier's reputation and a retailer' trust of the supplier, thus providing further evidence for this link.

Although theorized in several studies, the link between past experience and trust has not yet been empirically confirmed (Ganesan 1994; Kumar, Scheer and Steenkamp 1995). Our study is likely the first empirical study that confirms the positive relationship between a retailer's past experience with a supplier and the retailer's trust of the supplier. Taken together, our results suggest that a retailer's trust of a supplier can be derived from the reputation of the supplier and the retailer's past experience with the supplier.

Though hypothesized in the model, the link between personal relationships (between a retailer buyer and a salesperson) and the retailer's trust of the supplier was not confirmed. This finding may seem counterintuitive in a Chinese setting because personal relationships, or "*guanxi*" as they are called in China, have been advocated for in international marketing literature because of the belief that such relationships are an important tool used to cultivate trust in China (Armstrong and Yee 2001; Chang and Ding 1995). However, recently, some researchers have theorized about the decreasing importance of personal relationships/*guanxi* in business relationships. For example,

Guthrie (1998) argues that personal relationships/*guanxi* will eventually disappear as the institutional structure and the rational-bureaucratic system matures. The most recent empirical evidence also shows that personal relationships are not related to trust as China is transforming from a planned economy to a market economy. Huang, Sternquist, and Calantone (2006) conduct a study of retail buyer-supplier relationships in China and find that personal relationships between retail buyers and salespersons are not related to retailers' trust of suppliers. Similarly, Chen (2006) also concludes that personal relationships do not lead to a retailer' trust of a relatively new supplier at the beginning of the relationship building process. Therefore, our results add evidence to the recent argument that personal relationships/*guanxi* are losing its importance, especially in business settings.

New Product Evaluation

New product evaluation is proposed as a new construct in our model. Rao, McLaughlin and Hawkes (1995) suggest that a retailer' judgment of a new product is of particular importance to the potential success of the new product. However, no attention has been given to the retailers' judgment process *per se*. Instead, most studies have focused on the consequence of the judgment process—either the accept or reject decision. This study is therefore the first to examine retailers' judgments of new products through retailer new product evaluation. As hypothesized, a retailer's evaluation of a new product is based on considerations of both the product factor and the supplier factor. Specifically, the results of this study show that the product factor includes product advantage to consumers and product advantage to retailers, and the retailer factor is comprised of retailer trust of the supplier. In an industrial purchasing setting, Doney and Cannon

(1997) report that trust in the supplier is unrelated to purchase but related to future purchase consideration. They therefore suggest that trust is only an order qualifier (meaning a certain level of trust is required before a manufacturer is even considered as a potential supplier) rather than an order winner (meaning that the extent of trust does influence the purchase decision). However, in a retail buying setting, our results show that retailer trust of the supplier is positively related to retailer new product evaluation. In the context of China, trust may actually be an order winner because, compared to the West, China is a low-trust society, and therefore trust is of the highest importance in organizations (Atuahene-Gima and Li 2002).

Collaboration

In this study, we also examined whether retailer new product evaluation exerts any influence on a retailer's behavior after a new product is stocked. Several researchers have called for studies of buyer behavior in the buying/purchasing setting. For example, Rao, McLaughlin and Hawkes (1995) suggest that analysis of retailers' behavior can yield valuable insights on channel efficiency and management during new product introduction. Similarly, Lusch and Vargo (1998, p. 585) argue that "in organizational buying literature, purchasing decisions are typically involved with evaluating relative importance weights of attributes such as price, delivery, quality. What is missing in this literature is the empirical investigation of actual perceptions of decision criteria in relation to intended behavior." This study answered these calls by analyzing retailers' collaborative behavior after new products are accepted in stores. Weitz and Jap (1995) point out that most of the empirical research on channel relationships characterized the relationships at one point in time but does not provide much insight into the factors

leading to the development of the relationship or the effectiveness of the relationships. The model proposed in this study can be seen as an initial step to solve this problem because 1) our model consists of two stages: the evaluation stage and post-evaluation stage; and 2) we explicitly posited the antecedents and consequences of retailers' collaborative behavior.

As hypothesized, retailer new product evaluation and retailer trust of the supplier are positively related to retailer collaboration with that supplier. Andaleeb (1995) reports that a distributor's trust of a supplier is positively related to the distributor's cooperation with the supplier. Anderson and Weitz (1989) find that a sales agent's trust of a principal leads to the sales agent's communication with the principal and willingness to continue with the business relationship. Likewise, Morgan and Hunt (1994) also find a positive link between a retailer's trust of a supplier and the retailer's commitment to the relationship and a positive link between a retailer's trust of a supplier and the retailer's cooperation with the supplier. Therefore, our results are consistent with the findings in previous studies.

In addition, our results also suggest that product innovativeness and personal relationships between a buyer and a supplier are positively related to retailers' collaboration with suppliers. The link between product innovativeness and retailer collaboration is interesting and may be related to the finding by Sternquist and Chen (2006) that in general Chinese retailers think highly of and welcome unique, innovative products. For example, it is reported that some of the retailers in China may waive the slotting fee if they think a new product is unique (Huang, Sternquist and Calantone 2006). If a product is truly innovative, a retailer may be more willing to collaborate with

the supplier. The positive relationship between personal relationships and retailer collaboration is a surprising finding. However, when this finding is considered together with the finding that personal relationships were not significant in leading to retailer trust of a supplier, it may suggest that personal relationships do have different effects on buyer-supplier relationships at different relationship stages. For instance, personal relationships may be more important in driving trust at the relationship maintenance stage (Chen 2006).

