

DOCTOR OF PHILOSOPHY

A simultaneous examination of the effects
of salesperson relationship-building
activities and marketing activities on retail
buyers' purchase decisions

Steffen Fixson

2012

Aston University

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**A SIMULTANEOUS EXAMINATION OF THE EFFECTS OF SALESPERSON
RELATIONSHIP-BUILDING ACTIVITIES AND MARKETING ACTIVITIES
ON RETAIL BUYERS' PURCHASE DECISIONS**

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Doctor of Philosophy

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August 2012

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THESIS SUMMARY

Firms' contemporary selling practices often not only demand that salespeople meet sales quotas, but also that they build strong, profitable relationships with customers. Given the belief that relationship-building activities can develop closer customer ties and improve sales performance, scholars have increasingly studied salesperson behaviors aimed at nurturing buyer-salesperson relations. However, while previous sales research has investigated the effects of a number of relational activities on performance outcomes in isolation, knowledge about their effectiveness in comparison to other important performance drivers is virtually absent. The present study provides some first theoretical and empirical insights into this research gap by simultaneously examining the role of specific salesperson relationship-building activities, and product-focused variables, in retail buyers' new product purchase decisions.

Following an extensive literature review, a two-part qualitative field study was conducted to explore salesperson relationship-building activities that are regarded as important by retail buyers. Two key relational behaviors were suggested by the customer-centric and retail industry-specific data; salesperson consultation (communication-based) and salesperson helping behavior (action-based). Drawing on this as well as extant literature, a conceptual framework was developed concerning the influences of these relationship-building activities and other product-focused factors on retail buyers' new product acceptance.

The study's quantitative component contained a mail and web survey of U.S. retail buyers, resulting in a total dataset of 192 responses. After a comprehensive measure validation process, the theoretical hypotheses were tested using logistic regression analysis. Contrary to existing assertions, the results suggest that salesperson relationship-building activities themselves do not directly and/or indirectly influence purchase decisions, but instead can moderate the effects of product-focused determinants on retail buyers' new product selections. Data on actual purchase decisions provide a high level of external validity to the findings. The study closes with a concluding discussion, including theoretical and managerial implications of the findings, limitations of the research, and directions for future inquiry.

Keywords: Logistic Regression, New Products, Retail Industry, Salesperson Relational Behaviors, Selling Performance

DEDICATION

To My Parents

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Chapter 1

Introduction

The central premise of this Chapter is to present an introduction to the research project and outline the structure of the thesis. More precisely, this Chapter is structured as follows. First, the study is introduced, followed by a discussion on the research gap in extant literature. Then, the study's research objectives and contributions are specified. The Chapter closes by providing an outline of the remainder of the thesis.

1.1 Salesperson Relationship-Building Activities and Performance

In past sales-oriented scholarly studies and textbooks, researchers have continuously emphasized the critical role of the salesperson for the long-term success and competitive position of many organizations (e.g., Bradford et al. 2010; Jobber & Lancaster, 2009; Weitz & Bradford, 1999). The view that sales personnel fulfill a (if not *the*) prime 'boundary spanning position' in order to operate as vital link between a firm and its customers, is widely shared among scholars in the personal selling and sales management domains. In effect, as firms' contemporary selling strategies are changing, and many sales functions have broadened to include additional selling activities and responsibilities (Johnston & Marshall, 2005; Moncrief & Marshall, 2005), companies often rely on sales forces for various aspects of their successful performance. Thus, salesperson performance is of fundamental interest - to both practitioners and academics.

Identifying ways to enhance the performance of salespeople is possibly one of the most critical duties that sales managers are confronted with in the present competitive business environment, and a subject matter of particular concern for sales forces operating in business-to-business (B2B) marketplaces (e.g., Boles et al., 2000; Singh & Koshy, 2010). Given the importance of B2B salespersons' success, this specific topic has attracted a vast amount of research interest among academics (e.g., Ahearne et al., 2010; Churchill et al., 1985; Geiger & Finch, 2009; Geiger & Turley, 2005; Jaramillo et al., 2007; Palmatier et al., 2008; Walker, Churchill, & Ford, 1977; 1979). One way in which salespeople can actively impact on their performance is through carrying out effective selling activities (e.g., Plank & Reid, 1994; Singh & Koshy, 2010; Weitz, 1981). At present, companies' contemporary sales strategies often require salespeople not only to meet sales targets, but *also* to build profitable customer relationships (e.g., Ahearne, Jelinek, & Jones, 2007; Johnson, Barksdale, & Boles, 2001; Moncrief & Marshall, 2005). Hence, salesperson activities aimed at the development of strong and profitable ties with customers (i.e. relationship-building activities) constitute an important part of the modern sales job and one specific way to enhance salesperson performance.

Given these developments in the practice of selling towards a heightened emphasis placed on the building of relationships, sales scholars have quickly realized the importance of examining and understanding such relationships in commercial exchanges. Increasingly, academic studies focus on the specific activities that salespeople perform to nurture the development and maintenance of customer relationships. Whereas more than a decade ago Boles et al. (2000, p.143) noted that

“[O]ne relatively unexplored type of salesperson behavior involves activities that lead to customer relationships,” the more contemporary personal selling literature has developed towards investigating such activities that are important for building and strengthening the relational ties with customers. Examples include service behaviors (Ahearne, Jelinek, & Jones, 2007), socializing behaviors (Geiger & Turley, 2005), ethical behavior (Hansen & Riggle, 2009), and a number of different contextual performance activities, such as helping (Mulki, Jaramillo, & Marshall, 2007; Piercy et al., 2006).

Theoretically, a central assumption of the relational perspective is that time, efforts, attention, and other resources (e.g., monetary) spent on relationship-building activities develop stronger relationships with customers and increase sales performance (e.g., Palmatier et al., 2008). This viewpoint may be particularly relevant in B2B contexts. While in business-to-consumer (B2C) settings companies frequently manage customer relations through the collection, analysis, and evaluation of historical consumer purchase behavior data, B2B contexts often require salespeople to build and manage personal relationships with individual customers (Bradford et al., 2010). Regarding the latter case, in a fairly recent article in the *Harvard Business Review* entitled “The New Science of Sales Force Productivity”, it has been noted that it is “possible to teach the underlying behaviors of top salespeople” and that top salespeople can pass on “what appear to be instinctual relationship-building skills” (Ledingham, Kovac, & Simon, 2006, p.132). Thus, the identification of important salesperson relationship-building activities as well as the examination of their impact on sales performance is of central interest to sales practitioners and scholars alike.

1.1.1 Extant Literature on Salesperson Relationship-Building Activities

A review of the appropriate marketing and personal selling literatures regarding the theoretical concept of relationship-building activities suggests that existing work can be expediently grouped into two central research strands: (1) sales taxonomy/activities studies and (2) scholarly work on the salesperson activity-performance link. In order to depict a first overview of the current status of these literature arrays as well as to provide an overall justification for the research focus of the present study (see Section 1.2), the following sections briefly summarize these literature streams.

1.1.1.1 Salesperson Relationship-Building Activities in Sales Taxonomy/Activities Studies

A considerable body of research exists that has continuously investigated and categorized activities that salespeople carry out or are expected to carry out (e.g.,

Churchill, Ford, & Walker, 1978; McMurray, 1961; Marshall, Moncrief, & Lassk, 1999; Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006). Generally, existing works on the identification of selling activities can be classified into two groups, (1) sales taxonomies (e.g., McMurray, 1961; Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006) and (2) studies that identify and describe sales activities without generating a sales activity taxonomy (e.g., Churchill, Ford, & Walker, 1978; Marshall, Moncrief, & Lassk, 1999). While scholarly research belonging to category (1) has identified and categorized salesperson activities in order to describe different sales jobs, research in the second group (2) has generated long lists of specific selling activities as carried out by sales personnel, yet, has not categorized these further to illustrate different sales positions. Even so, each of these prior works has provided an improved understanding of the performed selling activities; that is, what sales personnel actually do, at different points in time. In succession, these studies appear to depict a constant evolution of the selling function and its entailed activities.

In light of the multiplicity of relationship-building activities, it is the more recent studies that have specifically identified salesperson tasks which contribute to the development of customer relationships - also referred to as relationship selling activities (Marshall, Moncrief, & Lassk, 1999; Moncrief, Marshall, & Lassk, 2006). In the most contemporary sales position taxonomy (Moncrief, Marshall, & Lassk, 2006), several detailed activities, such as “adapt presentations”, “build trust”, or “overcome objections”, were categorized as relationship selling activities (p.59). The identification and classification of salesperson activities which foster the building of strong customer relationships “reflects many of the philosophical changes in selling over the past 15 years, especially the shift to more consultative approaches to relationship selling” (Moncrief, Marshall, & Lassk, 2006, p.58).

Whereas the gained knowledge from these previous works provides a great deal of insights regarding the notion of relationship-building activities, a number of noteworthy commonalities among these studies exist. First, a vast majority of research in this area relies on B2B *salespeople’s* perceptions of what actions should be performed to enhance relationships with customers (e.g., Moncrief, 1986; Marshall, Moncrief, & Lassk, 1999). Next, existing scholarly work has predominantly focused on reports from salespeople in *industrial* settings (e.g., Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006). Importantly, these prior studies do not offer any guidance with respect to the *activity-performance link*, that is, how effective relational activities may be in augmenting salesperson performance. Therefore, additional literature needs to be consulted in order to shed more

light on the role of relationship-building activities for salesperson performance. The following section presents a brief summary of the relevant research area.

1.1.1.2 Salesperson Relationship-Building Activities and Performance

A substantial stream of past scholarly work has directed its attention towards the examination of the factors that determine salesperson performance - a critical topic in the present competitive business environment (e.g., see Singh & Koshy, 2010 for a review). Whereas earlier research works have frequently built upon a framework developed by Walker, Churchill and Ford (1977), investigating variables such as salesperson personal factors, individual skill, or role variables, among others (see Churchill et al., 1985 for a meta-analysis), more recent literature has developed towards examining the actual activities carried out by salespeople in the sales job. In this regard, Weitz (1981) has suggested a contingency framework, linking sales force behaviors to effectiveness, contingent on a number of factors such as salespeople's resources and the buying task. In his study, Weitz has emphasized that it is critical to understand, and thus important for researchers to examine, those selling activities that can positively impact on salesperson effectiveness and, consequently, performance. Other scholars have also come to this conclusion (e.g., Boles et al., 2000; Singh & Koshy, 2010; Weitz, Sujana, & Sujana, 1986). It seems that Weitz's (1981) framework was one important impetus for the personal selling domain in this matter, emphasizing the importance of salesperson behaviors for sales success and fueling academic interest for examinations of the selling activity-performance link (e.g., Saxe & Weitz, 1982; Spiro & Weitz, 1990).

Further developments in the marketing and personal selling fields, especially the increasing importance of relationships in contemporary business exchanges, have led researchers to direct heightened attention to those salesperson activities that nurture customer relationships, also referred to as relational behaviors, relationship selling activities, relationship selling behaviors, and salesperson's relationship investments/marketing activities (e.g., Crosby, Evans, & Cowles, 1990; Frankwick, Porter, & Crosby, 2001; Johnston & Marshall, 2005; Palmatier et al., 2008). Whereas definitions of salesperson behaviors in earlier studies were more broadly defined, such as "what people do (the tasks they expend effort on) in the course of working" (Walker, Churchill, & Ford, 1979, p.33), later scholarly work reflected the developments in the field in more detail by including an increasing focus on customer relationships. For example, Boles et al. (2000, p.143) defined behaviors of salespeople to "include activities required in the sales process and activities related to the development of ongoing relationships with customers/buyers." As a consequence, the number of empirical investigations

focusing on different salesperson activities that nurture the development of customer relationships and enhance sales performance appears to be increasing in the contemporary literature (see e.g., Ahearne, Jelinek, & Jones, 2007; Bradford, Crant, & Phillips, 2009; Geiger & Turley, 2005; Hansen & Riggle, 2009; Mulki, Jaramillo, & Marshall, 2007; Piercy et al., 2006).

While such prior studies have generated important new insights regarding the potential impact of specific salesperson relationship-building efforts on performance, certain similarities exist across these prior works which are worth highlighting. First, past examinations have rarely focused on those salesperson activities that are indeed *valued by the customer* (i.e. are important to customers/buyers, rather than the sales managers/salespeople alone), when investigating the activity-performance link (Singh & Koshy, 2010). Next, previous research attempts have typically concentrated on testing specific salesperson relational behaviors in *industrial* settings. The industrial sales job may require selling activities that are not comparable to selling activities performed for sales functions in other B2B contexts, such as the retail industry (e.g., Moncrief, 1986). Finally, it is important to note that prior studies have examined salesperson relational activities *in isolation* only, without considering and comparing their effectiveness to other important performance drivers.

1.1.2 Synthesis and Conclusions

Sales practitioners and academics alike have long been interested in identifying salesperson-related factors that drive sales performance - an important indicator of a firm's success in the marketplace. Whereas a long-standing tradition of sales activity taxonomies and classification studies exists in the sales literature (see Marshall, Moncrief, & Lassk, 1999, for an overview), much of earlier scholarly work in the personal selling domain examining the impact of salespeople on performance outcomes has focused on a wide array of different salesperson characteristics, rather than salesperson activities (e.g., Churchill et al., 1985). However, as the academic sales field has evolved, salespersons' actual performed behaviors have become more important in researchers' examinations of sales personnel's influence on performance results (for example, see Singh & Koshy, 2010). In this regard, scholars have more recently directed heightened attention towards those salesperson activities that build strong and profitable relationships with customers. This development is reflected in both, taxonomy studies (Marshall, Moncrief, & Lassk, 1999; Moncrief, Marshall, & Lassk, 2006) as well as research work investigating the impact of salesperson relationship-building efforts in commercial exchanges (e.g., Ahearne, Jelinek, & Jones, 2007; Geiger & Turley, 2005).

Despite sales scholars' increasing attention directed towards the examination of salespeople's activities aimed at nurturing customer ties, previous empirical investigations of the relational activity-performance link have typically followed a similar pattern: (a) they are salesperson-centered, (b) they have been based on industrial sales functions, and (c) they have examined salesperson relationship-enhancing activities in isolation. As a consequence, these underlying similarities in prior studies have often led to (1) the examination of salespeople's relational activities that are desired by the salesperson/sales manager alone (rather than the customer/buyer), (2) results and findings which are most applicable to industrial sales positions, and (3) a theoretical understanding in which insights regarding the role and effectiveness of salesperson relationship-building activities in conjunction with other important drivers of sales performance (such as product or marketing variables) remain virtually absent. This current state of the extant literature leaves opportunities for important contributions to our present understanding of the potential influence of salesperson relationship-building activities on performance outcomes. The identified research gap, the present study's research objectives, and the thereof resulting contributions to extant marketing knowledge are discussed in the following sections.

1.2 The Research Gap

As highlighted above, contemporary sales research focusing on B2B salesperson relationship-building activities exhibits a number of underlying commonalities. Due to this, presently little knowledge exists regarding (a) those relationship-enhancing activities that are indeed deemed important by organizational buyers, (b) the role of such relational activities in the context of the retail industry, (c) how their effects compare to influences of product-focused variables, and (d) whether interactive effects exist between these two types of variables (product and relational). The present study aims to shed some light on these issues by *simultaneously* examining the influences of specific salesperson relationship-building activities and product-focused variables (i.e. components of the product offering) on retail buyers' purchase decisions. While concurrent examinations of this kind appear to be sparse in the modern sales (and retail buying) literature, extant scholarly research can be identified that implicates the importance of each of the two types of factors (i.e. product-related variables and salesperson relationship-building activities) for successful business exchanges in the current competitive marketplace.

In the context of the retail industry, salespeople's *sales performance* is contingent on retail buyers' *purchase decisions*, as buyers are the decision-makers, accepting or

rejecting products for their organizations (Kaufman, Jayachandran, & Rose, 2006).¹ Much of the extant retail buying literature suggests that retail buyers are trained to focus on the attractiveness of product-focused variables, such as price of a product, market demand for a product, marketing support for a product etc., when making product evaluations and selection decisions (e.g., Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000).² As shown earlier, the more recent theoretical developments in the personal selling domain, however, have led sales scholars to direct heightened attention towards salespeople's role in contributing to the building of strong, profitable customer relationships, and consequently, the investigation of relationship-oriented variables when examining performance outcomes. Thus, given the critical role ascribed to salespeople's relationship-building task in the sales domain on the one hand, and the emphasis placed on product-focused variables in the retail buying literature on the other hand, it is intriguing to simultaneously examine how these variables affect exchange behavior. How does the impact of these variables compare? Do interactive effects exist? Presently, very little empirical knowledge exists regarding such effects, although contributions in this area seem highly relevant, especially in consideration of important resource allocation decisions (cf. Wathne, Biong, & Heide, 2001). For example, salespeople have to assign time, effort, as well as monetary and other resources to a number of different selling activities. Thus, should a salesperson direct heightened attention towards those activities that build close customer relationships in order to improve sales performance? Or should the central focus still be on key product-focused variables in the sales process?