New Product Performance and Retailer Performance

New product performance and retailer performance are consequences in our model. In general, the results support our hypotheses. Retailer collaboration and new product advantage to retailers are positively related to new product performance. New product performance also leads to retailer market performance and retailer financial performance. In addition, the results suggest that product innovativeness is also positively related to retailer market performance. This probably explains why innovative products are preferred by Chinese retailers in general. Further, the results did not suggest a link between product innovativeness and retailer financial performance, which seems consistent with the finding that product innovativeness did not lead to product advantage to retailers directly. In other words, if an innovative product does not bring any benefits to a retailer, it is not likely to contribute to the financial performance of the retailer.

Theoretical Implications

The theoretical contributions of this study are fivefold. First, this study incorporates theories from areas of new product development, marketing, and organizational buying and proposes a formal model of retail new product buying

behavior. The results of the study demonstrate a good model fit indicating the applicability of the proposed model. In particular, this study has answered both the call for an expanded incorporation of distribution in new product research (Rao, McLaughline and Hawkes 1995; Wind and Mahajan 1987) and the call for developing a theoretical model in retail buying behavior (Wagner, Ettenson and Parrish 1989). In this way, this study represents an initial attempt to connect RB literature with NP literature in the area of retailer new product buying.

Second, this study expands the domain of retailer new product buying from the previous dichotomous accept/reject decision to a continuous evaluation stage. The results of this study clearly show that retailers' evaluations of new products are subject to retailers' perceived product advantages of new products and retailers' trust of suppliers. In addition, this study suggests that new product advantage, a construct frequently studied in NP literature, may possess a higher order factorial structure consisting of two dimensions: product advantages to consumers and product advantages to retailers.

Third, this study incorporates both an evaluation stage and a post-evaluation stage in the retailer new product buying model. In this manner, we explicitly link retailers' perceptions of new products during the new product evaluation process to retailers' actual behavior after the evaluation and examine the influence of their behavior on new product performance in stores. In effect, since the retailer has become the "captain" of the marketing channel (Lusch and Vargo 1998, p.582), these linkages are particularly important in the stream of NP research. The results of this study provide evidence of the importance of retailers in affecting new product performance in the market.

Fourth, this study builds on the relationship marketing paradigm and is the first that includes relational constructs in retail buying studies. Specifically, the results of the study demonstrate that the retailer's trust of the supplier exerts an impact on retailer new product evaluation and the subsequent relationship between the retailer and the supplier. The results also show that the retailer's relational behavior, comprised by such attributes as cooperation, communication, and commitment, influence new product performance in the market.

Fifth, this study is the first to examine new product performance from the retailer's perspective and the first to link new product performance to retailer performance. Although previous studies suggest new products contribute to retail sales and profits (Montgomery 1975), there has been no empirical evidence until now. The results of this study provide evidence for this link.

Managerial Implications

Implications for Retailers

Buying new products is not a trivial decision for retailers (Sullivan 1997). Retailers need to learn to better allocate scarce resources, reduce costs, and thereby maximize both organizational and channel efficiency. Therefore, retailers need to understand their own behavior and the consequences of their behavior. The results of this study suggest the following implications for retail buyers and managers:

1) New product performance leads to both retailer market performance and retailer financial performance. Although new products have high failure rates and therefore bear risks and uncertainties, in general, new products contribute to retailer performance. The favorable performance of new products brings mutual

benefits to manufacturers and retailers and should be the common goal of both parties. Further, to the extent that new product success is associated with retailers' collaboration with suppliers, a retailer may be better off developing a partnership relationship with a supplier during the new product introduction process (Anderson and Narus 1991) to ensure new product success because new product performance is a driver of retailer performance as well.

2) The results of this study show that personal relationships between retail buyers and suppliers' salespersons are positively related to retailers' collaboration with suppliers. Therefore, although some retailers may have policies disencouraging or even forbidding personal relationships between buyers and salespersons (Huang, Sternquist and Calantone 2006), managers may need to carefully define the term "personal relationships" and differentiate the good consequences of these relationships from the bad. Further research is needed in this area to give more explicit guidance to retailers.

Implications for Suppliers

Along with the implications for retailers, the results of this study provide implications for suppliers as well. New product introduction is expensive for manufacturers. It is reported that total development expenditures for the Ultra-Pamper diaper, a product of the Procter & Gamble Company cost $1.5 billion (Rao and McLaughlin 1989). Ensuring the market success of a new product is important to a manufacturer. The adoption of a new product by consumers is dependent upon the new product being distributed by the retailer (Kuester, Gatignon and Robertson 2000). Therefore, for manufacturers, understanding the buying behavior of retailers is as

important as the knowledge of the buying behavior of consumers. The results of this study suggest the following implications for manufacturers:

1) Both retailers and consumers are manufacturers' customers; therefore, manufacturers need to understand and differentiate two types of product advantages—product advantage to consumer and product advantage to retailer. Retail buyers buy the new product before consumers do. Just like consumers, they need to get excited about the new product (Ottum 1996). Therefore, in addition to targeting product advantages to consumers, manufacturers also need to develop product attributes that are likely to bring benefits to retailers. For example, a manufacturer may put effort into developing a certain unique feature that may result in consumers' willingness to pay a premium for it. The manufacturer may thereby offer the retailer an opportunity for higher markup gained by carrying this new product.
2) From a managerial perspective, it is also important for manufacturers to know and understand the factors that determine retail buying processes. These factors may be internal or external to the manufacturer and thus either controllable or uncontrollable. Particularly, manufacturers need to know what variables are controllable and what variables are not controllable but are influenceable. For instance, among the factors influencing retailer new product evaluation, both product advantage to consumers and product advantage to retailers are controllable variables. Manufacturers need to make sure that their understanding of these two factors is the same as that of retailers'. In contrast, retailer trust of a supplier is an uncontrollable factor, but it can be influenced by company

reputation. Manufacturers can send "signals" to retailers that they intend to work together with retailers over the long run by safeguarding their own reputations. These signals help build the level of mutual trust (Anderson and Weitz 1989).