In the light of the identified research opportunity, a simultaneous consideration of salesperson relationship-building activities and product-focused variables enables (1) a direct comparison of their influences and (2) an investigation of interaction effects on retail buyers' purchasing behavior. Consistent with the growing emphasis placed on the building of strong customer relationships in much of the contemporary marketing practice and theory, and the attached modern viewpoint that the development of relationships can improve financial performance (e.g., Palmatier et al., 2008), an intriguing question then is whether salesperson relationship-building activities can modify (i.e. moderate) retail buyers' product assessments and decisions. Existing scholarly marketing research suggests that "buyers do make joint assessments of different sources of utility" (Wathne, Biong, & Heide, 2001, p.62), such as product-focused variables and salesperson relationship-building activities. If this is the case, can relationship-building activities

¹ The focus in the present study is on products, not on services. Hence, for the purposes of this work, services are not considered.

² See Chapter 2 for a comprehensive review of the pertinent buyer-oriented literature.

enhance the chances of a positive purchase assessment and decision? Can they positively modify the impact of poorly perceived product-focused variables? The present study is a first step towards exploring these important issues (among others).

In addition to the above, the focus of the current study is also a response to recent calls in the literature for more *customer-centric* examinations of salesperson selling activities and the need to better understand how *retail buyers* make decisions in order to inform salespeople/sales managers about those buying processes that are relevant for sales to retail ventures. First, and as highlighted earlier, much of the previously generated insights on salesperson selling activities performed to nurture customer relationships have been seller-centric, rather than customer-centric. This literature-based finding is consistent with the call of Singh and Koshy (2010, p.540) to advance towards “those selling activities that are customer-centric, and therefore valued by the buyers, and not by the sales managers alone.” Previous research suggests that sales personnel should enhance customer trust (e.g., Doney & Cannon, 1997), customer commitment (e.g., Morgan & Hunt, 1994), and customer satisfaction (e.g., Dwyer, Schurr, & Oh, 1987) in order to improve the chances of ongoing business exchanges with key customers. Despite this widely accepted viewpoint and the growing importance of customer-centric selling approaches, so far little is known about those salesperson relationship-enhancing activities that are indeed considered important by the buyer - especially in a B2B retail context. As such activities may actually offer the highest probability of building profitable long-term relationships with customers, identifying and understanding these behaviors is critical for an increased possibility of salesperson success. Without the identification of relational activities that are indeed valued by the customer/buyer, salesperson relationship-building behaviors can often be ambiguous, sales managers’ guidance may prove difficult, and the achievement of strong customer relationships is likely to be uncertain.

Furthermore, the topic of salesperson relationship-building activities generally warrants more attention in the retail context. Whereas it has been emphasized that the development and management of customer relationships is important across various industry sectors (e.g., Grönroos, 1997), including the sales of retail merchandise to channel partners, empirical research regarding salesperson relational activities in this context is sparse. This is despite the fact that it has been several consumer goods companies that have served as pioneers for many relationship practices, fostering more customer-centric sales efforts and stronger customer relationships (Bradford et al., 2010). Therefore, the present study identifies and examines important salesperson

relationship-building activities from the perspective of the retail buyer. In consideration of this, and for the purpose of the current work, *salesperson relationship-building activities* are defined as customer-oriented behaviors employed by B2B retail sales personnel that nurture profitable relationships with customers. They represent “resources, efforts, and attention that a salesperson devotes to building and maintaining a relationship” (Palmatier et al. 2008, p.178). Such activities may be either salesperson-initiated or actively sought (i.e. asked for) by the buyer, and typically involve a considerable level of personal interaction.

Second, the present study is also a response to reiterations in the modern marketing literature that additional research is necessary to understand “the process by which merchandise buyers make their decisions and the degree to which those decisions are optimal” (Grewal & Levy, 2007, p.448). In effect, “[A] vast majority of research that informs sales managers of purchasing processes has focused on sales to industrial rather than retail operations” and “scholars have noted that an understanding of the nature of purchasing processes in a retail context has been much slower to develop” (Bowler et al., 2011, p.8). This is somewhat remarkable because the retail industry is of considerable size. For example, in the U.S.A. alone, it has been reported that retailers outnumber manufacturing firms by a ratio exceeding 4:1 (Kerin et al., 2003).³ In addition, there is general agreement in both, the sales and buying literatures, that selling/buying processes for industrial goods are quite distinct from those for retail merchandise (cf. Moncrief, 1986; Sheth, 1981). This is not least due to the fact that retail buying distinguishes itself from industrial purchasing through a different “decision-making unit” and “position of the buyer in the marketing channel” (Kline & Wagner, 1994, p.76).

In order to investigate the identified research gap in extant literature presented above, a couple of issues need to be previously addressed and deliberated. In particular, two matters appear to stand out. Firstly, it is of importance to determine *what* specific salesperson relationship-building activities should be examined in the present study. In other words, what salesperson relationship-building behaviors are viewed as important by retail buyers? Uncovering these relational activities is important because in a simultaneous consideration of product-focused variables and relationship-building activities, they would represent the most promising candidates to exhibit significant relative effects on retail buyers’ purchasing behavior. In this regard, first a comprehensive review of the relevant literature will be conducted to shed light on this

³ Since the present research is a U.S.-based study, the U.S. market figures are of particular interest.

issue. Then, a field-based exploratory study is carried out in order to clearly identify such crucial relational activities which are important in the present study's research context.

Secondly, it appears to be of relevance to explore *when* specific salesperson relationship-building activities are deemed important by retail buyers. Stated differently, in which buying situations do such activities carry most weight, and hence, are likely to be most effective? Identifying the relevant buying situations will assist in the determination of the dependent outcome variable(s) for later empirical testing. In a similar vein as above, a critical literature review is consulted first. An exploratory study will then provide important additional information on this matter.

1.3 Research Objectives and Contributions

The overall research aim of the present study is to provide theoretical and empirical insights into *the relative and interactive effects of salesperson relationship-building activities and product-focused variables on retail buyers' purchase decisions*. More precisely, three central research objectives are derived from the previously identified research gap (and the resulting research questions):

1. To explore and conceptualize *what* specific salesperson relationship-building activities are deemed important by retail buyers.
2. To investigate and determine *when* (i.e. in which buying context[s] and purchase assessment[s]) such salesperson relationship-building activities are likely to carry most weight.
3. To *empirically examine* the relative and interactive influences of salesperson relationship-building activities and product-focused variables (i.e. components of the product offering) on retail buyers' purchase decisions (based upon the previously attained research objectives 1 and 2).

The achievement of the above outlined objectives constitutes the present study's overall theoretical contribution to extant literature - the generation of new insights regarding an improved understanding of the complex interplay of product-focused and relational drivers of retail buyers' purchase decisions. By this means, the current thesis contributes to the knowledge in the marketing domain, especially the sub-fields of personal selling and retail buying behavior.

Through the attainment of objective 1, the present research will contribute to extant marketing and sales knowledge by identifying important salesperson relationship-building activities from the retail buyer's perspective. Relational activities that are deemed important from the standpoint of the buyer may, after all, have the greatest potential to build strong customer relationships and increase salesperson's selling success. The achievement of this first objective is vital as it lays an important foundation for the later conceptualized theoretical framework (based on both a review of extant literature and qualitative field explorations).

The achievement of objective 2 will provide for the thesis' second contribution by determining the buying decision context(s) and purchase assessment(s) in which the previously identified salesperson relationship-building tasks are likely to be of greatest importance (as in the case of the attainment of objective 1, this will be accomplished through reviewing existing literature and field-based explorations). This constitutes another important objective to be attained prior to any empirical testing.

The research's third and central contribution is based upon achievement of objective 3, and is directly linked to the overall research aim of the study. More specifically, it will establish an enhanced understanding of the relative and interactive role of salesperson relationship-building activities and product-focused variables in retail buyers' purchase decisions. By doing so, the present investigation enables a direct comparison of the effects on retail buying decisions (comparison of effects). In addition, insights will be gained regarding relational activities' ability to moderate product-focused variables in buyers' product assessments and purchase decisions (interactive effects). Table 1.1 below summarizes the thesis' main contributions.

The present research also makes relevant managerial contributions. More specifically, findings will offer some guiding advice for salespeople on the effectiveness of specific relationship-building tasks in comparison to product-focused variables in retail buying situations. As the primary duty of salespeople is selling and meeting specific sales targets, salespeople's success is largely dependent on their ability to convince customers to purchase their offerings (Jones et al., 1998). Yet, sales force members are also often expected to perform relationship-building activities in order to grow strong, profitable customer relationships (e.g., Johnson, Barksdale, & Boles, 2003), which are believed to enhance general firm financial performance. The present work may ultimately help salespeople to better allocate resources, such as time, effort, and monetary resources (cf. Wathne, Biong, & Heide, 2001) when selling to their customers. In

addition, sales managers in charge of the performance results of sales force personnel may also benefit from the study's results. For example, sales managers may be able to incorporate the gained knowledge into their training and professional advancement programs for salespeople, and by doing so, helping sales force members to become more effective in their job.

Table 1.1: Overview of Main Contributions

Contribution	Explanation	New Insights
Examination of salesperson relationship-building activities from the <i>retail buyer perspective</i> (customer-centric)	<ul style="list-style-type: none"> In today's B2B marketplace, salespeople are often expected to meet sales targets <i>and</i> develop profitable customer relationships. Yet, little is known about those salesperson relationship-building activities that are indeed deemed important by the customer/buyer, especially in the retail industry. 	<ul style="list-style-type: none"> This study examines <i>what</i> and <i>when</i> (i.e. in which buying decision contexts and purchase assessments) salesperson relationship-building activities are valued by the retail buyer. Important insights regarding selling activities as well as buying behavior can be derived for the retail industry.
Investigation of the <i>relative and interactive influences</i> of salesperson relationship-building activities and product-focused variables on retail buyers' purchase decisions	<ul style="list-style-type: none"> As product-related factors (e.g., price of a product, market demand for a product, etc.) have been shown to be vital in retail buyers' purchase decisions, it is intriguing to examine their specific relative and interactive influences on buying behavior in consideration of salesperson selling activities, such as relationship-building activities. Presently, very little empirical knowledge exists regarding such effects. 	<ul style="list-style-type: none"> This study tests (1) how the impact of specific relationship-building activities directly compares to the influence of product-focused variables on retail buyer purchase decisions (<i>relative effects</i>) and (2) whether such relationship-enhancing activities can moderate product-focused variables (<i>interaction effects</i>). Knowledge about relative effectiveness and modifying influences provides valuable insights into critical resource allocation decisions.

The subsequent section presents an outline of the remainder of the thesis (Chapters 2 to 8), designed and arranged to attain the previously discussed objectives (research objectives 1 to 3).

1.4 Outline of the Dissertation Structure

Including the introductory Chapter, the thesis is organized into eight Chapters. In particular, the dissertation adopts the following structure:

Chapter 2 provides a review and assessment of the personal selling, organizational/retail buying, and other marketing literature streams pertaining to the present study.

Particularly, existing research is investigated regarding previous examinations of salesperson relationship-building activities, product-focused variables and retail buying decisions, as well as prior simultaneous investigations of product and relational variables. Further to this, theoretical perspectives employed in past studies pertinent to the present work are synthesized, providing assistance to the development of a conceptual framework at a later stage of the thesis (Chapter 4). Conclusions are drawn in light of the present thesis' research objectives.

Chapter 3 discusses the field-based explorations. In particular, a multi-part field study design using multiple data sources (i.e. observations and interviews) was utilized to obtain insights regarding those salesperson relationship-building activities that are deemed important by retail buyers. This qualitative inquiry in conjunction with the appropriate extant literature led to the identification of some key salesperson relationship-building activities, as well as the provision of additional insights regarding their importance in different buying decision contexts/purchase assessments (attainment of research objectives 1 and 2).

Next, *Chapter 4* develops the conceptual framework of this study. Using relevant academic literature, theory-based hypotheses are formulated regarding the influences of important product-focused variables and salesperson relationship-building activities on retail buyers' purchase decisions. In addition, a number of control variables are also discussed, and their expected effects on the buying decision specified.

Chapter 5 presents a discussion of the research methodology employed to empirically test the previously developed hypotheses. In essence, the utilized quantitative survey methodology is laid out. First, details are provided on the research design and the measuring instrument (i.e. questionnaire) development process. Next, the operationalization of the constructs and variables is discussed, followed by a description of the physical questionnaire design. Hereafter, the questionnaire pretest stage is discussed, including a review by academic peers, 'protocol interviews', a small-scale pilot study, and the resulting modifications to the measurement instrument. Finally, an outline of the main data collection procedure is provided by presenting the selection of the sample frame, describing the data collection, and reporting on the results of the non-response analysis as well as the overall representativeness of the dataset.

Chapter 6 then details the analyses of the characteristics of the dataset and the utilized multi-item measures. First, responses are profiled based on the demographic

characteristics of the retail buyers (i.e. respondents), the organizational characteristics of the retailers, and information collected on the evaluated salespeople. For this purpose, appropriate graphical illustrations were prepared to support the analysis. Second, the employed measurement scales are investigated for their reliability and validity, an important step to be conducted before commencement of the theory-testing phase. Tables and graphs support the results of the performed analyses.

Chapter 7 reports on the results of the empirical theory-testing phase. After a general discussion of the utilized analysis approach (i.e. logistic regression analysis), the operationalization of the model variables is deliberated. Next, the results regarding the verification of specific logistic regression requirements are reported. Finally, the respective logistic regression models are tested and the results discussed.

Finally, *Chapter 8* presents the discussion of the findings for this dissertation by synthesizing and concluding the previously obtained results. Specifically, the theoretical and managerial implications of the findings are presented, providing an improved understanding of the relative and interactive influences of product-focused variables and salesperson relationship-building activities on retail buyers' purchase decisions - for both academics and practitioners. The Chapter closes by discussing the limitations of the present work and outlining potential directions for a future research agenda.

Chapter 2

Literature Review and Evaluation

The foregoing introductory Chapter already provided a broad overview of the thesis' theoretical background and specified the identified research gap in the extant academic marketing literature. The main objective of the current Chapter is to provide a profound review and assessment of existing marketing theory and knowledge relevant to the present study.

The Chapter adopts the following structure. First, a brief introduction to the literature assessment is provided, followed by a discussion of the pertinent salesperson-oriented and buyer-oriented literatures respectively. Next, prior scholarly work simultaneously examining product-focused variables and relational aspects is evaluated. Subsequently, an array of previously employed theoretical perspectives on exchange behavior are reviewed and assessed. The Chapter closes with a summary of the literature evaluation.

2.1 Introduction to the Literature Assessment

As outlined in the previous introduction Chapter (Chapter 1), extant marketing research has rarely examined product-focused and relationship variables simultaneously, and thus, leaves many questions regarding their relative effectiveness as well as interactive influences widely unanswered. One opportunity for contribution is the concurrent investigation of the effects of specific product-focused variables and salesperson relationship-building activities on retail buyers' purchase decisions - the focus of the present dissertation. Accordingly, the extant literature pertinent to this research topic is reviewed and evaluated.

Three key literature domains are of particular interest. First, the relevant salesperson-oriented research is reviewed. More specifically, special attention is paid to the personal selling literature that has focused on salespeople's relational activities, and their impact on sales performance. Second, the applicable buyer-oriented research is assessed. Particularly, the focus is directed towards the existing organizational buying literature that has focused on retail buyers' purchase evaluations and decisions. Finally, prior scholarly marketing work is examined that has simultaneously investigated product-focused and relationship variables. In this regard, it is of heightened interest to extract any previously generated knowledge pertaining to salespeople's relationship-building activities.

Furthermore, it is deemed important to review and evaluate existing theoretical perspectives on exchange behavior that have been employed in the literature streams relevant to the present study. This examination will provide insights into past theoretical approaches as well as aid the development of a conceptual framework at a later stage of the thesis. The subsequent section presents the review of the pertinent salesperson-oriented literature.

2.2 Salesperson-Oriented Literature

As a point of departure, the relevant existing salesperson-focused research is assessed. More precisely, this section will concentrate on the personal selling literature, reviewing (a) extant studies generating sales position taxonomies or similar other sales activities overviews (Section 2.2.1), (b) research on salesperson relational activities that have been shown - when examined in isolation - to be associated with improved performance (Section 2.2.2)¹, and (c) existing work that has focused on salespeople and their

¹ At a later point, it will be evident from the definitions of 'salesperson behaviors' in extant literature that the terminology of performed 'salesperson behaviors' and 'salesperson activities' can be used interchangeably.

relational activities in the retail industry (Section 2.2.3).² Finally, the section concludes with a synthesis of this extant scholarly work and conclusions are drawn regarding implications for the present study (Section 2.2.4).

2.2.1 Sales Activities/Taxonomy Studies

The identification of sales force-related determinants contributing to (enhanced) sales performance is certainly of great interest to sales practitioners. In this regard, academic works focused on explaining salespeople's performance have resulted in an increasing body of research (cf. Boles et al., 2000; Pilling & Eroglu, 1994; Singh & Koshy, 2010). Kohli and Jaworski (1994, p.82) have suggested that three areas of sales research can be identified that aim at explaining salesperson's performance (and job satisfaction): (1) "salesperson's individual skills, characteristics, and behaviors", (2) "job characteristics and their perceptions by salespeople", and (3) "salespeople's interactions with others in their organizations".³ In the light of the focus of the present study, sales research array (1) above, and more precisely salespeople's relationship-building activities, are of critical concern. Therefore, as a starting point, this section provides a general overview of extant sales activities/taxonomy studies that have examined and classified what activities salespeople perform and/or are expected to perform. Importantly, salesperson relational activities will be highlighted.

Within the sales force-oriented literature, a history of scholarly works can be identified that have specifically investigated and contributed to an improved overview of sales activities - that is, what sales force members actually do (e.g., McMurray, 1961; Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006). Although there is one main difference between two types of studies, there are also a number of fundamental commonalities among these research works. Table 2.1 below presents an overview of this particular literature stream. First, the focus is directed towards the common characteristics, and then the main difference is discussed.

Extant sales position taxonomies or studies examining sales activities have been based on similar principles. First, all of these research works provide a snapshot of the activities

² The importance and effectiveness of different salesperson relational activities may not necessarily compare across different industry settings (e.g., manufacturing, services, and retail) (for example, cf. Churchill et al., 1985; Moncrief, 1986). Hence, one should be cautious about the studied research context. In view of this, especially the extant retail-oriented scholarly work is of interest for the purpose of the present work.

³ It should be noted that Bagozzi's (1978) model on sales force performance (and satisfaction) had already proposed such a categorization. Bagozzi's (1978, p.517) conceptualized that a salesperson's performance (and job satisfaction) is determined by "the person" (the individual salesperson) (i.e. (1) above), "the interactions the person has with significant others in his or her role set" (i.e. (3) above), and "the situation or environment in which these interactions take place", (i.e. (2) above). Yet, it was Kohli and Jaworski (1994) who utilized this 'split' to categorize extant sales literature.

constituting the sales function at a certain point in time. Yet, examined as a series of studies, they provide an overview of the development of sales activities.

Table 2.1: History of Studies Examining Sales Taxonomies/Sales Activities

Study	Year	Major Accomplishment	Specific Finding
McMurray	1961	Five category taxonomy	<ol style="list-style-type: none"> 1. Missionary 2. Delivery 3. Order taker 4. Technical 5. Create demand
Newton	1973	Four category taxonomy	<ol style="list-style-type: none"> 1. Missionary 2. Trade servicer 3. Technical 4. New business
Lamont & Lundstrom	1974	Identified daily activities	60 items
Churchill, Ford, & Walker	1978	Identified daily activities	Broadly based activities
Moncrief	1986	Six category taxonomy (121 activities)	<ol style="list-style-type: none"> 1. Missionary 2. Trade servicer 3. Trade seller 4. Order taker 5. Institutional seller 6. Residual
Marshall, Moncrief, & Lassk	1999	Identified new selling activities; Organized in five categories based on technology/non-technology classification	49 new selling activities categorized as (technology/non-technology): <ol style="list-style-type: none"> 1. Communication 2. Sales 3. Relationship 4. Team 5. Database
Moncrief, Marshall, & Lassk	2006	Six category taxonomy (105 activities)	<ol style="list-style-type: none"> 1. Consultative seller 2. New business/channel development seller 3. Missionary seller 4. Sales support 5. Key account seller

Note: Adapted from Marshall, Moncrief, and Lassk (1999), Table 1, p.89.

Next, past research work in this area has solely focused on salespeople as respondents, that is, has generated lists of sales activities based on salespeople's views, perceptions, and ratings (e.g., based on performance frequency). Furthermore, studies have largely examined B2B industrial salespeople, especially in earlier studies (e.g., Churchill, Ford, & Walker, 1978; Moncrief, 1986). However, it needs to be noted that although later works continued to focus on industrial B2B sales force members, in Marshall, Moncrief, and Lassk's (1999) research, service salespeople were also included. Nevertheless, salespeople of supplier firms that sell products to retailers are typically not represented

at all (e.g., Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006). Moncrief (1986, p.262) explains the choice of surveying only industrial salespeople in the following way:

“For construction of the taxonomic system described here, only industrial salespeople who sell a tangible product were used; the service or retail industries were excluded. Because service and retail sales activities may not be comparable to industrial sales activities, combining them with industrial sales jobs may result in non-meaningful and/or uninterpretable results.”

Besides the above discussed commonalities among the studies, a notable difference exists between certain types of works. More specifically, extant work on the identification of sales activities can be broadly grouped into two categories, (a) sales taxonomies (McMurray, 1961; Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006; Newton, 1973) and (b) studies identifying and describing selling activities without classifying them into a taxonomy (Churchill, Ford, & Walker, 1978; Lamont & Lundstrom, 1974; Marshall, Moncrief, & Lassk, 1999). Whereas in the case of (a) illustrative classifications are developed that describe the profile of an array of activities, studies belonging to category (b) have focused on generating lists of individual selling activities performed by salespeople, yet, have not further grouped these into specific sales positions.

As alluded to at an earlier point, the stream of research concerned with sales taxonomies/identifying sales activities can be understood as a series of studies, providing an overview of the evolvement of the sales function. In effect, to a great extent they build on each other. Therefore, the most recent taxonomy of sales activities to date (i.e. the research by Moncrief, Marshall, and Lassk, 2006) is of greatest interest to the present study because it provides the most contemporary picture of the salesperson activities characterizing the sales job in a B2B context. That said, it needs to be emphasized again at this point that previous results regarding important sales activities have generally been achieved based on industrial sales force samples. Retail industry salespeople have not been utilized. Thus, the results of Moncrief, Marshall, and Lassk's (2006) study should be considered with caution (cf. Moncrief, 1986).

In Moncrief, Marshall, and Lassk's (2006) study of sales activities, respondents were asked to report on 105 activities, indicating how frequently they performed such activities (rated on a seven-point Likert-type scale). Based on 1,011 salesperson responses from 61 participating companies, 12 factors were extracted that represented underlying

groupings within the collected data. A summary overview of these factors is provided in Table 2.2 below.⁴

In view of the present research work, the factor of central interest is labeled ‘relationship selling’ (factor 1). As discussed by Moncrief, Marshall, and Lassk (2006, p.58), this was a new factor previously not existing in Moncrief’s (1986) work, reflecting “many of the philosophical changes in selling over the past 15 years, especially the shift to more consultative approaches to relationship selling.” In greater detail, this factor included sales activities that are important in relational selling approaches and included items such as “build trust”, “consult with customers”, “sell value added”, “work with key accounts”, and “help clients plan” (among others) (Moncrief, Marshall, & Lassk, 2006, p.59).

Table 2.2: Extracted Factors – Moncrief, Marshall, and Lassk (2006)

Factor	Description
Factor 1	Relationship selling
Factor 2	Promotional activities and sales service
Factor 3	Entertaining
Factor 4	Prospecting
Factor 5	Computer
Factor 6	Travel
Factor 7	Training/recruiting
Factor 8	Delivery
Factor 9	Product support
Factor 10	Educational activities
Factor 11	Office
Factor 12	Channel support

Note: Adapted from Moncrief, Marshall, and Lassk (2006), Table 2, p.59.

As shown in Table 2.2 (and apparent from the large number of examined activities - 105), relational-based activities are one specific, yet increasingly important, part of the contemporary sales function. Due to the great relevance to the present work, the sales activities that loaded on the ‘relationship selling’ factor were examined in more detail. It can be concluded that most of the identified relationship-oriented activities that

⁴ In the study of Moncrief, Marshall, and Lassk (2006), a cluster analysis was also performed in order to further categorize the factors into a sales position taxonomy (six categories). However, for the purposes of the present study, the actual selling activities are of major interest.

salespeople perform could also apply to a B2B retail context. For example, “consult with customers”, “adapt presentations”, and/or “help clients plan” may as well be applicable to a retail industry setting.⁵ However, consistent with previous assertions identified in extant literature (e.g., Moncrief, 1986), some major concerns can be brought forward as to why such inferences may not be the best research approach for the present study. First, past results were typically achieved by focusing on salesperson reports. Hence, it is unclear whether buyers would view the identified activities in a similar way. Next, as compared to industrial purchasing, retail buying is characterized by both a different (a) “decision-making unit” and (b) “position of the buyer in the marketing channel” (Kline & Wagner, 1994, p.76). Thus, additional relational selling activities may (also) play a critical role in retail buying. Finally, but yet also crucial, is the question of *how* effective the various sales activities are in a retail buying context. Based on extant work largely focusing on B2B industrial salespeople, it appears to be very hard to judge what the most critical activities could be in a retail setting. However, this seems an important consideration for the meaningful development of a theoretical framework at a later stage of the thesis. Therefore, after a review of the extant studies that have examined and contributed to an enhanced overview of sales activities performed by B2B salespeople, the specific usefulness of these works for the purpose of the present study is at least questionable. The following section discusses previous research on salesperson relational activities and their link to performance outcomes.

2.2.2 Salesperson Relational Activities and Performance

As previously stated, past scholarly research has shown great interest in identifying determinants of salesperson performance. A substantial amount of prior work has built on a model developed by Walker, Churchill, and Ford (1977; see also Walker, Churchill, & Ford, 1979), in which the authors propose a conceptual framework that suggests important determinants of salesperson performance. In particular, this model puts forward that the performance of the sales force is determined by (1) personal, organizational, and environmental variables, (2) motivation, (3) aptitude, and (4) role perceptions (accuracy, ambiguity, and conflict). Based on these prior conceptualizations, Churchill et al. (1985) conducted a meta-analysis investigating the empirical evidence existing to that date on different determinants of salesperson performance. After adjusting for sampling error, the examined variables showed correlations with performance in the following order - ranked after the strength of the association: (1) salesperson personal factors, (2) salesperson individual skill, (3) salesperson role variables, (4) salesperson aptitude, (5) salesperson individual motivation, and (6)

⁵ For the complete list of ‘relationship selling’ activities, see Moncrief, Marshall, and Lassk (2006, p.59).

organizational/environmental factors. The most important determinants, salesperson personal factors, included such as age, sex, race, appearance, and education (among others).

Although Churchill et al.'s (1985) results indicated that salespeople's personal factors played the most critical role in determining successful performance, even this variable category could only explain less than 10 percent of the variation in the outcome variable of salesperson performance. A detailed examination of this meta-analysis reveals, however, that salespeople's personal behaviors had not been included. Walker, Churchill, and Ford (1979, p.33) define salesperson behavior as "what people do (the tasks they expend effort on) in the course of working." Specified in more detail and reflecting the developments towards more relational selling approaches, according to Boles et al. (2000, p.143), "[S]alesperson behaviors include activities required in the sales process and activities related to the development of ongoing relationships with customers/buyers."

In the scholarly work of Weitz (1981), a contingency framework has been suggested, linking behaviors of the sales force to effectiveness, contingent on factors such as salesperson resources as well as characteristics of the buying task and buyer-salesperson relationship. Furthermore, in this study it has been emphasized that it is important to understand, and hence, for sales researchers to investigate, those salesperson deeds that directly impact on effectiveness in sales interactions. Other researchers have also come to the conclusion that investigations of how specific salesperson activities determine performance outcomes are important (e.g., see Boles et al., 2000; Plank & Reid, 1994; Singh & Koshy, 2010; Weitz, Sujan, & Sujan, 1986).

Particularly, previous research has conceptualized and examined a number of different sales force behaviors and their link to performance outcomes. Examples include things such as adaptive selling behaviors (e.g., Spiro & Weitz, 1990), and customer-oriented selling behaviors (e.g., Saxe & Weitz, 1982). These studies have provided empirical support for the notion that several salesperson activities indeed affect performance outcomes. That said, it needs to be acknowledged that results have not always been consistent, and results also exist that do not support the positive association between salesperson behaviors and performance (for example, cf. Singh & Koshy, 2010).

Due to the focus of the present thesis, salespersons' relational activities (also referred to as relationship selling behaviors - e.g., see Crosby, Evans, & Cowles, 1990) are of

central interest; that is, salesperson activities that can build strong customer relationships and improve sales performance. It should be clear that, while several different relational activities performed by salespeople have been studied in previous works, salespersons' relational activities as such only represent one category of salesperson behaviors. The wide range of activities performed by contemporary salespeople (i.e. the broadening of the sales function) was already reflected in the previously-examined sales taxonomies/studies providing an overview of different sales activities (Section 2.2.1). Nevertheless, over the past years the topic of relationship-building has been increasingly important, and salespeople's relational activities performed to grow customer relationships and enhance performance, has been of increasing interest to both, sales scholars and practitioners.

More than a decade ago, Boles et al. (2000, p.143) noted that "[O]ne relatively unexplored type of salesperson behavior involves activities that lead to customer relationships." A review of extant literature to date reveals that this particular research field has certainly developed further. Various sales researchers have investigated different relational behaviors of salespeople that can build and strengthen relationships with customers/buyers, in both consumer and B2B markets. These prior studies comprise examinations of specific salespersons' activities, including such as mutual trusting behaviors (Smith & Barclay, 1997), socializing behaviors (Geiger & Turley, 2005), service behaviors (i.e. diligence, information communication, inducements, sportsmanship, and empathy) (Ahearne, Jelinek, & Jones, 2007), ethical behavior (Hansen & Riggle, 2009), customer-focused helping behavior (Bradford, Crant, & Phillips, 2009) and other contextual performance activities (i.e. helping, courtesy, and sportsmanship) (Mulki, Jaramillo, & Marshall, 2007) or organizational citizenship behaviors (Piercy et al, 2006). Other scholars have taken a broader approach towards the examination of such actions performed by the sales force. For example, some research works have examined salespeople's relationship selling behaviors by measuring underlying indicators (i.e. interaction intensity, mutual disclosure, and cooperative intentions) (Boles et al., 2000; Crosby, Evans, & Cowles, 1990). Others again have worked with wider constructs such as salesperson service investment (Frankwick, Porter, & Crosby, 2001) or salesperson's relationship marketing activities (Palmatier et al., 2008), capturing relational actions carried out by salespeople in a more general way.

However, even though these past research studies have made important contributions, there are at least three key conclusions derived from this previous stream of work that

reveal gaps in existing literature, and hence, are important for the present thesis. First, although some researchers have investigated specific relational activities of salespeople, such as helping or socializing deeds, other conceptualizations of relational behaviors or activities appear to be somewhat questionable, in the sense that they do not represent *actual* activities performed by salespeople. For example, constructs such as interaction intensity, mutual disclosure, and cooperative intentions (e.g., Boles et al., 2000; Crosby, Evans, & Cowles, 1990), even though critical dimensions in relationship selling, provide only limited insights into what salespeople can actually *do* to build and cultivate relationships with customers and increase performance. That said, it needs to be noted that more recent developments in the literature - especially sales-specific research studies (as presented above) - have shown a development towards the examination of more specific activities. Next, although a tendency can be seen in extant literature towards an increasing drive to establish the activity-performance link empirically, one should be aware that not all previous studies have done so (nor have they all focused on the B2B context). For example, researchers have also focused on examining effects on trust or relationship quality (e.g., Bradford, Crant, & Phillips, 2009; Crosby, Evans, & Cowles, 1990), or have explored the role of salesperson behaviors qualitatively (e.g., Geiger & Turley, 2005). Finally, existing research work on salespeople's relational activities that has shown support for a positive association between the actions performed by salespeople and performance outcomes, has typically examined relational activities in isolation; that is, past studies have solely focused on sales behaviors, without any consideration of product-focused drivers of performance (e.g., product price or market demand for a product). This may be especially problematic when researchers are interested in measures of sales performance (e.g., sales volume) because the salability of a product has been shown to be the key determinant of buying decisions in the retail industry context (cf. Pilling & Eroglu, 1994).

Further, more general, yet important insights regarding salespeople's activities can be derived from a recent article by Singh and Koshy (2010), entitled "Determinants of B2B salespersons' performance and effectiveness: a review and synthesis of literature". In this work, the authors specify specific prominent classes of performance determinants, among which are (1) cognitive variables, (2) personality variables, (3) situational variables, (4) communication-related variables, (5) attribution theory-based variables, (6) behavioral variables, and (7) customer-oriented variables. Although it goes beyond the aims of the present literature review to evaluate all of these determinant classes, this work is certainly interesting for the present thesis with respect to category (6), behavioral variables, and the conclusions drawn in this regard.