3) The results of this study show that retailer collaboration contributes to new product performance. Therefore, eliciting retailer collaboration is important to ensure new product success in the market. Based on our results, manufacturers can increase retailer collaboration in three ways: through improving product advantage to retailers, through developing an organizational trust, and through cultivating personal relationships with retail buyers.

Limitations and Directions for Future Research

Like any empirical research, our study has several limitations. First, we used subjective measures of new product performance, retailer market performance, and retailer financial performance in our study. Although subjective measures of performance have been widely used in marketing and NP literature (Homberg, Hoyer and Fassnacht 2002; Langerak, Hultink and Roben 2004), adding objective performance measures may be more desirable and could further validate subjective performance measures. Therefore, for further research, it is desirable to incorporate objective performance measures.

Second, as argued by Cannon and Perreault (1999), in any research project, choices made by the researchers create limitations in interpreting the results. Although we propose our model as an integrated model of new product evaluation and new product success, we only investigated the retail buyer's evaluation of new products accepted in stores because of the way we asked the respondents to answer questions. Further research

needs to investigate the retail buyer's evaluation of new products that are rejected by buyers to validate the first half of our model.

Third, in our survey study, we asked the respondents to think back to a new product they accepted the previous year and answer questions relevant to the situations surrounding their acceptance of the new product. Although the respondents did not express any problems with recalling situations and previous studies using the same method did not report any problems (Rao and McLaughlin 1989), it is possible that the respondents' memories may not have been precise and thus information about the situations associated with new product acceptance may be not accurate. To solve this potential problem, a longitudinal study may be a better design for further research. In addition, longitudinal studies are also a preferred method to infer causal relationships.

Finally, although we propose our model as a general model of new product evaluation and success, we only tested the model in China. Further studies need to be conducted in other countries to validate the model and compare the strength of the relationships among constructs in different countries.

In addition to alleviating these limitations, there are other fertile avenues for further research. First, the data for this research are based on the retailer's perspective of the new product buying process. Readers should keep in mind that suppliers' points of view might be different from retailers'. For example, suppliers may have differing perspective regarding whether or not retailers' collaboration has any impact on new product performance. In studies on channel issues, dyadic data collection from both sides is usually encouraged (Siguaw, Simpson, and Baker 1998). A further study using dyadic

responses from both retailers and suppliers may reveal any differences in their perceptions and help to increase channel efficiency.

Second, in proposing our model, we have attempted to strike a balance between parsimony and completeness in identifying theoretically relevant constructs. The scope of the research is therefore delimited by the constructs we explicitly specify, measure, and evaluate. However, it is possible that other constructs that are potentially important in the new product buying process were not included. For example, a retailer's private label strategy may have an influence on retailer new product evaluation because a manufacturer's new product may be a direct competitor of some of the retailer's private label products (Corstjens and Corstjens 1995). Investigation into the influence of retailers' private label strategy on retailer new product evaluation may prove to be a fruitful area of research particularly when retail private labels are prevalent nowadays and will continue to prosper in the future.

Third, Dwyer, Schurr, and Oh (1987) propose a classification scheme based on the stages and processes along which business relationships develop. In the new product buying context, the business relationship stage that a retailer and a supplier stay in may be different from case to case. For instance, a new product supplied by a new supplier indicates that the business relationship between the retailer and the supplier is in the initiation stage, while another new product supplied by a long-term supplier indicates that the business relationship stage may be at a maintenance stage. Different business relationship stages may influence the relationship and behavior between the retailer and the supplier (Chen 2006). Thus, the retailer's evaluation of a new product, and later the

post-evaluation behavior, may be contingent on the business relationship stage the retailer stays in with the particular supplier.

Finally, the model may also be subject to other moderating effects. For instance, the relative power between a retailer and a supplier may moderate proposed relationships among constructs. Since only 10% of our sample retailers (i.e. 15 cases) are classified as less powerful than their suppliers, our data prevent us from conducting a post-hoc check of the moderating effect of power balance. However, further research may strive to solve this problem by asking respondents to think of two suppliers (one who is more powerful than the retailer and another who is less powerful than the retailer) who provided a new product in the past, and answer questions for new products and suppliers respectively.

Conclusion

New product development, the process of bringing new products to market, is one of the most important issues in business research today (Hauser, Tellis, and Griffin 2006). However, with the explosion in new product introductions and a commensurate increase in the number of new product failures, a decision on whether or not to carry a new product is not trivial for a retailer (Rao and Mahi 2003; Sullivan 1997). Previous studies argued that retailers play the role of "gatekeepers" in new product introductions. Our study confirms this argument and extends the argument to suggest that retailers play the role of "co-producers" in new product introductions. Taken together, the results of this study suggest that the retail buyer derives his/her evaluation of a new product from both the product factor (i.e. new product advantage) and the supplier factor (i.e. retailer trust of the supplier). Further, this evaluation influences the extent of the retailer's collaborative behavior, and in turn, influences new product performance. Due to the critical role

retailers play in the potential market success of a new product, this study stands for an initial step in exploring the importance of retailer new product buying in the NPD chain—an area that connects RB literature with NP literature.

REFERENCES

Akerlof, G. A. (1970). The market for 'Lemon': Quality under uncertainty and the market mechanism. Quarterly Journal of Economics, 84(August), 488-500.

Alder, N. J., Campbell, N., and Laurent, A. (1989). In search of appropriate methodology: From outside the People's Republic of China looking in. Journal of International Business Studies, 20, 61-74.