In the light of the present research, perhaps one of the most crucial inferences that can be drawn from Singh and Koshy's (2010) current synthesis of salesperson performance determinants in the B2B context is that the study reinforces the importance of specific sales force selling activities for performance outcomes. That said, their work highlights a couple of important issues regarding extant conceptualizations of (1) the performance construct and (2) salesperson behaviors. First, in the existing sales literature, sales force performance has been conceptualized and examined (including its operationalization) in a number of different ways. For example, indices such as sales volume, gross margin, profitability, revenue, and sales expense can be used as outcome measures (e.g., see Anderson & Oliver, 1987), but also qualitative self-reports of performance. Of course, the informative value of examined associations between salesperson activities and performance does, at least partially, depend on the chosen measure. Second, Singh and Koshy (2010, p.536) view salesperson behaviors to "include selling skills such as adaptive selling, teamwork, effective communication, and customer orientation as well as selling activities that include making sales calls, managing time and territory." As previously discussed, the sales job has been broadening over the last years, and relational activities represent one specific activity category performed by salespeople. In view of salespeople's performance, the sales force can carry out specific actions (including relational activities) to impact on their success. Singh and Koshy (2010, p.540) also refer to these activities as "managerially actionable measures of salesperson's performance." In the terminology of Walker, Churchill, and Ford (1979, p.22) used in their seminal scholarly work, salespeople can affect performance results through "carrying out a number of discrete and specific activities which may vary greatly across different types of selling jobs and situations." Churchill et al.'s (1985) express a similar view. The authors note that the industry (type of selling job) as well as the type of product sold (selling situation) may be crucial factors to be considered in the development of performance drivers. In addition, Moncrief (1986) also states that sales jobs and the performed selling activities may vary widely between different industries. The more recent developments towards examining the performance impact of more concrete activities seem to be in agreement with these notions. Furthermore, specific contemporary propositions for future research attempts are made by Singh and Koshy (2010). In particular, these authors suggest the following:

"[...] we should move away from the current normative bias towards desirable sales behaviors for enhancing the probability of sales. Instead, we should progress towards those adopting those selling activities that are customer-centric, and therefore valued by the buyers, and not by the sales managers alone" (p.540).

Stated differently, future research is urged to examine those salesperson activities that are important to buyers. Following such an approach implies that sales researchers should more often take a buyer perspective, rather than a salesperson/sales manager perspective, when conducting research on the effects of salespeople's activities on performance outcomes.

In sum, the review of the sales literature that has specifically dealt with salespeople's activities and their impact on performance has shown that previous empirical research work has generally found a positive association between such behaviors and performance outcomes. However, even though developments in this particular research stream have increasingly moved towards the empirical examination of specific activities performed by salespeople, that is, what salespeople actually *do*, several opportunities for future research contributions have been identified. In a nutshell, sales researchers can contribute through testing specific activities carried out by B2B salespeople that are valued by buyers in a certain industry and selling context (i.e. specific customer-oriented activities) (Singh & Koshy, 2010). Furthermore, past research works have typically examined sales behaviors in isolation (i.e. without any consideration of product-focused variables). Thus, it seems appropriate to conclude that previous work concentrating on salesperson activities, including relational behaviors that can build customer relationships and affect performance outcomes, has been (a) salesperson-centric (as opposed to buyer-centric) and (b) solely focused on the activities of the salesperson (as opposed to simultaneous examinations of product-oriented variables and salespeople's relational activities).

Since the literature review has shown that the industry (the type of selling job) and selling situation (type of product sold) may be critical factors of what activities are performed by salespeople (e.g., Churchill et al., 1985; Moncrief, 1986), the following section (Section 2.2.3) discusses extant sales research that has specifically studied selling activities in the context of the retail industry.

2.2.3 Salesperson Relational Activities, Performance, and the Context of the Retail Industry

In the extant academic literature it has been argued that “[I]n industrial marketing, services marketing, managing distribution channels and even consumer packaged goods marketing itself, a shift is clearly taking place from marketing to anonymous masses of customer to developing and managing relationships [...]” (Grönroos, 1997, p.333). In respect of this increasing significance of building strong relationships with customers, the

B2B consumer goods example constitutes one important and quite sizable market to be examined.

Nevertheless, whereas the importance of buyer-salesperson relationships in retail industry settings has been widely appreciated (e.g., see Murry & Heide, 1998; also see Bowler et al., 2011, for a recent B2B research example), a review of the relevant literature has revealed that examinations of specific activities performed by *B2B salespeople of retail products* that build profitable relationships with customers appear to be rather sparse. Significantly more scholarly research work regarding relational activities of B2B sales force members has been conducted in industrial (e.g., Biong & Selnes, 1995; Bradford, Crant, & Phillips, 2009; Palmatier et al., 2008) and service (e.g., Boles et al., 2000; Crosby, Evans, & Cowles, 1990; Piercy et al., 2006) settings, or specific industries such as pharmaceuticals (e.g., Ahearne, Jelinek, & Jones, 2007; Mulki, Jaramillo, & Marshall, 2007). Consequently, positive associations between specific sales force activities and performance outcomes in the context of the retail industry have been rarely established. However, as noted earlier, the industry (type of selling job) and the type of product sold (selling situation) may be crucial factors to be considered in the development of performance drivers (Churchill et al., 1985; Moncrief, 1986). Thus, as sales jobs, and hence, the performed selling activities and their effectiveness, may vary widely between different industry contexts, it appears to be crucial to understand (a) what salesperson activities are important to build strong customer relationships in the retail industry and (b) how such activities affect performance results. Yet, to date the existing sales literature has explored these research matters in a retail industry setting only to a limited extent.

Nonetheless, the predominant focus on relational activities of B2B salespeople in industrial and service contexts, although conspicuous, can be based on an understandable logic. In general, it seems that one could argue that the building of relationships may carry more 'weight' when industrial goods or particular services are offered. For example, the selling of heavy and expensive machinery or insurance policies respectively can often require more intense buyer-salesperson interactions (as compared to the selling of retail products), and thus, can offer a more obvious 'platform' for B2B salespeople's relationship-building activities to be performed and bear fruit. Researchers appear to follow this (or a similar) logic when testing their conceptual frameworks empirically, often showing a preference for industrial and service settings in this particular research matter.

Despite the good reasons which can be brought forward to investigate B2B salespeople's relationship-building activities in industrial or service settings, the tendency in existing sales literature towards testing the activity-performance link in these research contexts is also somewhat surprising. After all, it were "[...] goods-dominant firms, such as IBM and Procter and Gamble who pioneered many relationship marketing practices [...]" (Bradford et al., 2010, p.240), leading to more customer-centric sales efforts and the development of strong relationships with key customers.

Therefore, in summary, it can be concluded that even though the importance of establishing customer relationships in the context of the retail industry has been widely recognized (cf. Murry & Heide, 1998), the majority of existing knowledge regarding the B2B salesperson activity-performance link has been derived from industrial and service settings, hence, leaving opportunities for contribution to existing knowledge in this particular research field.

2.2.4 Salesperson-Oriented Literature: Summary and Implications for the Present Study

The previous sections have provided a discussion on the extant literature concerned with B2B salespeople's activities that build and maintain relationships with customers, as well as the association between such activities and performance outcomes. In particular, three key areas of interest have been reviewed and evaluated: (1) research work that has generated sales position taxonomies or other sales activities overviews, (2) existing scholarly research that has specifically investigated the B2B salesperson relational activity-performance link, and (3) extant knowledge regarding B2B salespeople's relationship-building activities in the retail industry context.

As the literature assessment revealed, an array of different relational activities of B2B salespeople have been researched previously, and some empirical evidence regarding the effect of such activities on performance outcomes has been established. However, the review of this literature stream has also shown that the majority of studies has *not* focused on the retail industry, but rather on industrial and service contexts. Furthermore, existing works in this research array have typically investigated salespeople's relational activities in isolation; that is, salespersons' relational activities have usually been modeled as sole determinants of performance outcomes without any considerations of product-focused variables.

So far, the first part of the literature evaluation has focused on the salesperson-oriented literature relevant to the present study. In light of this, the previous sections provided insights into salespeople's activities as performance drivers in B2B exchanges. Rather unsurprisingly, the sales literature emphasizes the role of these and other salesperson-centered factors for sales outcomes. Special attention was directed towards relational activities that can cultivate customer relationships and increase performance. Until now, however, the buyer-focused literature has been ignored. Consequently, at this point no inferences can be drawn with respect to the determinants deemed important in specific buyer-oriented research, nor can any specific implications be derived regarding the role of salespeople's relational activities in the retail buying literature. Therefore, the subsequent section reviews the relevant buyer-focused research field, in an attempt to deduce further implications for the present study.

2.3 Buyer-Oriented Literature

After the assessment of the relevant salesperson-oriented literature, this section now evaluates the pertinent buyer-oriented literature. More specifically, the focus will be directed towards reviewing (a) the different types of purchase decisions organizational buyers are confronted with when purchasing for their organizations (Section 2.3.1), (b) research on organizational buyers' purchase decisions in the retail context (Section 2.3.2), and (c) the key variables considered in the buying literature to predict retail buyers' product evaluations and purchase decisions (Section 2.3.3).⁶ The section closes with a synthesis of this existing work and a discussion of the implications that can be derived for the present study (Section 2.3.4).

2.3.1 Organizational Buyers' Purchase Decisions

The examination of B2B buying behavior, including buying processes and the classification of different purchase decisions that organizational buyers are confronted with, has been of interest to academic researchers and practitioners for the past 50 years (Lindgreen, Révész, & Glynn, 2009). Seminal scholarly studies on organizational buying that have had an important impact on shaping this particular research field incorporated Robinson, Faris and Wind's (1967) "buyclass framework", Webster and Wind's (1972) "general model for understanding organizational buying behavior", and Sheth's (1973) "model of industrial buyer behavior" (Lindgreen, Révész, & Glynn, 2009; Wilson, 1996). Whereas the models of Webster and Wind (1972) and Sheth (1973) focus on the

⁶ As the retail purchasing decision-making process differs from different industries (i.e. industrial purchasing) "in terms of the decision-making unit and the position of the buyer in the marketing channel" (Kline & Wagner, 1994, p.76), due to the focus of the thesis the literature assessment will concentrate on examples from the retail buying context.

description of buying processes, the work of Robinson, Faris, and Wind (1967) suggests a buyclass theory, also known as the RFW-Framework (e.g., Anderson, Chu, & Weitz, 1987), to explain organizational buying behavior. In order to better understand the different purchase decisions organizational buyers are confronted with, the buyclass framework is of central interest.

The buyclass framework differentiates between three buying situations (new task, modified rebuy, and straight rebuy) based on three different dimensions (newness of a problem, information requirements, and consideration of new alternatives). The subsequent Table 2.3 presents this framework graphically.

Table 2.3: Buying Decision Grid/RFW-Framework

Type of Buying Situation	Newness of the Problem	Information Requirements	Consideration of New Alternatives
New task	High	Maximum	Important
Modified rebuy	Medium	Moderate	Limited
Straight rebuy	Low	Minimal	None

Note: Adapted from Robinson, Faris, and Wind (1967), Table 4, p.25.

Firstly, one type of buying situation is the *new task*. This purchase decision is characterized by the obtainment of a new product that is bought for the first time. As this buying task is rather unfamiliar to buyers, this type of purchase decision is usually risky and can be very substantial in monetary terms. Hence, buyers typically require a lot of information to evaluate this purchase, including the consideration of alternatives, which is deemed important in this task. Secondly, another type of buying situation is the *straight rebuy*. In this purchase scenario, buyers are faced with a routine purchase, that is, they are familiar with the product. As straight rebuys are concerned with the reordering of previously bought products, there are usually no additional information needs and the supplier stays the same. Yet, buyers need to ensure that certain elements of the exchange, such as product quality and product price, are still satisfactory (i.e. no modifications have occurred). If certain expectations or requirements are not met, a straight rebuy can become a modified rebuy. Thirdly, the last type of buying situation is the *modified rebuy*. This purchase situation is either characterized by a previously new task buy that is now more familiar, or a formerly straight rebuy for which modifications have occurred or requirements have changed. Examples are such as new product

purchases that are similar to previous buys, or the replacement of a product due to changes in terms and conditions or product specifications.

Although an exhaustive discussion on the appeal as well as flaws of the RFW-Framework would go beyond the aims of the present section of the literature review, the buyclass framework itself has some specific implications and limitations that are worth pointing out at this point. First, a central implication is that organizational buyer behavior is contingent on the type of buying situation, rather than a certain type of product. Based on this premise, the framework suggests that organizational buyers' purchasing behavior changes as the purchase situation changes. Next, although the RFW-Framework is widely appealing to a lot of different product-based purchases, it may be less applicable to the buying of services. Furthermore, as the framework focuses on the buying party (organizational buyer), the supplier side (including salespeople) and its influence on buyers' decision-making is ignored. Nevertheless, due to its intuitive general applicability and simplicity, the ideas of the buyclass framework have been utilized and further developed in a wide range of different research studies (e.g., Alejandro et al., 2011; Iyer, 1996; Moon & Tikoo, 2002; also cf. Lewin & Donthu, 2005, for example), including scholarly works focusing on retail buying (e.g., Da Silva, Davies, & Naudé, 2002; Fairhurst & Fiorito, 1990). The following section discusses research on organizational buyers' purchase decisions in the retail context.

2.3.2 Organizational Buyers' Purchase Decisions in the Retail Context

Although an array of different research topics has evolved around retail buyers' purchasing behavior (cf. Grewal & Levy, 2007; Hansen & Skytte, 1998), the issue of product assortment, that is, "the total set of items offered by a retailer, reflecting both the breadth and depth of offered product lines" (Simonson, 1999, p.347), has long been identified as a critical determinant of customer patronage and retailer's successful performance (e.g., see Grewal et al., 1999; McIntyre & Miller, 1999; Miller et al., 2010). The retail buyer fulfills a critical function in this regard because one important responsibility of the buyer is the planning and selection (purchasing) of the merchandise assortment (Fiorito & Fairhurst, 1993; Fiorito, Gable, & Conseur, 2010).

In contrast to industrial purchasing, in which buying decisions are often made by buying centers/committees, retail buying decisions are commonly made independently by individual buyers (Kline & Wagner, 1994); that is, retail purchasing is characterized by autonomy of the buyers (Bowler et al., 2011). The extant literature on retail buying that has concretely focused on individuals' buying decisions can be traced a long way back

(e.g., see Grashof, 1970, for an early example). An examination of the relevant scholarly work has revealed that the majority of previously conducted research studies has examined new product acceptance and the criteria evaluated by retail buyers when making such decisions (e.g., Gerlich, Walters, & Heil, 1994; Heeler, Kearney, & Mehaffey, 1973; Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990; Montgomery, 1975; Pellegrini & Zanderighi, 1991; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). This finding is in line with previous conclusions drawn on extant research concerned with retail buying behavior (see Hansen & Skytte, 1998, for a former review). Perhaps the 'new product' focus of many prior works is mainly due to the fact that these buying situations are of great interest to practitioners (from both suppliers and retailers). Indeed, in extant literature it has been argued that new product introductions are among the most critical tasks for firms' successful performance in the marketplace (e.g., Fu et al., 2010; Hultink, Thölke, & Robben, 1999; Kaufman, Jayachandran, & Rose, 2006).

Applying the previously discussed buyclass framework (Robinson, Faris, & Wind, 1967), the purchasing of new products, such as innovations, line extensions, or me-too products (Gerlich, Walters, & Heil, 1994), confronts the retail buyer with new task (e.g., innovation) or modified rebuy (e.g., new size or flavor of a product) situations. These purchase situations contain inherent risk and uncertainty, posing considerable challenges for buyers, even if they are experienced (e.g., Kline & Wagner, 1994). In contrast to straight rebuys (routine purchases/reordering of a product), new product purchases require the retail buyer to evaluate new product features, as well as other market- and marketing strategy-related information in order to make a decision whether to accept or reject a new item for display and sales (e.g., Rao & McLaughlin, 1989). In straight reorder situations, this is typically not the case because (a) reorder decisions are often based on historical information, such as cost and profit information, and especially past sales performance, which determines whether a particular item gets reordered or deleted from the product portfolio (e.g., Davies, 1994a; Grashof, 1970; McLaughlin & Rao, 1990), and (b) buyers can now often rely on the use of automated replenishment/reordering systems (i.e. inventory management systems [IMSS]) (e.g., Fiorito, Gable, & Conseur, 2010). In cases where a product becomes unprofitable (or generates insufficient profit) and gets deleted from the retailer's product portfolio,⁷ the replacement of this specific item turns into a modified rebuy or new task.