Alpert, F., Kamins, M., and Graham, J. (1992). An examination of reseller buyer attitudes toward order of brand entry. Journal of Marketing, 56(July), 25-37.

Alpert, F., Kamins, M., Sakano, T., Onzo, N., and Graham, J. (2001). Retail buyer beliefs, attitude and behavior toward pioneer and me-too follower brands. International Marketing Review, 18(2), 160-187.

American Productivity & Quality Center (2003). Improving new product development performance and practices. Houston, TX.: APQC. Available at: www.apqc.org/pubs/NPD2003.

Andaleeb, S. S. (1995). Dependence relations and the moderating role of trust: Implications for behavioral intentions in marketing channels. International Journal of Research in Marketing, 12(2), 157-172.

Andaleeb, S. S. (1996). An experimental investigation of satisfaction and commitment in marketing channels: The role of trust and dependence. Journal of Retailing, 71(1), 77–93.

Anderson, E. and Coughlan, A. T. (1987). International market entry and expansion via independence or integrated channels of distribution. Journal of Marketing, 51(January), 71-82.

Anderson, J. C. and Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychology Bulletin, 103(5), 411-23.

Anderson, E. and Weitz, B. A. (1989). Determinants of continuity in conventional industrial channel dyads. Marketing Science, 8(4), 310-323.

Anderson, E. and Weitz, B. A. (1992). The use of pledges to build and sustain commitment in distribution channels. Journal of Marketing Research, 29 (February), 18-34.

Anderson, J. C. and Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. Journal of Marketing, 54(January), 42–58.

Anderson, E. W. and Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. Marketing Science, 12(2), 125-43.

Anderson, E. W., Fornell, C., and Rust, R. T. (1997). Customer satisfaction, productivity, and profitability: Differences between goods and services. Management Science, 16(2), 129-145.

Armstrong, R. W. and Yee, S. M. (2001). Do Chinese trust Chinese? A study of Chinese buyers and sellers in Malaysia. Journal of International Marketing, 9(3), 63-86.

Atuahene-Gima, K. and Li, H. (2000). Marketing's influence tactics in new product development: A study of high technology firms in China. Journal of Product and Innovation Management, 17, 451-470.

Atuahene-Gima, K. and Li, H. (2002). When does trust matter? Antecedents and contingent effects of supervisee trust on performance in selling new products in China and the United States. Journal of Marketing, 66(July), 61-81.

Bagozzi, R. P. and Phillips, L. W. (1982). Representing and testing organizational theories: A holistic construct. Administrative Science Quarterly, 27(3), 459-89.

Banting, P. M. and Blenkhorn, D. L. (1988). The mind of the retail buyer. Management Decision, 26(6), 29-36.

Bentler, P. M. (1995). EQS Structural Equations Program Manual. Encino, CA: Multivariate Software, Inc.

Besanko, D., Dubé, J., and Gupta, S. (2005). Own-brand and cross-brand retail pass-through. Marketing Science, 24(1), 125-137.

Beverland, M. B., Ewing, M. T., and Matanda, M. J. (2006). Driving-market or market-driven? A case study analysis of the new product development practices of Chinese business-to-business firms. Industrial Marketing Management, 35, 383-393.

Bowersox, D. J., Stank, T. P., and Daugherty, P. J. (1999). Lean launch: Managing product introduction risk through response-based logistics. Journal of Product and Innovation Management, 16, 557-568.

Bradach, J. L. and Eccles, R. G. (1989). Price, Authority and Trust: From ideal types to plural forms. Annual Review of Sociology, 15, 97-118.

Brown, S. L. and Eisenhardt, K. M. (1995). Product development: Past research, present findings, and future directions. The Academy of Management Review, 20(2), 343-378.

Boyd, R. and Richerson, P. J. (1985). Culture and the Evolutionary Process. Chicago: University of Chicago Press.

Byrne, B. M. (2001), Structural Equation Modeling with EQS and EQS/Windows: Basic Concepts, Applications, and Programming. Thousand Oaks, CA: Sage Publications.

Calantone, R. J. and di Benedetto, C. A. (1988). An integrative model of the new product development process: An empirical validation. Journal of Product Innovation Management, 5, 201-215.

Calantone, R. J., Schmidt, J. B., and Song, X. M. (1996). Controllable factors of new product success: A cross-national comparison. Marketing Science, 15(4), 341-358.

Calantone, R. J., di Benedetto, C. A., and Stank, T. P. (2005). Managing the supply chain implications of launch. In Kahn, Kenneth B. (Ed.) The PDMA Handbook of New Product Development, 2nd edition (pp. 466-478), New York: John Wiley & Sons, Inc.

Calantone, R. J., Chan, K., and Cui, A. S. (2006). Decomposing product innovativeness and its effect on new product success. Journal of Product Innovation Management, 23, 408-421.

Cannon, J. P. and Perreault W. D. (1999). Buyer–seller relationships in business markets. Journal of Marketing Research, 36(November), 439-60.

Chang, K. and Ding, C. G. (1995). The influence of culture on industrial buying selection criteria in Taiwan and Mainland China. Industrial Marketing Management, 24, 277-84.

Chen, Z. Y. (2006). Chinese Retail Buyer-Seller Initiation and Maintenance of Relationships. Doctoral Dissertation.

China Statistics Yearbook (2001). Beijing: China Statistical Publishing House.

Churchill. G. A. (1979). A paradigm for developing better measures of marketing constructs. Journal of Marketing Research, 16(1), 64-70.

Coase, R. H. (1937). The nature of the firm. Economica, 4, 386-405.

Cooper, R. G. and Kleinschmidt, E. J. (1990). New Product: The Key Factors in Success. Chicago: American Marketing Association.