⁷ It is recognized that sometimes unprofitable products (i.e. loss leaders) are maintained in a product assortment in prospects of improving overall profitability of the retailer (e.g., McIntyre & Miller, 1999). For example, a loss leader may generate additional store traffic, leading to further sales across other product categories.

As discussed above, most research work that has specifically examined retail buyers' individual purchase decisions has focused on the acceptance of new products. Scholarly work investigating reorders or delisting of retail products (assortment reductions) seems to be rather rare (e.g., see Davies, 1994a; 1994b; Sloot & Verhoef, 2008, for examples of delisting items; see Sloot, Fok, & Verhoef, 2006, for an overview of studies on assortment reductions), and research exploring more than one buying situation is also noticeably scarce (e.g., see Fairhurst & Fiorito, 1990, for an exception). In a nutshell, scholars interested in retail buyers' purchase decisions have mainly conducted research by focusing on one particular purchase decision - the new product acceptance decision.

The existing literature investigating retail buyers' new product purchases has generally focused on retail buyers accept/reject decisions (i.e. dichotomous yes/no answers), without specifically differentiating between the type of new product (e.g., Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). For example, Gerlich, Walters, and Heil's (1994) approach to distinguish between innovations, line extensions, and me-too products is typically not pursued (also see Pellegrini & Zanderighi, 1991, for another example of distinguishing between new products types). Most studies incorporate all new items in their definitions of new products and build upon earlier work, such as Rao and McLaughlin (1989). In Rao and McLaughlin's (1989, p.84) terminology, "a new product is defined [here] as a stock-keeping unit - e.g., a single flavor/size - not previously carried" by a retailer or retail chain. Hence, the majority of research studies have focused on retail buyers' product acceptance decisions regarding products that were new to the retailers' product assortment during the data collection process. Perhaps this is mainly due to the fact that new products, which are by definition new to a retailer's product portfolio, require retail buyers to evaluate the same general decision criteria for product acceptance/rejection. This seems likely because historical information from company data records is not available for any new product.

Furthermore, extant scholarly work on retail buyers' new product acceptance is often based on findings from a single data source, that is, typically one particular retail chain (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). Although research findings are always bound to the underlying research context of a study, in previous examinations it has been noted that some of these results on retail buyers' new product purchasing decisions may not necessarily generalize to other buyers at different retailers (e.g., see Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989).

In summary, the review of existing scholarly work particularly concerned with retail buyers' individual purchase decisions has shown that the majority of research has concentrated on buyers' new product acceptance - a critical buying decision for retailers due to the objective to choose items that maximize returns from limited shelf space, and crucial for suppliers as the successful introduction of new products is dependent on retailers' selection decisions (e.g., Kaufman, Jayachandran, & Rose, 2006). Furthermore, the assessment has revealed that research studies examining individual buyers' straight rebuy situations (i.e. reorders) is rather rare. A similar conclusion holds for studies focusing on the delisting of items. Although this part of the literature review pertaining to retail buyers' purchasing behavior has been important to (a) understand the different purchasing situations buyers are generally confronted with and (b) assess the extant work examined buying decisions, it does not provide any information regarding the determinants of buyers' decision-making. Therefore, the following section reviews and evaluates prior research work regarding the determinants of retail buyers' purchasing behavior.

2.3.3 Determinants of Retail Buyers' Purchase Behavior

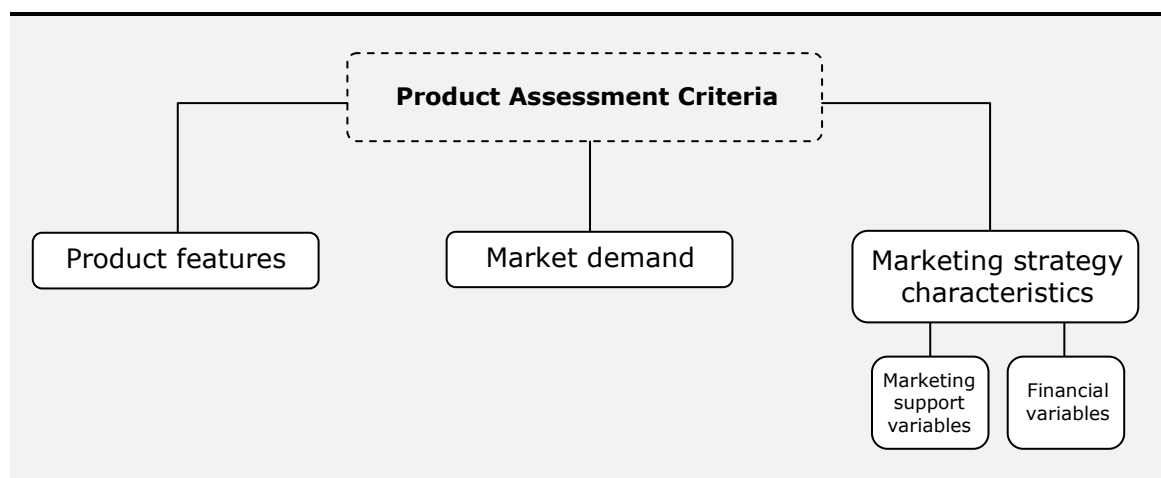
Within the literature stream concerned with retail buying, manifold variables and their influences on purchase behavior have been investigated. For example, prior work has studied the impact of new product acceptance criteria, that is, product features, market demand, and marketing strategy characteristics (e.g., Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000), different buyer variables, such as age, experience, and gender (e.g., Da Silva, Davies, & Naudé, 2002; Neu, Graham, & Gilly, 1988), the use of information (e.g., Kline & Wagner, 1994), country- and culture-specific criteria (e.g., Sternquist & Chen, 2006), sourcing considerations (e.g., Chatterjee, Hyvönen, & Anderson, 1995), and networks in retail buying (e.g., Seevers, Skinner, & Dahlstrom, 2010).

However, although the above examples show that the retail buying literature has developed and expanded to include an array of topics that academic researchers have shown interest in, many of them are *not* particularly focused on individual buyers' purchase decisions. As alluded to in the previous section (Section 2.3.2), those research studies that have specifically examined retail buyers purchase decisions (especially *actual* purchasing decisions) have mostly focused on new product selections, that is, buyers' accept/reject decisions regarding new retail merchandise.

A review of the retail buying literature concentrating on buyers' new product selections reveals that past research has generally focused on an array of key product-related determinants (e.g., product features, market demand for a new product, marketing support for a new product, estimated gross margin of a new product, etc.). This appears to be a different emphasis than found in the salesperson-oriented literature, which has naturally focused on the influence of sales force-specific factors on exchange outcomes (such as the impact of salesperson relational activities on performance). From the standpoint of the buyer, however, the focus on product-related criteria intuitively makes sense and is not surprising, as retail buyers are trained to select items for the product assortment that maximize retailer's returns (e.g., McIntyre & Miller, 1999). After all, buyers need to determine a product's salability, which has been named to be the main objective in retail buying (Pilling & Eroglu, 1994). In view of this, Kotler and Keller (2006, p.211), for example, characterize buying professionals as "trained purchasing agents, who must follow their organizations' policies, constraints, and requirements."

With regard to retail buyers' new product selections, "there seems to be general agreement as to the key determinants that influence product acceptance decisions" (White, Troy, & Gerlich, 2000, p.292). More specifically, the extant literature suggests that retail buyers evaluate new products based on three main decision criteria categories, that can be summarized as product features, market demand, and marketing strategy characteristics (e.g., Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). Figure 2.1 represents a graphical overview of these decision criteria factors. The following sections then discuss these decision determinants in more detail.

Figure 2.1: Key Determinants Influencing New Product Acceptance



2.3.3.1 Product Features

First, a key decision criteria category in retail buying for the acceptance of new products is the attributes of the new item (e.g., Fairhurst & Fiorito, 1990; Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990; Pellegrini & Zanderighi, 1991; Rao & McLaughlin, 1989). Obviously, such product-specific variables play a central role in a buyer's evaluation of a new item. Among the often studied physical characteristics are those such as product quality and/or product price. Past academic research has illustrated that product characteristics, such as a product's quality composition and its price, are typically critical determinants of retail buyers' new product decisions (e.g., see Hansen & Skytte, 1998; McLaughlin, 1995). Hence, when a retail buyer evaluates new merchandise, the product itself is a central decision criterion in the buyer's judgment of the new item.

The actual product composition as well as the offered price of a new product are under the control of the manufacturer. This implies that manufacturers can directly influence retail buyers' purchasing behavior through these key components. In fact, in extant literature it has been suggested that some marketing strategy variables (discussed in detail at a later stage), such as introductory allowances or slotting fees, may be less important than fundamentally critical investments in the actual features of new products offered to retailers (Rao & McLaughlin, 1989).

2.3.3.2 Market Demand

Next, the second critical decision criterion for retail buyers' new product selections is the expected market demand for a new item (e.g., see Gerlich, Walters, & Heil, 1994; White, Troy, & Gerlich, 2000). In essence, retail buyers need to assess the salability of newly offered products (Pilling & Eroglu, 1994), critically important for an accurate forecast of the sales potential of a particular item (cf. Pellegrini & Zanderighi, 1991), and hence, the determination of future returns derived from a new product. The retail buyer needs to evaluate whether the new item will fulfill a need that is currently unmet. Different buyers may assess a (strong) demand for new merchandise by one or several factors. For example, extant literature has looked at variables/items such as expected growth of product category, category sales volume, and retail competition. Other researchers have included broader items when asking retail buyers to report on expected demand, such as 'fulfillment of unmet need' and 'strong demand expectations' (Kaufman, Jayachandran, & Rose, 2006). Nevertheless, the underlying idea is always the same: the buyer's assessment of expected customer demand for a specific new product. Extant scholarly work has shown that such market considerations are important determinants of buyers'

new product acceptance decisions (e.g., Gerlich, Walters, & Heil, 1994; Rao & McLaughlin, 1989).

Expectations regarding customer demand and hence, sales potential of a new product may deviate between the supplier firm and retailer due to the involved uncertainty in the forecasting process (Pellegrini & Zanderighi, 1991). Therefore, buyers' expected market demand itself is *not* under the direct control of the selling party, yet, may be influenced by marketing strategy variables (e.g., media support), which are under the control of the seller. Marketing tools are available to sellers that can be utilized in order to stimulate demand in the marketplace and/or reduce the risk for the retailer (White, Troy, & Gerlich, 2000). These marketing strategy variables are discussed in the subsequent section.

2.3.3.3 Marketing Strategy Characteristics

Third, further important decision determinants for retail buyers' new product acceptance are marketing strategy variables (e.g., Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989). These can be divided into two subcategories: (1) marketing support variables and (2) financial variables.

When evaluating new merchandise, retail buyers also place a strong emphasis on the seller's marketing efforts aimed at supporting new products. Typically, such assistance is characterized by support through (a) advertising (e.g., media support and cooperative advertising funds), (b) promotional activities (e.g., planned couponing and product sampling/demonstrations), and (c) introductory allowances (i.e. a specific number of free items or orders that are discounted) and slotting fees (i.e. lump sum up-front cash transfers to retailers) (Bloom, Gundlach, & Cannon, 2000; Desiraju, 2001; Lariviere & Padmanabhan, 1997; White, Troy, & Gerlich, 2000). From the buyer/retailer perspective, these marketing support variables represent valuable ways to mitigate the uncertainty involved in new product introductions, either through the direct stimulation of customer demand (advertising and promotion programs) or cost reductions (introductory allowances and slotting fees) (e.g., Bloom, Gundlach, & Cannon, 2000; White, Troy, & Gerlich, 2000).

Furthermore, another key criterion for retail buyers' new product acceptance is the financial returns generated by a new item (e.g., McLaughlin & Rao, 1990; Pellegrini & Zanderighi, 1991; Rao & McLaughlin, 1989). As discussed earlier, the retail buyer is trained to choose new products for the retailer's assortment that maximize returns (e.g., McIntyre & Miller, 1999). In the light of this, financial indicators are crucial. Existing

literature has typically examined retail buyers' judgment of the financial indicators of gross margin and/or profit judgments (e.g., perception of estimated profit or gross margin; or expected/actual percentages, such as gross margin = (retail price - retail cost) ÷ retail price). For example, the studies of Montgomery (1975), Pellegrini and Zanderighi (1991), and Kaufman, Jayachandran, and Rose (2006) suggest a focus on estimated gross margin, whereas scholarly work such as Rao and McLaughlin (1989) as well as McLaughlin and Rao (1990) considered gross margin and profit. Although all of these measures give a financial indication of future returns from a specific new product, it appears that an estimation of the gross margin is most frequently utilized. This may be due to the fact that retail buyers (whether working for smaller or larger organizations) have this information 'most readily available', and hence, can usually report on it in research studies without any difficulties. Nevertheless, whether gross margin or profit is estimated, the financial component is an important part of retail buyers' new product evaluations.

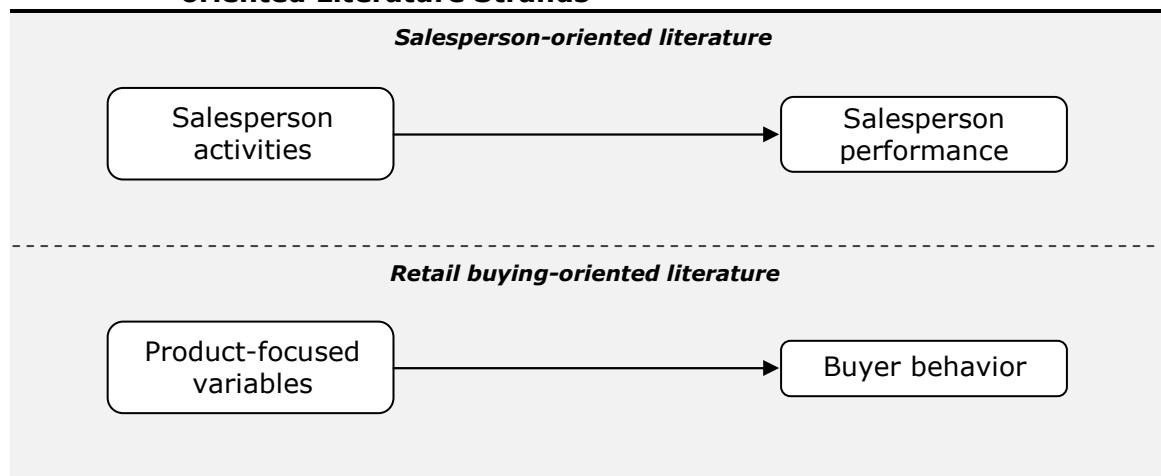
All in all, the review of academic research that has explicitly dealt with retail buyers' purchase decisions has revealed that past works' focus has been directed towards buyers' new product acceptance decisions (also cf. Hansen & Skytte, 1998). As discussed at an earlier stage in this literature evaluation, retailers' reordering of already-carried products is usually based on historical information (e.g., sales figures and profit information) and often supported by inventory management systems (IMs) (e.g., Fiorito, Gable, & Conseur, 2010). Thus, the decision that is most risky concerns the selection of new products. In this regard, the buyer-oriented literature suggests three key decision criteria categories: (1) product features, (2) market demand, and (3) marketing strategy characteristics. The previous discussion has reviewed each of these decision determinants.

2.3.4 Buyer-Oriented Literature: Summary and Implications for the Present Study

Although the domain of organizational buying is quite a substantial research field in its own right (including work on topics such as industrial purchasing, for example), due to the dissertation's focus, the buyer-oriented part of the literature review was mainly directed towards academic work examining retail buying behavior. After an evaluation of the different purchasing situations organizational buyers are confronted with, the specific literature stream concerned with retail buying behavior was consulted in order to gain deeper insights into buyers' purchasing decisions, and the criteria that determine such decisions. As revealed by the literature evaluation, especially retail buyers' new product acceptance decisions are emphasized in existing academic works.

In contrast to the salesperson-oriented literature, scholarly work on retail buyers focuses on a different set of determinants when examining exchange behavior. In particular, the buyer-oriented research suggests that specific product-focused variables (i.e. product features, market demand, and marketing strategy characteristics) are the key factors when buyers consider new products for display and sales. In a somewhat similar vein, reorders are mainly driven by historical product information (particularly past sales performance data) available to the retailer. The critical role of the salesperson, as (unsurprisingly) emphasized in the sales literature, is typically not evident. Consequently, this particular retail buyer-focused literature provides important knowledge regarding product-related determinants of specific purchase decisions, however, does *not* offer any insights with respect to the relative role of salespeople’s relational activities in retail buying. The following Figure 2.2 represents the distinct foci of these two literature streams relevant to the present study.

Figure 2.2: Distinct Foci of Relevant Salesperson- and Retail Buying-oriented Literature Strands



The subsequent section will now investigate research studies that have simultaneously examined product-focused variables and relational components, in an attempt to derive further implications for the current work.