Cooper, R. G. (2005). New products—What separates the winners from the losers and what drives success. In Kahn, Kenneth B. (Ed.) The PDMA Handbook of New Product Development, (pp. 466-478), New York: John Wiley & Sons, Inc.

Corstjens, J. and Corstjens, M. (1995). Store Wars, Chichester, England: John Wiley & Sons, Ltd.

Couper, M. and De Leeuw, E. (2003), Nonresponse in Cross-Cultural and Cross-National Surveys. Cross-Cultural Survey Methods. Hoboken, NJ: John Wiley & Sons.

Crawford, C. M. (1977). Marketing research and the new product failure rate. Journal of Marketing, 41(April), 51-61.

Crawford, C. M. (1994). New Products Management (4th edition). Homewood, IL: Irwin.

Crozier, R. and Ranyard, R. (1997). Cognitive process models and explanations of decision making. In W.R. Crozier and O. Svenson (Eds.), Decision making: Cognitive models and explanations, 2nd edition (pp. 5-20). London and New York: Routledge.

Dawson J. (2000). Viewpoint: Retailer power, manufacturer power, competition and some questions of economic analysis. International Journal of Retail & Distribution Management, 28(1), 5-8.

Day, G. S. and Wensley, R. (1988). Assessing advantage: A framework for diagnosing competitive superiority. Journal of Marketing, 52 (April), 1-20.

Delre, S. A., Jager, W., Bijmolt, T. H. A., and Janssen, M. A. (2007). Targeting and timing promotional activities: An agent-based model for the takeoff of new products. Journal of Business Research, 60(8), 826-835.

Desai, P. (2000). Multiple messages to retain retailers: Signaling new product demand. Marketing Science, 19, 381-389.

Desiraju, R. (2001). New product introduction, slotting allowances, and retailer discretion. Journal of Retailing, 77, 335-358.

Di Benedetto, C. A. (1999). Identifying the key success factors in new product launch. Journal of Product Innovation Management, 16, 530-544.

Doney, P. M. and Cannon, J.P. (1997). An examination of the nature of trust in buyer–seller relationships. Journal of Marketing, 61(April), 35-51.

Doyle, P. and Weinberg, C. B. (1973). Effective new product decisions for supermarkets. Operational Research Quarterly, 24(1), 45-54.

Dwyer, F., Schurr, P.H., and Oh, S. (1987). Developing buyer–seller relationships. Journal of Marketing, 51(April), 11-27.

Economist (2005, May 5). Making a Meal of Packaged Food.

Fan, X., Thompson, B., and Wang L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. Structural Equation Modeling, 6(1), 56-83.

Fisher, M. L., Raman, A., and McClelland, A. S. (2000). Rocket science retailing is almost here—Are you ready? Harvard Business Review, 78, 115-127.

Fontenot, R. J. and Wilson, E. J. (1997). Relational exchange: A review of selected models for a prediction matrix of relationship activities. Journal of Business Research, 39, 5-12.

Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. Journal of Marketing, 56(January), 6-21.

Frazier, G. L., Gill, J. D., and Kale, S. H. (1989). Dealer dependence levels and reciprocal actions in a channel of distribution in a developing country. Journal of Marketing, 53(January), 50-69.

Frazier, G. L. (1999). Organizing and managing channels of distribution. Journal of the Academy of Marketing Science, 27(2), 226-240.

Gale, F. and Reardon, T. (2004, November). China's modernizing supermarket sector presents major opportunities for U.S. agricultural exporters. AgExporter, Available: http://www.fas.usda.gov/info/agexporter/2004/November/pgs%204-8.pdf

Gallo, A. E. (2007). First major drop in food product introduction in over 20 years. Food Review. Available at: http://findarticles.com/p/articles/mi_m3765/is_n3_v20/ai_20465554

Ganesan, S. (1994). Determinants of long-term orientation in buyer–seller relationships. Journal of Marketing, 58(April), 1-19.

Garcia, R.and Calantone, R. J. (2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. Journal of Product Innovation Management, 19(3), 110-132.

Gatignon, H. and Xuereb, J. (1997). Strategic orientation of the firma and new product performance. Journal of Marketing Research, 34(1), 77-90.

Gerbing, D. W., Hamilton, J. G., and Freeman, E. B. (1994). A large-scale second-order structural equation model of the influence of management participation on organizational planning benefits. Journal of Management, 20(Winter), 859-886.

Gerlich, N. R., Walters, R. G., and Heil, O. P. (1994). Factors affecting retailer acceptance of new packaged goods: Some comparisons across new product types. Journal of Food Products Marketing, 2(2), 65-92.

Geyskens, I., Steenkamp, J. E., and Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships. Journal of Marketing Research, 36(May), 223-38.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. American Journal of Sociology, 91(3), 481-510.

Griffin, A. (1997). PDMA research on new product development practices: Updating trends and benchmarking best practices. Journal of Product Innovation Management, 14, 429-458.

Grashof, J. F. (1970). Supermarket chain product mix decision criteria: A simulation experiment. Journal of Marketing Research, VII(May), 235-242.

Guthrie, D. (1998). The declining significance of Guanxi in China's economic transition. The China Quarterly, 154, 254–282.

Hair, J. F., Anderson, R. E., Tatham, R. L., and Black, W. C. (1998). Multivariate Data Analysis. New Jersey: Prentice Hall.

Hamel, G. and Prahalad, C. K. (1991). Corporate imagination and expeditionary marketing. Harvard Business Review, (July-August), 81-92.

Hansen, T. H. and Skytte, H. (1998). Retailer buying behaviour: A review. International Review of Retail, Distribution and Consumer Research, 8(3), 277-301.

Hansen, K. (2001). Purchasing decision behavior by Chinese supermarkets. International Review of Retail, Distribution and Consumer Research, 11(2), 159-175.

Hauser, J., Tellis, G. J., and Griffin, A. (2006). Research on innovations: A review and agenda for marketing science. Marketing Science, 25(6), 687-717.

Heeler, R. M., Kearney, M. J., and Mehaffey, B. J. (1973). Modeling supermarket product selection. Journal of Marketing Research, X(February), 34-37.

Hogarth, R. (1987). Judgment and Choice. New York: John Wiley and Sons.

Homburg, C., Pflesser, C. (2000). A multiple-layer model of market-oriented organizational culture: Measurement issues and performance outcomes. Journal of Marketing Research, 37(4), 449-462.

Homburg, C., Hoyer, W. D. and Fassnacht, M. (2002). Service orientation of a retailer's business strategy: Dimensions, antecedents, and performance outcomes. Journal of Marketing, 66(4), 86-101.

Hu, D., Reardon, T., Rozelle, S., Timmer, P., and Wang, H. (2004). The Emergence of supermarkets with Chinese characteristics: Challenges and opportunities for China's agricultural development. Development Policy Review, 22(5), 557-586.

Huang, Z., Li, S. X., and Mahajan, V. (2002). An analysis of manufacturer-retailer supply chain coordination in cooperative advertising. Decision Sciences, 33(3), 469-494.

Huang, Y., Sternquist, B., and Calantone, R. J. (2006). Chinese retail buyer-supplier relationship in a transitional economy: Does Guanxi still matter? Working Paper.

Hultink, E. J, Thölke, J. M., and Robben, H. S. J. (1999). Retailers' adoption decision of new consumer durables. Journal of Product Innovation Management, 16, 483-490.

Hunter, G. K. and Perreault, W. D. Jr. (2007). Making sales technology effective. Journal of Marketing, 71(January), 16-34.

Jefferson, G., Hu, A., Guan, X., and Yu, X. (2003). Ownership, performance, and innovation in China's large and medium-size industrial enterprise sector. China Economic Review, 14, 89-113.

Jobber, D. and Saunders, J. (1988). An experimental investigation into cross-national mail survey response rates. Journal of International Business Studies, 19(3), 483-489.

Johansson, U. (2001). Retail buying: Process, information and IT use: A conceptual framework. International Review of Retail, Distribution and Consumer Research, 11(4), 329-357.

Johansson, U. (2002). Food retail buying processes: a study of the UK, Italy and Sweden. International Journal of Retail and Distribution Management, 30(11/12), 575-586.

Johnson, W. J. and Lewin, J. E. (1996). Organizational buying behavior: Toward an integrative framework. Journal of Business Research, 35(1), 1-15.

Kadiyali, V., Chintagunta, P., and Vilcassim, N. (2000). Manufacturer-retailer channel interactions and implications for channel power: An empirical investigation of pricing in a local market. Marketing Science, 19(2), 127-148.

Kale, S. (1986). Dealer perceptions of manufacturer power and influence strategies in a developing country. Journal of Marketing Research, 23 (November), 387-93.

Kincade, Doris H., Woodard, Ginger A., and Park, H. (2002). Buyer-seller relationships for promotional support in the apparel sector. International Journal of Consumer Studies, 26(4), 294-302.

Kline, B. and Wagner, J. (1994). Information sources and retail buyer decision-making: The effect of product-specific buying experience. Journal of Retailing, 70(1), 75-88.

Knight, J. G., Holdsworth, D. K., and Mather, D. W. (2007). Country-of-origin and choice of food imports: An in-depth study of European distribution channel gatekeepers. Journal of International Business Studies. 38(1), 107-125.

Kono, T. and Lynn, L. (2007). Strategic new product development for the global economy, New York: Palgrave Macmillan.

Kotler, P. (1997), Marketing Management: Analysis, Planning, Implementation, and Control, 9th ed. Englewood Cliffs, NJ: Prentice-Hall.

Kuester, S., Gatignon, H., and Robertson, T. S. (2000). Firm strategy and speed of diffusion. In Mahajan, V., Muller, E. and Wind, Y. (Eds), New Product Diffusion Models. 27-47.

Kumar, N., Scheer, L. K., and Steenkamp, J. (1995). The effects of supplier fairness on vulnerable resellers. Journal of Marketing Research, 32(February), 54-65.

Kumar, S. and Phrommathed, P. (2005). New Product Development: An Empirical Study of the Effects of Innovation Strategy, Organization Learning and Market Conditions, New York: Springer.

Lane, C. and Bachmann, R. (1996). The social constitution of trust: Supplier relations in Britain and Germany. Organization Studies, 17(3), 365-95.

La Porte, T.R. and Metlay, D.S. (1996). Hazard and institutional trustworthiness: Facing a deficit of trust. Public Administration Review, 56, 341-347.

Langerak, F., Hultink, E. J., and Robben, H. S. J. (2004). The impact of market orientation, product advantage, and launch proficiency on new product performance and organizational performance. Journal of Product and Innovation Management, 21, 79-94.

Larson, A. (1992). Network dyads in entrepreneurial settings: A study of the governance of exchange relationships. Administrative Science Quarterly, 37, 76-104.

Lee, H. L. (2002). Aligning supply chain strategies with product uncertainties. California Management Review, 44(3), 105-119.

Lee, Y. and O'Connor, G. C. (2003). The impact of communication strategy on launching new products: The moderating role of product innovativeness. Journal of Product and Innovation Management, 20, 4-21.

Li, H. and Atuahene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. Academy of Management Journal, 44(6), 1124–34.