2.4 Simultaneous Examinations of Product-Focused Variables and Relational Variables

Following the evaluations of the pertinent salesperson- and buyer-oriented literatures respectively, the attention is now directed towards scholarly works that have simultaneously investigated product-focused variables and relational variables in business exchanges. Section 2.4.1 provides a discussion of this specific research array,

including a detailed overview of exemplary scholarly works (Table 2.4). Subsequent to this, Section 2.4.2 concludes with a synthesis of this particular research area and implications are derived for the current study.

2.4.1 Previously Conducted Simultaneous Examinations

It has not been until more recent years that marketing academics have commenced to investigate the double considerations of product-focused variables and relational components in empirical research. The review of the extant literature has revealed that besides an earlier study conducted by Frenzen and Davis (1990), conceptualizing a customer's purchase behavior (total utility) as a function of the utility derived from a product purchase (acquisition utility) and the utility derived from personal relations (exchange utility), such joint examinations have increasingly attracted researchers' interest in more current times. An overview of exemplary studies, including information on (1) author(s), (2) year of publication, (3) B2B or B2C orientation, and (4) investigated variables, is provided below (Table 2.4).

Extant simultaneous investigations of product-focused variables and relational aspects can be identified in both, the B2B (e.g., Murry & Heide, 1998; Wuyts, Verhoef, & Prins, 2009) and B2C (e.g., Jeng, 2008a) research literature, including studies concentrating on actual 'physical' products, and works studying specific services offered. With respect to product-oriented variables (i.e. physical product or service), existing scholarly work has frequently investigated the comparative effects of the product (e.g., product attractiveness, product breadth, and product price), although other variables have on occasion been studied. A review of the previously examined relational variables in such joint analyses has shown that a considerable number of past research attempts has focused on the binary presence/non-presence of interpersonal relationships between buyer and salesperson (e.g., Jeng, 2008a; 2008b; Murry & Heide, 1998; Wathne, Biong, & Heide, 2001; Wuyts, Verhoef, & Prins, 2009). Kaufman, Jayachandran, and Rose (2006) provide one notable exception, in their focus on the simultaneous influence of product attractiveness and relationship quality on corporate buyer's new retail product selections.

Furthermore, in regards of the investigated outcome variables, existing research has typically focused on customer behavior - on the firm or individual level. Examples include such as customer promotion program participation (Jeng, 2008b; Murry & Heide, 1998), switching behavior (Wathne, Biong, & Heide, 2001), and buying behavior (e.g., Jeng, 2008a; Kaufman, Jayachandran, & Rose, 2006).

Table 2.4: Exemplars of Previous Simultaneous Examinations

Study	Author(s)	Year	Orientation	Relational Variables	Product-Focused Variables	Other Variables ¹	Dependent Variable
				<i>Independent Variables</i>			
1	Frenzen & Davis	1990	B2C/C2C	<ul style="list-style-type: none"> • Utility derived from social relations (exchange utility derived from inter-personal relationships) 	<ul style="list-style-type: none"> • Utility derived from the product purchase (acquisition utility) 	n/a	<ul style="list-style-type: none"> • Customer's total utility (sales/purchasing behavior)
2	Murry & Heide	1998	B2B	<ul style="list-style-type: none"> • Interpersonal attachments (presence/non-presence) 	<ul style="list-style-type: none"> • Incentive premium (e.g. promotional allowances for a product) • Payment method (e.g., ex post allowances that improve product margins) 	<ul style="list-style-type: none"> • Monitoring 	<ul style="list-style-type: none"> • Customer promotion program participation
3	Wathne, Biong, & Heide	2001	B2B	<ul style="list-style-type: none"> • Interpersonal relationships (presence/non-presence) • Switching costs (firm level) 	<ul style="list-style-type: none"> • Price (competing supplier) • Product breadth (competing supplier) 	n/a	<ul style="list-style-type: none"> • Customer switching behavior
4	Fruchter & Sigué	2005	B2B or B2C (not specified)	<ul style="list-style-type: none"> • Buyer's and seller's commitment 	<ul style="list-style-type: none"> • Transactional marketing effort 	n/a	<ul style="list-style-type: none"> • Seller's utility
5	Kaufman, Jayachandran, & Rose	2006	B2B	<ul style="list-style-type: none"> • Firm-firm relationship quality • Buyer-salesperson relationship quality 	<ul style="list-style-type: none"> • Product attractiveness 	n/a	<ul style="list-style-type: none"> • Buyer's new product acceptance
6	Jeng ²	2008a	B2C	<ul style="list-style-type: none"> • Interpersonal relationships (presence/non-presence) 	<ul style="list-style-type: none"> • Price (competing supplier) • Product variety (competing supplier) 	<ul style="list-style-type: none"> • Corporate reputations 	<ul style="list-style-type: none"> • Customer cross-buying intentions

Table 2.4 continued:

Study	Author(s)	Year	Orientation	Relational Variables	Product-Focused Variables	Other Variables ¹	Dependent Variable
				<i>Independent Variables</i>			
7	Jeng ²	2008b	B2B	<ul style="list-style-type: none"> • Interpersonal relationships (presence/non-presence) 	<ul style="list-style-type: none"> • Product attractiveness • Financial incentives 	<ul style="list-style-type: none"> • Bargaining costs 	<ul style="list-style-type: none"> • Customer promotion program participation
8	Polo & Sesé ²	2009	B2C	<ul style="list-style-type: none"> • Relationship characteristics (length, depth & breadth; individual-firm level) 	<ul style="list-style-type: none"> • Price (focal firm & competitor) • Service advertising (focal firm & competitor) • Brand advertising (focal firm & competitor) 	n/a	<ul style="list-style-type: none"> • Customer switching costs
9	Wuyts, Verhoef, & Prins ²	2009	B2B	<ul style="list-style-type: none"> • Good personal relationships (presence/non-presence) 	<ul style="list-style-type: none"> • Price • Interpretation & advice 	<ul style="list-style-type: none"> • Expert image (agency) • Recommendations (by other clients) • Strong brand name (agency) 	<ul style="list-style-type: none"> • Supplier consideration • Supplier choice

Notes: ¹Control variables are not reported here.

²These are service-oriented studies.

As noted earlier, the review of this particular research strand has shown that the interest in joint investigations of product-focused variables and relational aspects has been increasing among marketing academics. In more detail, this implies that researchers have started to direct more attention towards the conceptualization and empirical examination of the comparative influences of such variables. In addition, some studies have also hypothesized and investigated respective interaction effects (for example, see Murry & Heide, 1998). The examination of both, the relative and interactive influences of product-focused variables and relational variables on customer behavior can generate important knowledge for an enhanced understanding of business exchanges (Wathne, Biong, & Heide, 2001).

However, despite the above developments in parts of the extant marketing literature, the actual number of conducted simultaneous research studies still appears to be rather small at this point in time. Particularly, joint examinations that focus on salesperson-specific relational variables and product-focused components, and their relative as well as interactive effects on buyer behavior in the retail industry are virtually absent. To the best of the author's knowledge, currently only one study exists in this specific research domain (i.e. simultaneous research works) that has been conducted in the context of the retail industry, examining the impact of product attractiveness and the relationship quality of inter-firm and inter-personal relationships (cf. Kaufman, Jayachandran, & Rose, 2006; also see Table 2.4).

2.4.2 Simultaneous Examinations: Summary and Implications for the Present Study

This part of the literature assessment has provided a review of existing academic research dealing with simultaneous investigations of product-focused variables and relational variables, and their comparative role in business exchanges. In addition to the prior evaluation of the pertinent salesperson- and buyer-oriented literature fields respectively, this specific strand of work has also been assessed in a search for further insights regarding the underlying research objectives of the present study.

The review has demonstrated that, even though scholars have started to incorporate the notion of such double considerations in the study of economic exchanges, a still rather limited number of joint empirical examinations exists in the academic literature to-date. In view of the present study, this particular stream of work generally has at least two important characteristics: (a) past simultaneous investigations typically focus only on the binary presence/non-presence of interpersonal relationships between buyer and

salesperson and (b) only one prior study could be identified in this field of research that concentrates on retail buyers' purchase decisions.

As a result, it can be concluded that joint investigations of product-focused variables and relational variables appear to become more important in extant literature, leading to an improved understanding of the relative and interactive effects of such variables on customer behavior and exchange outcomes. However, it is also clear that at present existing research in this domain cannot provide any specific insights into the comparative role of salesperson relationship-building activities. Thus, the simultaneous investigation of salesperson relationship-building activities and specific product-focused variables, and their relative and interactive influences on retail buyers' product purchase decisions, provides opportunities to contribute to existing marketing knowledge and theory.

In the light of the foregoing discussions of the pertinent literature strands (Sections 2.2 to 2.4), the following section reviews and assesses previously employed theoretical frameworks/perspectives on exchange behavior and outcomes in these streams of work.

2.5 Explaining Exchange Behavior and Outcomes: A Review of Previously Employed Theoretical Frameworks and Perspectives

After the preceding evaluation of the different literature streams relevant to the present study, this section now specifically focuses on reviewing these research domains regarding their employed conceptualizations. As alluded to at the beginning of this Chapter, an examination of previously employed perspectives will assist the development of a theoretical framework for the present research work.

2.5.1 Previously Employed Conceptual Frameworks and Perspectives

In order to review prior conceptual approaches, a logical step was to assess the theoretical perspectives of the pertinent literature fields in the same order as the previous discussion, that is, broadly speaking (1) salesperson-oriented literature focusing on salespersons' activities, (2) buyer-oriented literature concerned with retail buyers' product purchase decisions, and (3) studies that have simultaneously examined product-focused variables and relational variables. The following evaluates the theorizations utilized in prior scholarly works within these three research areas.

First, the salesperson-oriented literature pertaining to the current work was reviewed. The evaluation has revealed that, even though each individual research study has its own developed theory, a couple of predominant frameworks on salesperson

performance and effectiveness have been shown to guide and/or inform several scholarly works on this subject matter: Walker, Churchill, and Ford's (1977; 1979) expectancy framework perspective and Weitz's (1981) contingency perspective (cf. Plank & Reid, 1994; Singh & Koshy, 2010). Although, alternative frameworks have been developed, with some being based on these two theorizations (e.g., Plank & Reid, 1994; Weitz, Sujana, & Sujana, 1986), the expectancy and contingency perspectives appear to have laid a major foundation for some of the later research on salesperson performance and effectiveness.

Whereas Walker, Churchill, and Ford's (1977) model did *not* explicitly link salespersons' behaviors and their effects on performance/effectiveness outcomes, Walker, Churchill, and Ford's (1979) and Weitz's (1981) frameworks hypothesized such an association in sales transactions.⁸ Both frameworks suggest a number of different variables driving/affecting the selling behavior-performance link. In particular, Walker, Churchill, and Ford's (1979) model emphasizes associations between the variable groups of (a) personal, organizational, and environmental factors, (b) motivation, (c) aptitude, (d) skill level, (e) role perceptions and salespersons' behaviors, and performance. Furthermore, personal, organizational, and environmental factors are considered to moderate the relation between performance (behavior-based) and selling effectiveness. Weitz's (1981) perspective suggests that the relationship between selling behaviors and sales effectiveness is moderated by (i.e. contingent upon) (a) characteristics of the salesperson-customer relationship, (b) resources of the salesperson, and (c) characteristics of the customer's buying task. Sales behaviors are defined in a somewhat restrictive manner by four types: (1) adapting to customers, (2) establishing influences bases, (3) influence techniques used, and (4) controlling the sales interaction.

As previously noted, both of these frameworks propose a different set of variables driving the relationship between selling behaviors and salesperson performance/effectiveness. The central tenet of these two perspectives, that is, the notion that the deeds of salespeople can affect the outcome of business exchanges, however, is the same. That said, it also becomes clear from these frameworks that they are salesperson-centered; in other words, ultimately they are focused on what a salesperson can do to impact on the success of business exchanges. Although maybe not astonishing *per se* because both frameworks represent perspectives on *salesperson* performance and effectiveness, with respect to the present study, however, it needs to be noted that direct effects of product-

⁸ At this point, it should be noted again that Walker, Churchill, and Ford (1979, p.33) define salesperson behavior as "what people do (the tasks they expend effort on) in the course of working." Therefore, the terminology of salesperson 'behavior' is synonymous to salesperson 'activity'.

focused factors (as discussed earlier) are not included in these conceptualizations as additional determinants of exchange success. These theoretically-based observations appear to be in line with what has been empirically examined in extant literature (cf. Section 2.2.2).

Next, the relevant retail buyer-oriented literature was examined. In a similar vein as the prior theory-focused investigation of the pertinent salesperson-oriented literature, the examination was directed towards identifying theoretical frameworks and perspectives that have guided and/or informed past research studies.

As discussed at an earlier stage (Sections 2.3.2 and 2.3.3), previously conducted research studies have mainly investigated the topic of new product acceptance, and the criteria assessed by buyers when making such purchasing decisions. In effect, in a former literature review of retail buying behavior by Hansen and Skytte (1998), the authors come to a comparable conclusion. Specifically, Hansen and Skytte (1998, p.277) note that “[M]ost of the previous research has been concerned with generating lists of criteria used by retailers when deciding whether or not to accept a new product.” In this regard, it has been concluded that “there seems to be general agreement as to the key determinants that influence product acceptance decisions” (White, Troy, & Gerlich, 2000, p.292), which have been summarized in extant literature as (1) product features, (2) market demand, and (3) marketing strategy characteristics (Kaufman, Jayachandran, & Rose, 2006). These determinant categories have already been discussed in more depth at an earlier stage of this Chapter (see Section 2.3.3).

From a theoretical perspective, one could attempt to employ organizational buying frameworks such as Webster and Wind’s (1972) “general model for understanding organizational buying behavior” or Sheth’s (1973) “model of industrial buyer behavior” in order to investigate retail buyers’ purchasing behavior, for example. Yet, it has been argued that retail buying represents a particular case of organizational purchasing (cf. Hansen & Skytte, 1998). Although several arguments can be brought forward as to why retail buying is distinct from other organizational buying (such as industrial buying), central features are surely that “a retailer is more like a consumer in what he buys, and more like a producer in how he buys his merchandise” (Sheth, 1981, p.181).

Although in past literature a number of authors have noted the deficiency of a general conceptual framework for retail buying behavior (e.g., Cravens & Finn, 1983; Keaveney, 1995), some efforts have been made to conceptualize a common model for buying

behavior in the retail context (e.g., Cravens & Finn, 1983; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; Sheth 1981). Especially conceptualizations such as Sheth's (1981) model on retail buying behavior or Rao and McLaughlin's (1989) view of the retail buyer purchase evaluation process appear to be scholarly works that have guided and informed much of later research attempts in this particular field (e.g., cf. Hansen & Skytte, 1998; also see Kaufman, Jayachandran, & Rose, 2006; White, Troy, & Gerlich, 2000). For example, Sheth's (1981) model is a rather broad theory of retailer buying behavior, that is, it explains the buying behavior of a retail firm. Personal characteristics or behaviors are not considered. Specifically, the framework comprises the constructs of (1) merchandise requirements (influenced by inter- and intra-organizational variables), (2) supplier accessibility (influenced by competitive structure, corporate image, and relative marketing effort), (3) choice calculus, (4) ideal supplier choice, as well (5) actual supplier/product choice (dependent upon situational factors). Because of this theory's broad approach, Sheth's (1981) conceptualizations have the advantage of being widely applicable, not least due to the fact that this model was not based on results obtained from one specific retailer or a single product category (cf. Hansen & Skytte, 1998). That said, it was scholarly work such as that of Rao and McLaughlin (1989) that has specifically conceptualized retail *buyers'* product evaluation process (among other studies). Rao and McLaughlin's (1989) model, for example, views the retail product evaluation process as consisting of the following components: (1) objective information presented to a buyer on a contract, (2) buyer's inferences on certain attributes, (3) buyer's judgment on profit potential, leading to (4) buyer's accept or reject recommendation. Further to this, channel intermediary characteristics influence this evaluation process. Even though this conceptualization of retail buyer product evaluations is also rather broad, their study also identifies and tests an array of specific variables that are important determinants of retail buyers' new product acceptance decisions. Consistent with earlier discussions in this Chapter, these different criteria (categories) have been repeatedly identified and tested in subsequent research studies concerned with new product acceptance decisions at the retail level (e.g., Gerlich, Walters, & Heil, 1994; Kaufman, Jayachandran, & Rose, 2006; White, Troy, & Gerlich, 2000).

Theoretically, it is clear that conceptualizations, such as Rao and McLaughlin's (1989), are of greater interest to the present work as the theoretical focus is directed towards the individual buyer, rather than the retail firm. Nevertheless, overall it can be seen that the central tenet of such previous theorizations is the same, namely the explanation of retail buying behavior. In this regard, these previously-discussed conceptual approaches

represent buyer-centered viewpoints, concentrating on variables that influence such buying behavior, and hence, the exchange outcome. That said, it stands out that retail buying behavior models seem to lack an appreciation of the activities performed by the salesperson. This is in contrast to many theories developed in the salesperson-oriented literature, emphasizing the role of the sales force as an important determinant of successful business exchanges. These conceptual-based observations seem to be consistent with the earlier discussed empirical focus of the literature specifically concerned with retail buyers' purchasing behavior (see Section 2.3.3).