Li, T. and Calantone, R. J. (1998). The impact of market knowledge competence on new product advantage: Conceptualization and empirical examination. Journal of Marketing, 62(October), 13-29.

Li, Y., Liu, Y., and Zhao, Y. (2006). The role of market and entrepreneurship orientation and internal control in the new product development activities of Chinese firms. Industrial Marketing Management, 35, 336-347.

Loveman, G. W. (1998). Employee satisfaction, customer loyalty, and financial performance: An empirical examination of the service profit chain in retail banking. Journal of Service Research, 1(1), 18-31.

Luk, S. T. K. (1998). Structural changes in China's distribution system. International Journal of Physical Distribution and Logistics Management, 28(1), 44-67.

Lukas, B. A., Tan, J. J., and Hult, T. M. (2001). Strategic fit in transitional economies: The case of China's electronics industry. Journal of Management, 27, 409-29.

Luo, X., Sivakumar, K., and Liu, S. S. (2005). Globalization, marketing resources, and performance: Evidence from China. Journal of the Academy of Marketing Science, 33(1), 50-65.

Lusch, R. and Vargo, S. L. (1998). Multiplex retailers versus wholesalers: A test of the total value of purchasing model. International Journal of Physical Distribution & Logistics Management, 28(8), 581-598.

Mardia, K. V. (1970). Measure of multivariate skewness and kurtosis with application. Biometrika, 57, 519-30.

Mahajan V, Muller E, Wind J, (2000). New Product Diffusion Models. (Eds.), Boston, MA: Kluwer Academic Publishers.

Marr, N. E. and Thomas W. (1999). The acceptance/rejection of new products in the retail grocery industry: The influence of background elements. International Review of Retail, Distribution and Consumer Research, 9(2), 187-202.

McGoldrick, P. J. and Douglas, R. A. (1983). Factors influencing the choice of supplier by grocery distributors. European Journal of Marketing, 17(5), 13-27.

McLaughlin, E. W. and Rao, V. R. (1991). Decision Criteria for New Product Acceptance and Success. New York, NY: Quorum Books.

Metcalf, L. E., Frear, C. R. and Krishnan, R. (1992). Buyer-seller relationships: An application of the IMP interaction model. European Journal of Marketing, 26(2), 27-46.

Montgomery, D. B. (1975). New product distribution: An analysis of supermarket buyer decisions. Journal of Marketing Research, XII(August), 255-264.

Montoya-Weiss, M. M. and Calantone, R. (1994). Determinants of new product performance: A review and meta-analysis. Journal of Product Innovation and Management, 11, 397-417.

Moorman, C., Deshpande, R., and Zaltman G. (1993). Factors affecting trust in market research relationships. Journal of Marketing, 57(January), 81-102.

Mooy, S. C. and Robben, H. S. J. (2002). Managing consumers' product evaluation through direct product experience. Journal of Product and Brand Management, 11(6/7), 432-446.

Moran, P. (2005). Structural vs. relational embeddedness: Social capital and managerial performance. Strategic Management Journal, 26, 1129-1151.

Morgan, R. M. and Hunt, S. D. (1994). The commitment–trust theory of relationship marketing. Journal of Marketing, 58 (July), 20-38.

Mowen, J. C. and Gaeth, G. J. (1992). The evaluation stage in marketing decision making. Journal of the Academy of Marketing Science, 20(2), 177-187.

Nilsson, J. and Høst, V. (1987). Reseller Assortment Decision Criteria. Aarhus, JAI Press.

Nunnally, J. C. (1967). Psychometric Methods. New York: McGraw-Hill.

Ottum, B. D (1996). Launching a new consumer product. In Rosenau, Milton D., Griffin, Abbie, Castellion, George A., and Anschuetz, Ned F. (Eds.), The PDMA Handbook of New Product Development (pp. 381-392). New York: John Wiley & Sons, Inc.

Ozer, M., and Chen, Z. (2006). Do the best new product development practices of US companies matter in Hong Kong? Industrial Marketing Management, 35, 279-292.

Patterson, P. M. and Richards, T. J. (2000). Produce marketing and retail buying practices. Review of Agricultural Economics, 22(1), 160-171.

Pellegrini, L. and Zanderighi, L. (1991). New products: Manufacturers' versus retailers' decision criteria. International Review of Retail, Distribution and Consumer Research, 1, 149-174.

Phillips, L. W. (1981). Assessing measurement error in key informant reports: A methodological note on organizational analysis in marketing. Journal of Marketing Research, 18(November), 395-415.

Porter, M. E. (1974). Consumer behavior, retailer power and market performance in consumer goods industries. Review of Economics and Statistics, LVI, 419-436.

Rangan, V., Kasturi, M. Y., and Bell, M. B. (2000). RadioShack. Harvard Business Review Case 9-500-081.

Rao, A. R. and Mahi, H. (2003). The price of launching a new product: Empirical evidence on factors affecting the relative magnitude of slotting allowances. Marketing Science, 22(2), 246-268.

Rao, V. R. and McLaughlin. E. W. (1989). Modeling the decision to add new products by channel intermediaries. Journal of Marketing, 53(January), 80-88.

Rao, V. R., McLaughlin, E. W., and Hawkes, G. F. (1995). Supermarket buyer evaluations of hypothetical new products: An empirical analysis, Agribusiness, 11(1), 21-33.

Retail News Letter (2005). Retail opportunity ranking. Retail Forward, 531, 2.

Rindfleisch, A. and Heide, J. B (1997). Transaction cost analysis: Past, present, and future applications. Journal of Marketing, 61(October), 30-54.

Robinson, P. J., Faris, C. W., and Wind, Y. (1967). Industrial Buying and Creative Marketing, Boston: Allyn and Bacon.

Rogers, E. M. (1995). Diffusion of Innovations, New York: Free Press.

Rogers, E. M. (2003). Diffusion of Innovations. 5th ed. New York: Free Press.

Rotter, J.B. (1967). A new scale for the measurement of interpersonal trust. Journal of Personality, 35 (4), 651–665.

Schurr, P. H. and Ozanne, J. L. (1985). Influences on exchange processes: Buyers' preconceptions of a seller's trustworthiness and bargaining toughness. Journal of Consumer Research, 11(March), 939-953.

Sebenius, J. and Knebel, E. (2006). The Bollingers: Negotiating with Wal-Mart. Harvard Business Review, 9-907-009.

Shaw, S. A., Dawson, J. A., and Blair, L. M. A. (1992). The sourcing of retailer brand food products by a UK retailer. Journal of Marketing Management, 8(2), 127-146.

Sheth, J. N. (1973). A model of industrial buyer behavior. Journal of Marketing, 37(4), 50-56.

Sheth, J. N. (1981). A theory of merchandise buying behavior. In Stampfl, R. W. and Hirschman E. C. (Eds). Theory in Retailing, American Marketing Association, 180-189.

Siguaw, J. A., Simpson, P. M. and Baker, T. L. (1998). Effects of supplier market orientation on distributor market orientation and the channel relationship: The distributor perspective. Journal of Marketing, 62(July): 99-111.

Silva, R. and Davis, G. (2002). Assessing the influence of retail buyer variables on the buying decision-making process. European Journal of Marketing, 36(11/12), 1327-1343.

Sinclair, G., Ananth, L. and Anderson, J. (1998). The supermarket supply chain in Shanghai. International Food and Agribusiness Management Review, 1(4), 443-450.

Simon, H. (1957). Models of Man. New York: John Wiley & Sons.

Skytte, H. and Blunch, N. (2005). Buying behavior of Western European food retailers. Journal of Marketing Channels, 13(2), 99-129.

Song, X. M. and Parry, M. E. (1994). The dimensions of industrial new product success and failure in state enterprise in the people's republic of China. Journal of Product Innovation and Management, 11(2), 105-118.

Standifird, S.S. and Marshall, R.S. (2000). The transaction cost advantage of Guanxi-based business practices. Journal of World Business, 35(1), 21-42.

Sternquist, B., Huang, Y., and Chen, Z. (2003). Market orientation in a transitional economy. Working Paper.

Sternquist, B. (1998). International Retailing. New York: Fairchild Books and Visuals.

Sternquist, B. (2007). International Retailing (2nd edition). New York: Fairchild Books and Visuals.

Sternquist, B. and Chen, Z. (2006). Food retail buyer behavior in People's Republic of China: A grounded theory model. Qualitative Market Research: An International Journal. (9)2, 243-265.

Stump, R. L. and Heide, J. B. (1996). Controlling supplier opportunism in industrial relationships. Journal of Marketing Research, 33(4), 431-441.

Sullivan, M. (1997). Slotting allowances and the market for new products. Journal of Law and Economics. 40(2), 461-493.

Tellis, G. J. (1998). Advertising and Sales Promotion Strategies. New York: Addison-Wesley Educational Publishers.

Telser, L. G. (1980). A theory of self-enforcing contracts. Journal of Business, 53(January), 27-44.

Useem, J., Schlosser, J., and Kim H. (2003, March 3). One nation under Wal-Mart. Fortune (Europe), 40.

Vargo, S. L. and Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. Journal of Marketing, 68(January), 1-17.

Wagner, J. and Ettenson, R., and Parrish, J. (1989). Vendor selection among retail buyers: An analysis by merchandise division. Journal of retailing, 65(1), 58-79.

Walters, R. G. and MacKenzie, S. B. (1988). A structural equations analysis of the impact of price promotion on store performance. Journal of Marketing Research, 25, 51-63.

Webster, F. E. and Wind, Y. (1972). A general model for understanding organizational buying behavior. Journal of Marketing, 36(April), 12-19.

Webster, F., E., Jr. (1984). Industrial Marketing Strategy, New York, NY: John Wiley & Sons.

Weitz, B. A. and Jap, S. D. (1995). Relationship marketing and distribution channels. Journal of the Academy of Marketing Science, 23(Fall), 305–20.

White, J. C., Troy, L. C., and Gerlich, R. N. (2000). The role of slotting fees and introductory allowances in retail buyers' new-product acceptance decisions. Journal of the Academy of Marketing Science, 28(2), 291-298.

Williamson, O. E. (1975). Markets and Hierarchies: Analysis and Antitrust Implications. New York: The Free Press.

Williamson, O. E. (1985). The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting. New York: The Free Press.

Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. Administrative Science Quarterly, 36(2), 269-296.

Williamson, O. E. (1993). Calculativeness, trust, and economic organization. Journal of Law and Economics, 36(1), 453-486.

Willson, D. D. and Collier, D. A. (2000). An empirical investigation of the malcolm baldrige national quality award causal model. Decision Sciences, 31(2), 361-390.

Willson, E. (1994). The relative importance of supplier selection criteria: A review and update. International Journal of Purchasing and Materials Management, 30(3), 35-41.

Wind, J. and Mahajan, V. (1987). Marketing hype: A new perspective for new product research and introduction. Journal of Product Innovation Management, 4(1), 43-49.

Wing, C. C. K. (1996). Strategic investment, uncertainty and distribution reform in the People's Republic of China: Why a gradual reform strategy works. Journal of Applied Business Research, 12, 20-8.

Zucker, L.G. (1986). Production of trust: Institutional sources of economics structure. Research in Organizational Behaviour, 8, 53-111.