Finally, parallel to the preceding discussions of the theoretical approaches employed in the relevant salesperson- and buyer-oriented literature arrays, the attention is now directed towards the theoretical perspectives utilized in extant scholarly works that have simultaneously examined product-focused variables and relational aspects.

A review of the previously employed theoretical viewpoints in such simultaneous examinations has shown that one theoretical perspective seems to stand out as frequently guiding past research attempts; that is, institutional theory, or more specifically the embeddedness perspective (e.g., Granovetter, 1985; 1992). Prior scholarly works have employed this theoretical standpoint as it offers an explanation for a double consideration of product-focused variables *and* relational variables in business exchanges (e.g., Frenzen & Davis, 1990; Fruchter & Sigué, 2005; Kaufman, Jayachandran, & Rose, 2006; Wathne, Biong, & Heide, 2001; Wuyts, Verhoef, & Prins, 2009). In this regard, institutional theory has informed a number of conceptual frameworks operationalized in different industry settings, including both B2C- and B2B-oriented research (also cf. Section 2.4, Table 2.4). In the light of the present study, one notable example from the B2B retail buying context is the work by Kaufman, Jayachandran, and Rose (2006) in which the authors employ this perspective to explain the influence of product attractiveness and relationship quality (personal- and firm-level) on retail buyers' new product purchase decisions.

The institutional perspective of embeddedness originates from theorizations on embedded market activity in the economic sociology literature. For example, Granovetter (1985) discusses the embeddedness viewpoint as a reaction to shortcomings of the conventional 'undersocialized' and 'oversocialized' theories on exchange behavior. Granovetter (1985) refers to *undersocialized* conceptualizations of human action when discussing theorizations of human behavior as found in the economics literature. Respectively, he refers to *oversocialized* conceptualizations of human action when

discussing theorizations of human behavior as found in the sociology literature. In more detail, Granovetter (1985, p.487) argues:

“A fruitful analysis of human action requires us to avoid the atomization implicit in the theoretical extremes of under- and oversocialized conceptions.”

Essentially, this institutional perspective proposes that economic activity is embedded in personal relationships (e.g., Granovetter 1985; 1992), which can be of social and/or economic nature (cf. Dacin, Ventresca, & Beal, 1999). From a theoretical standpoint, this is consistent with the notion that economic agents are influenced by product-focused variables *and* relational variables (Fruchter & Sigué, 2005; Wathne, Biong, & Heide, 2001).

Although arguments could be brought forward that relational factors may constrain economic efficiency due to the introduction of extraneous variables into exchange activity (e.g., Williamson, 1996), modern perspectives on embeddedness suggest that the building of strong customer relationships creates value, often improving the chances of transactions (Kaufman, Jayachandran, & Rose, 2006). Consistent with this latter viewpoint, prior marketing research has employed this theoretical perspective in the simultaneous study of product-focused variables and relational aspects (e.g., Kaufman, Jayachandran, & Rose, 2006; Wathne, Biong, & Heide, 2001) - a theoretical perspective, that may also assist in the development of a conceptual framework for the present study at a later stage.

2.5.2 Previously Employed Conceptual Frameworks and Perspectives: Summary and Implications for the Present Study

The central objective of Section 2.5.1 was to review and evaluate the conceptual frameworks and perspectives previously employed in the relevant extant literatures. In this regard, key research domains of interest to the present study were assessed, including (1) salesperson-oriented literature concentrating on sales force activities, (2) buyer-oriented literature addressing retail buyers' product selection decisions, and (3) studies that have simultaneously examined product-focused variables and relational aspects.

The assessment revealed that neither solely salesperson-centered, nor buyer-focused conceptualizations appropriately capture a double consideration of product-focused variables *and* relational variables. In particular, each of these reviewed theorizations

proposes a different set of variables as critical antecedents to exchange behavior by either (a) suggesting a relationship between selling activities and salesperson performance or (b) proposing specific product-focused variables as key determinants of retail buyers' product purchase decisions respectively. In contrast to salesperson-oriented theories, which naturally emphasize the role of the salesperson (including salespeople's activities), in retail buyer-oriented conceptualizations the role of the sales force is not accentuated. Consequently, the previously employed theoretical perspectives in each of these literature arrays appear rather inappropriate for the conceptualization of a framework for the present study.

However, the evaluation of theoretical perspectives employed in prior research that has simultaneously examined product-focused variables *and* relational aspects suggests that institutional theory may aid in the conceptualization of the present study's theoretical framework. A concrete example of its prior successful application in the retail buying literature was provided (cf. Kaufman, Jayachandran, & Rose, 2006).

2.6 Summary

The current Chapter has provided a literature evaluation pertinent to the simultaneous study of salesperson relationship-building activities and product-focused variables, and their effects on retail buyers' purchase decisions. Three key literature domains were investigated to carve out the status of the present academic knowledge with respect to the study of this specific research topic. First, sales-oriented scholarly work was examined, showing that (a) salespeople's efforts to build strong customer relationships are increasingly important, (b) relationship-building activities of the sales force can positively affect sales performance, and (c) extant sales literature has typically investigated salespeople's relationship-building activities in isolation, leading to a lack of understanding of how their influences on exchange outcomes compare to those of product-focused variables. Second, buyer-oriented research was reviewed, demonstrating that (a) most of the existing literature on retail buyers' purchase decisions is concerned with new product acceptance, (b) this extant research work has highlighted buyers' evaluations of product-related variables, and (c) existing retail buyer-focused research largely ignores relational aspects of an exchange, offering only limited insights into the relative role of salesperson relationship-building activities and product-focused variables in buying decisions. Finally, existing marketing research which has simultaneously examined product-related variables and relationship variables has mainly focused on the binary presence/non-presence of personal relationships between buyer and salesperson, leaving important questions regarding the relative effectiveness of

specific relational activities unanswered. Therefore, based on the conducted literature assessment, extant academic research does not provide clear insights into the relative role of product-focused variables and salesperson relationship-building activities in retail buyers' purchase decisions.

Further to the above, the literature review has also specifically evaluated theories and frameworks previously employed to explain exchange behavior in the pertinent research domains. Derived from this assessment, it was concluded that institutional theory may assist in the development of the present study's conceptual framework at a later stage of this thesis. An individual salesperson-oriented or retail buying-related theory alone does not appear to be sufficient to capture and explain a double consideration of salesperson relationship-building activities and product-focused factors, and their influences on retail buyers' purchasing behavior.

The following Chapter reports on the conducted qualitative inquiry. Since two objectives of the present research are to identify *what* and *when* specific salesperson relationship-building activities are deemed as important by *retail buyers* (see Chapter 1), an exploratory study utilizing multiple data sources (i.e. observations and interviews) was carried out. The findings from the data analysis in conjunction with extant literature are used to define key salesperson relationship-building activities that retail buyers considered to be important. Additionally, the collected data is analyzed with regard to the importance of these relational activities in different buying situations.

Chapter 3

Exploratory Study

***T**he previous Chapters set the foundations of the study's theoretical background in the marketing research domain and disclosed the identified research gap in present marketing theory. The aim of this third Chapter is to build on the insights previously deduced and further explore the detected research gap.*

Chapter 3 is structured as follows. First, an introduction and methodological outline of the exploratory study are provided. Next, the specifics and findings of this qualitative research are discussed. Finally, an overall summary concludes the Chapter.

3.1 Introduction to the Exploratory Study

As emphasized at the end of the preliminary Chapter, the central aim of this qualitative inquiry was to generate insights on *what* and *when* salesperson relationship-building activities are viewed as important by *retail buyers*. Due to the scarce treatment of salesperson relational behaviors in the context of the retail industry, as well as limited existing research work concerned with salesperson relational activities that has taken a customer-centric perspective (Singh & Koshy, 2010), an exploratory investigation was necessary to ensure the inclusion of industry-relevant relationship-building activities, and to take account of key variables relevant to the applicable buying situation, in the later developed conceptual framework (Chapter 4).

The subsequent discussion of the qualitative study is structured into four main parts. First, the research methodology, which was employed for the collection and analysis of the field data, is discussed. Next, the two-part research process of observations and in-depth interviews is presented sequentially; that is, the observation study is presented first, followed by the interview study. Both parts include a detailed discussion of the research conduct and findings. Throughout the analysis, relevant theoretical concepts are delineated, defined, and verbatim examples are provided. Finally, an overall summary of the qualitative inquiry is presented.

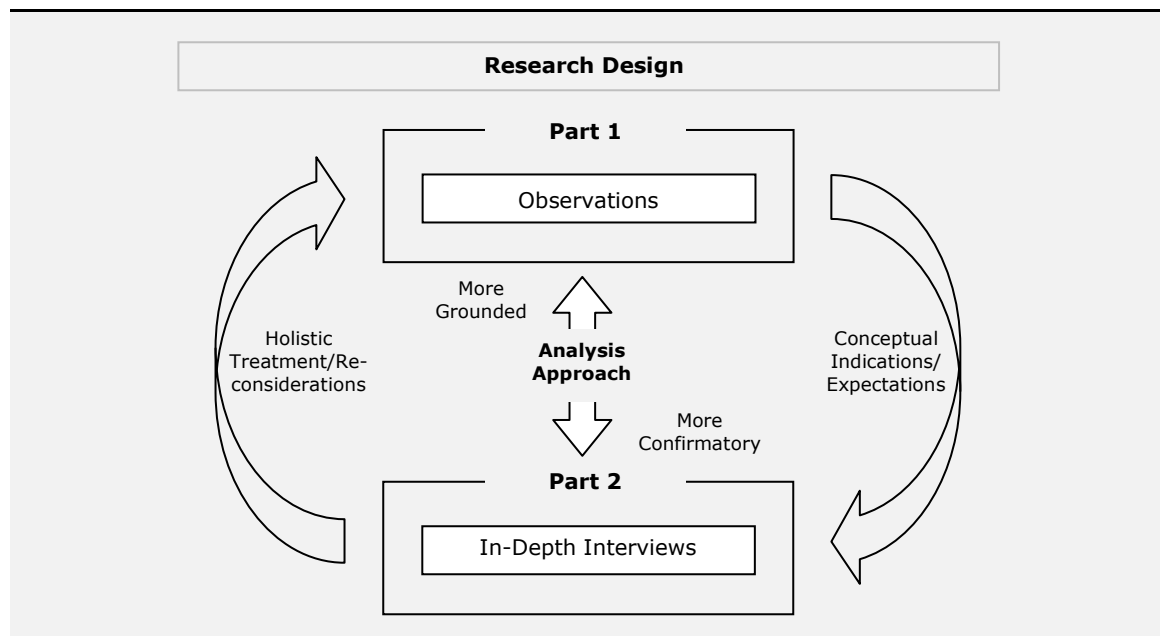
3.2 Research Methodology

3.2.1 The Sequential Research Approach

A multi-part field study design was utilized to attain the research objectives. Consistent with prior qualitative scholarly work in the sales literature (e.g., Lee & Cadogan, 2009), a sequential data collection process of observations and in-depth interviews was employed. The motive behind a sequential research strategy is “to begin with a highly exploratory approach, based on grounded theory methods, followed with a more ‘confirmatory’ phase” (Lee & Cadogan, 2009, p.358). Guided by this research process, it was possible to build on the findings derived from the observations by examining key areas of interest with a series of more directed in-depth interviews with retail buyers. In other words, an initial theoretical understanding of the phenomena at hand was gained before the development and design of the interview study (cf. Strauss & Corbin, 1998). Such an approach to theory generation is in accordance with more recent notions, which suggest that the concept of grounded theory should be viewed as a general inquiry approach, rather than a single method (e.g., Dey, 2004; Pidgeon & Henwood, 2004).

The central principle of a grounded theory approach, the linkage between data collection and theory generation, is manifested in the qualitative study's iterative research design, which also incorporates Yin's (1985; 2003) ideas of 'pattern matching'. Essentially, the data analysis started early in the research process. Observations were analyzed and theorizing began in parallel to further data gathering efforts. Thus, initial observational-based findings resulted in more directed expectations and areas of interest for the interview study. However, even though the observational data collection stage informed the interview study, the collected data was considered as a holistic dataset, insofar as observational-based findings were reviewed repeatedly during later phases of the research based on new insights gained from the interviews. Adapted from Lee and Cadogan (2009, p.358), Figure 3.1 represents the employed two-part field study design.

Figure 3.1: Employed Two-Part Field Study Design



Note: Adapted from Lee and Cadogan (2009), Figure 1, p.358.

3.2.2 The Collected Data

Data were collected from store-based retailers in the Pacific North-West of the U.S.A. Consistent with the study's research objectives, this approach facilitated a customer-centric exploration of salesperson relationship-building activities in the retail industry. Importantly, the participating retailers focus on similar target customers and have comparable buying decision structures, wherein buyers make their purchase decisions independently. In contrast to industrial purchasing, in which a committee-based decision-making process is frequently observable, buying decisions in the retail industry are commonly made by buyers independently (Kline & Wagner, 1994).

3.2.3 Validity and Reliability of the Findings

Data triangulation - through the utilization of multiple methods and data sources from observations and interviews - was used to strengthen and validate findings (e.g., Hollenbeck et al., 2009). In the B2B domain, qualitative studies employing different sources of data have recently been classified as 'best' and/or 'innovative' practice (Piekkari, Plakoyiannaki, & Welch, 2010). Regarding the reliability of findings, although a stringent peer evaluation method as proposed by Miles and Huberman (1994) could not be employed due to the nature of this study (i.e. single coder analysis), feedback on the qualitative findings was frequently sought, primarily from two academic peers.¹ Thus, themes and concepts emerging from the data were regularly discussed between the author and other academic researchers, which led to an increased confidence and reliability in the findings (cf. Miles & Huberman, 1994). Further, consistent data recording methods were employed across both parts of the qualitative investigation (e.g., Hollenbeck et al., 2009); that is, uniform notation, audio recording, and coding methods. Finally, the maintenance of an evidence trail was assured by the consistent administration of the data via the use of QSR NVivo8 (Weitzman, 2000).

3.3 The Observation Study

3.3.1 Research Conduct

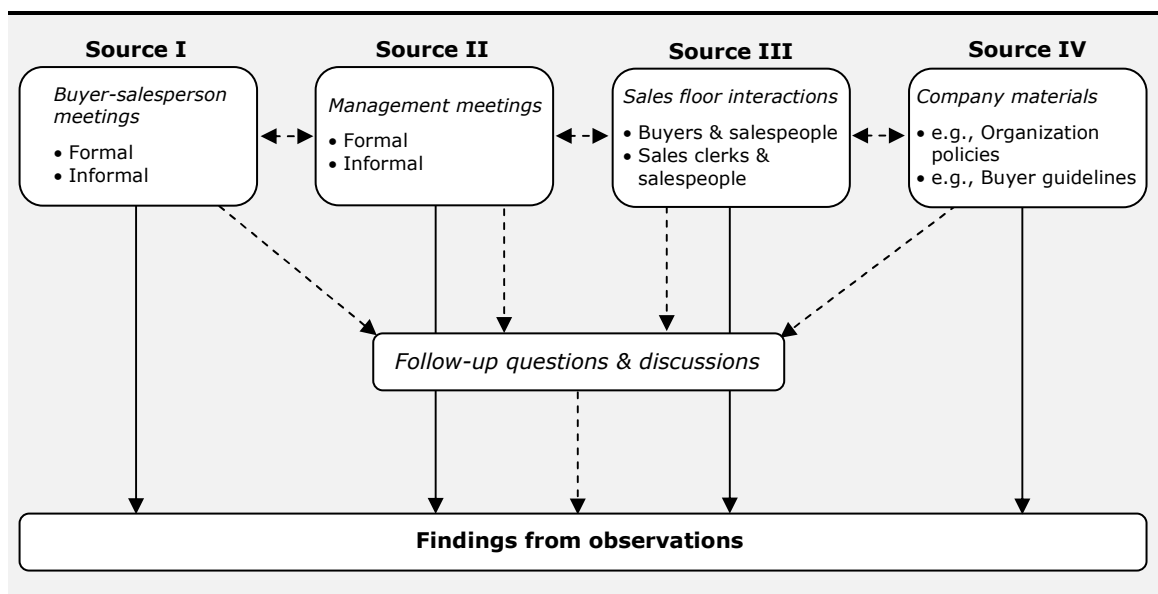
An observation study was conducted in order to gain an initial understanding of (a) what salesperson relationship-building activities may be a factor in retail trade, (b) the buying decision context(s) in which such relational activities appear important, and (c) the role of relationship-building activities in buyers' purchase assessments. Personal contacts were utilized to gain access to a U.S. general merchandise retailer with a total number of 80 employees in two store locations. The retailer has multiple departments, including such as household supplies, home decoratives, gifts/collectibles, office supplies, and confectionary/candy (among others). In addition to the company owners and management, fifteen staff members were involved in B2B purchasing activities. For one month, the author acted as an undisguised participant observer at both store locations, and permission was granted to (1) attend formal and informal buyer-salesperson meetings, (2) attend formal and informal management meetings (company owners and management), (3) observe behavior on the sales floors, and (4) collect and analyze company materials, such as organization policies, buyer guidelines, purchase order forms, supplier marketing programs, and so forth (e.g., Bryman, 2008; Haytko, 2004). During this research phase, much time was devoted towards observing buyers making purchase decisions, observing buyer-salesperson interactions in purchase situations,

¹ I would like to thank my supervisors, Prof. Nick Lee and Dr. John Rudd, for their helpful comments.

and investigating the various company materials that aided and guided buying decisions. Apart from that, the researcher observed company owners, managers, as well as retail buyers operating on the sales floors and in the back offices. Data were predominantly collected through the use of extensive field notes which were taken during and immediately after observations (Lee & Lings, 2008; Hollenbeck et al., 2009). This data collection procedure was supplemented with memos summarizing and structuring the recordings from the observations at the end of each working day.

The analysis of the recorded field notes, memos, and company materials started at an early stage throughout the data collection process. This strategy allowed for fostering of initial ideas and categorizations of themes. Due to the nature of the observation study, an ‘open coding’ process - that is, the development of initial concepts and categories - was deemed appropriate (e.g., see Strauss & Corbin, 1990). Rigor of the findings from the observations was achieved through a number of strategies. First, validity of the data analysis was ensured by (a) participant validation (e.g., Miles & Huberman, 1994; Geiger & Finch, 2009), using member checks with participants where possible, and (b) the use of multiple data sources (e.g., Hollenbeck et al., 2009). Second, the issue of reliability was addressed by (a) the employment of a consistent data recording method (e.g., Hollenbeck et al., 2009), and (b) follow-up discussions with the company owners to assess the consistency of the recordings across the four utilized data sources. Figure 3.2 provides a summary overview of the data sources used.

Figure 3.2: Data Sources, Validity and Reliability Checks



Notes: Field notes allowed for comparisons of observations from the same and different data sources. Follow-up questions and discussions offered the possibility to assess the consistency of recordings and validate findings.

3.3.2 Findings from the Observation Study

From the outset of the data analysis, observations suggested that salespeople's activities during interactions with retail buyers constituted an important part in the development of their relationships. Even though the level of performed activities observed to nurture relations with buyers differed between individual sales professionals (i.e. some salespeople appeared to place a greater emphasis on engaging in such activities than others), it seemed to be common practice to employ certain acts in order to cultivate relationships. In all of the observed buyer-salesperson interactions (including buyer-salesperson meetings and contacts on the sales floors) engagement in relationship-building activities appeared to be evident, implying a general agreement with more recently developed selling frameworks that propose a focus on customer-oriented relationship selling, rather than the selling-oriented traditional seven-step approach (e.g., Moncrief & Marshall, 2005).

In particular, the observations indicated strongly that salespeople's activities important to the nurturing of customer relationships could be broadly categorized into two groups: (1) *communication-based* and (2) *action-based* activities. Communication-based activities performed by sales professionals varied widely, depending on the salesperson's efforts as well as retail buyers' needs to communicate. Observations of interactions between sales professionals and buyers suggested that communication *per se* was a key factor in various situations, of which two noticeably occurred repeatedly. First, salespeople would often communicate with the retail buyer by actively approaching and informing the retail buyer. Second, retail buyers would request communication-based activities, in which case the salesperson had to respond to buyer demands (more reactive/passive communication). Nevertheless, even though the observed situations differed, the importance of sales professionals' communication efforts for retail buyers' work responsibilities was apparent. Furthermore, during observations as well as several follow-up conversations (with either buyers or sales professionals), it was noticeable that communication-based activities mostly facilitated buyers' state of knowledge, and decision-making processes. Specific examples included things such as the communication of marketing program updates, in-depth product and market knowledge, and so forth. A basic situation, as observed during a sales call, was the following: Buyer asks, "Do you think I should do this [purchase a specific product]?" Salesperson replies, "No, you don't want this. But this would work for you."

Next to this, salespeople's action-based activities were also an integral part of many buyer-salesperson interactions, and it was apparent that they constituted another

important part of conducting business with customers. In a comparable manner as the observed communication-based activities, sales professionals' performed actions differed considerably, depending on the salesperson's endeavors and/or retail buyers' demands to conduct specific actions. Thus, it seemed that action-based activities fostering the relationship with the customer were either salesperson-initiated (not asked for by the buyer) or sought (asked for) by the buyer. Both cases brought about deeds performed by the salesperson. In contrast to the initial observations regarding salesperson communicated-based activities, some actions did not directly involve the buyer or did not require direct interaction with the buyer. For example, the attended buyer-salesperson meetings as well as observations on the sales floors revealed crucial and reoccurring actions taken by salespeople, such as supporting buyers and sales clerks in product display and/or inspecting the retailer's product breadth to identify potential opportunities for the buyer. Moreover, a number of follow-up conversations (with either buyers or sales professionals) revealed similar findings, in that action-based activities are also often carried out outside of the retailers' stores or offices. Thus, by virtue of these two broad activity groups (i.e. communication-based and action-based), salespeople actively sought to foster the success of retail buyers and the retail organization as a whole. From this it appeared that the activity categories resulting from the observations were mainly targeted at building the business aspects of the customer relationship, and to a lesser extent the social facets.

It also became apparent, however, that the acts performed by sales professionals to cultivate their buyer relationships - just as any other business activities - do not occur in isolation; rather, they are embedded in a specific commercial context. The observation study suggested that the 'buying decision context' is a central factor for understanding the role of relationship-building activities in retail buying. In line with previous research on buying decisions, such as the 'Buyclass-Framework' (Robinson, Faris, & Wind, 1967), observations during buyer-salesperson encounters and the analysis of company materials uncovered that retail buyers are mainly confronted with two buying situations: reorders and the purchasing of new products. Although this distinction is well-known in the extant buying literature *per se*, it seemed to be fundamentally important to consider these different buying situations in order to identify *when* relationship-building activities may be most important.

The observational-based findings suggested that buyers generally sought support from and relied on salespeople more heavily under conditions of greater uncertainty, such as the purchasing of new merchandise (e.g., new-to-market products, line extensions, or

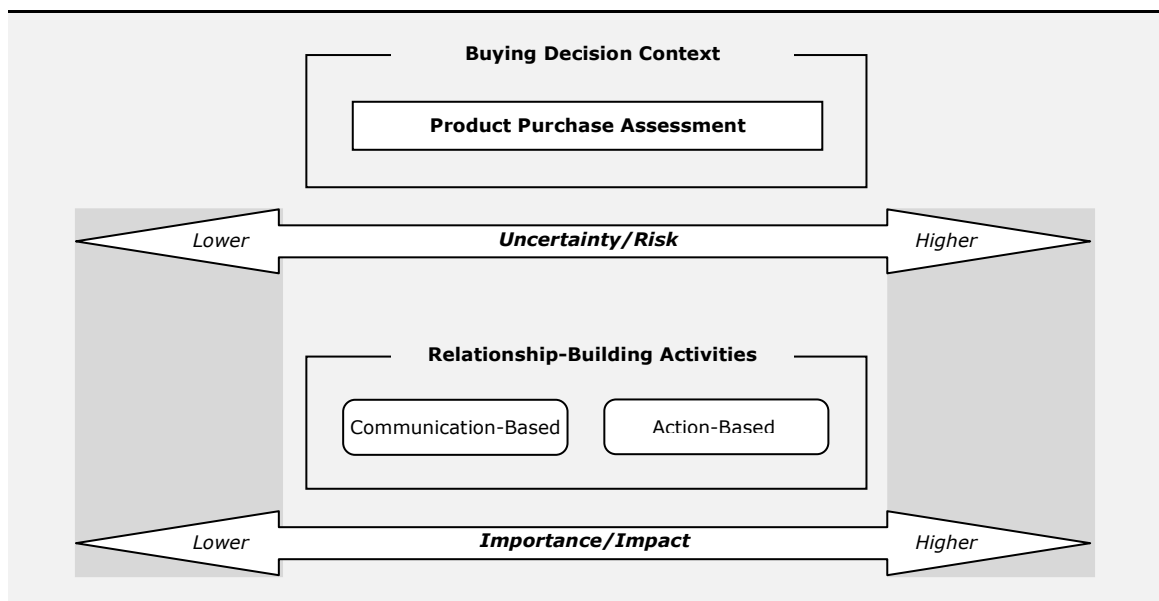
other merchandise not previously carried by the retailer). Particularly, the buying decision context of 'new products' was generally characterized by a high level of interaction between buyer and salesperson, as well as longer discussions over certain product items. Salespeople's activities directed at building the customer relationship were highly evident and appeared to be of heightened importance to the buyer. This included activities (both, communication- and action-based) performed during the sales call, as well as past and future activities referred to during the buyer-salesperson meeting. In contrast, observations showed that purchases with which buyers were more familiar, such as the reordering of merchandise that had already been carried before by the retailer, differed widely from the previously described purchasing situation. It was apparent that in the buying decision context of 'reorders', involvement of salespeople was less evident and discussions over products were shorter. In fact, the observed level of interaction between buyer and salesperson was considerably lower, and efforts focused on fostering the relationship at this point were at most minimal (often absent). It was also apparent that buyers did not encourage and/or did not require the same level of interaction with the sales professional during this personal interface. Rather, the salesperson mainly fulfilled the function of an order-taker (for example, cf. Moncrief, 1986).

Closely related to the observations regarding the specific buying decision context are the findings as to the actual 'product purchase assessment' conduct by retail buyers. Consistent with previous research in the retail buying literature (e.g., Montgomery, 1975; Rao & McLaughlin, 1989), it was clear that buyers' product evaluation processes were contingent upon the buying situation (i.e. reorders or new products). Especially the collected company materials (e.g., buyer guidelines and other organizational policies) strongly supported these observations. Importantly, the activities performed by sales professionals varied enormously depending on whether the buyer assessed a new product or simply reordered merchandise. On the one hand, when evaluating new product items, retail buyers were trained to assess a list of criteria, including such as the quality and price of the product, various marketing support components (e.g., introductory allowances, planned media support, etc.), financial elements, and so forth. As such situations are often related to a riskier decision-making process (cf. Kaufman, Jayachandran, & Rose, 2006; White, Troy, & Gerlich, 2000), buyers typically sought involvement from salespeople. Indeed, it was evident that buyers often relied on them in order to have all necessary information available to make a considerate assessment. This offered opportunities for sales professionals to actively respond to requests and provide relevant product and market knowledge (communication-based activities), but

also to offer support with other specific work tasks to help the buyer with his/her work responsibilities (action-based activities). From these observations it was evident that salespeople were able to gear activities to build the relationship with the buyer when new products were assessed. On the other hand, when buyers reordered merchandise, it became apparent that decisions were predominately driven by historical data sources (e.g., sales reports and similar other documentations) and past purchase experiences. Effectively, it appeared that activities performed by the salesperson were less relevant to the development of the customer relationship. The rather passive function of the salesperson in this regard was evident through activities such as writing-up orders or the handling of back orders. Therefore, based on the observational findings, relationship-building activities seem to carry most weight when retail buyers assess new products.

Figure 3.3 represents a graphical illustration of the initial findings from the observation study. Drawing from the previous discussion, Figure 3.3 recognizes two central issues concerning relationship-building activities in a retail industry context: (1) they appear to vary depending on whether they are communication- or action-based, and (2) their respective importance/impact in retail buying seems to differ based on the level of uncertainty/risk inherent in the specific buying decision context and its directly related purchase assessment process. However, at this point it should be accentuated that this representation is a first provisional attempt to interpret *what* and *when* relationship-building activities play a role in retail buying, also given that observations are based on a single retailer. As a consequence, Figure 3.3 was utilized as a conceptual indicator for the analysis and interpretation of additional research endeavors.

Figure 3.3: Findings from the Observation Study



Since the observation data could not explicitly elucidate what relationship-building activities are in fact *valued* by retail buyers, nor when exactly they are deemed important and whether they indeed play a role in retail purchase assessments, a series of in-depth interviews was conducted to provide further insights into these issues.

3.4 The Interview Study

3.4.1 Research Conduct

Over a time period of approximately one month, personal contacts were used in order to gain access to U.S. ‘brick-and-mortar’ merchandise retailers. The interview study consisted of fifteen semi-structured in-depth interviews with informants from seven different organizations, including the company that participated in the observation study. Instead of defining the interview sample size *a priori*, the evolvement of theoretical saturation of emerging concepts determined an adequate sample size (Strauss & Corbin, 1990). Even so, this sample size compares to similar qualitative studies in the marketing field (e.g., Dewsnap & Jobber, 2009; Flint & Woodruff, 2001; Griffin & Hauser, 1993; Lee & Cadogan, 2009). Participants were selected following a purposive sampling design (Bryman, 2008; Miles & Huberman, 1994), with criteria of (1) responsibilities and experience in retail buying, (2) performance of independent retail buying decisions, and (3) firsthand knowledge of existing personal relationships with salespeople. As perceptions of relationship-building activities may differ based on informant characteristics (e.g., gender, buying experience, educational background) or organizational characteristics (e.g., retailer size - number of employees, annual sales), participants were selected carefully in an attempt to maximize variance on these aspects across the interview sample. Table 3.1 provides an overview of the characteristics of this sample.

Table 3.1: Characteristics of Interview Sample

Informant Characteristics		Organizational Characteristics ¹	
Retail buyers	15	Buys and sells retail merchandise	7
Females	7	Buyers purchase independently	7
Males	8	Number of employees	1-3,000
Years in retail buying	1-56	Number of retail buyers	1-25+
Informant age	21-75	Annual sales (in \$000)	100-800,000
Bachelor degree holders	4		
College education	7		

Note: ¹Some retailers provided more than one informant.

An interview guide was used as directing and structuring device, without restricting informants in their assumptions (Geiger & Turley, 2005). The initial literature-based interview guide was adapted in order to incorporate emerging themes and concepts from the observations. Also, with respect to newly raised issues and specific examples provided by the informants, additional questions and probes were posed for clarification purposes or more depth (Strauss & Corbin, 1998). A one-page questionnaire was also completed by each participant immediately before each interview in order to collect data on the characteristics of informants and organizations.

All of the interviews were conducted face-to-face and audio-taped with permission. On average, the interviews with retail buyers lasted for 50 minutes. Some key notes were taken after each interview to summarize the main emerging ideas and themes. This is in line with suggestions and procedures in existing literature (e.g., Miles & Huberman, 1994). Subsequently, the interviews were transcribed verbatim, resulting in textual data of 230 single-spaced pages (around 110,000 words). The interview data was imported into QSR NVivo8 software for data management purposes, and to organize, code, and analyze the textual data; the auto-coding or auto-analysis features of the software were not used in order to avoid overlooking or miscoding important strings of text (Weitzman, 2000).

On the basis of the previously conducted literature review and the findings from the observation study, a tentative theoretical appreciation as well as pattern of potentially important concepts had already emerged (Yin, 1985; 2003). However, the analysis approach allowed for the coding of emergent ideas and themes. The coding and analysis strategy thus settled between a purely inductive and confirmatory approach. In particular, it was sought to obtain a deeper understanding of *what* and *when* relationship-building activities are valued and deemed important by retail buyers, as well as whether such activities indeed play *a role* in buyers' purchase assessments.

The analysis approach for the interview-based data followed a 'part-to-whole strategy' as outlined by Haytko (2004). First, the focus was directed towards individual interviews, and then similarities and differences across interviews were compared. This approach allows "earlier readings of the text to inform later readings, and reciprocally, later readings allow the researcher to recognize and explore patterns not noted in the initial analysis" (Haytko, 2004, p.316). In essence, this is also in line with one of the suggested approaches of Spiggle (1994) regarding systematical procedures during data analysis - individual data records were read and reread before moving to other cases.

Rigor of the findings from the interview study was enhanced through a number of strategies. First, validity of the data analysis was mainly addressed through (a) data triangulation (e.g., Bryman, 2008) and (b) participant validation (Miles & Huberman, 1994). Reliability of the data analysis was also improved by the use of a number of approaches. First, feedback was regularly sought from two academic peers on emerging themes and concepts.² Next, a database was administrated (Yin, 1985; 2003) and consistent coding as well as notation methods were employed, both supported by the use of the QSR NVivo8 software (Weitzman, 2000).

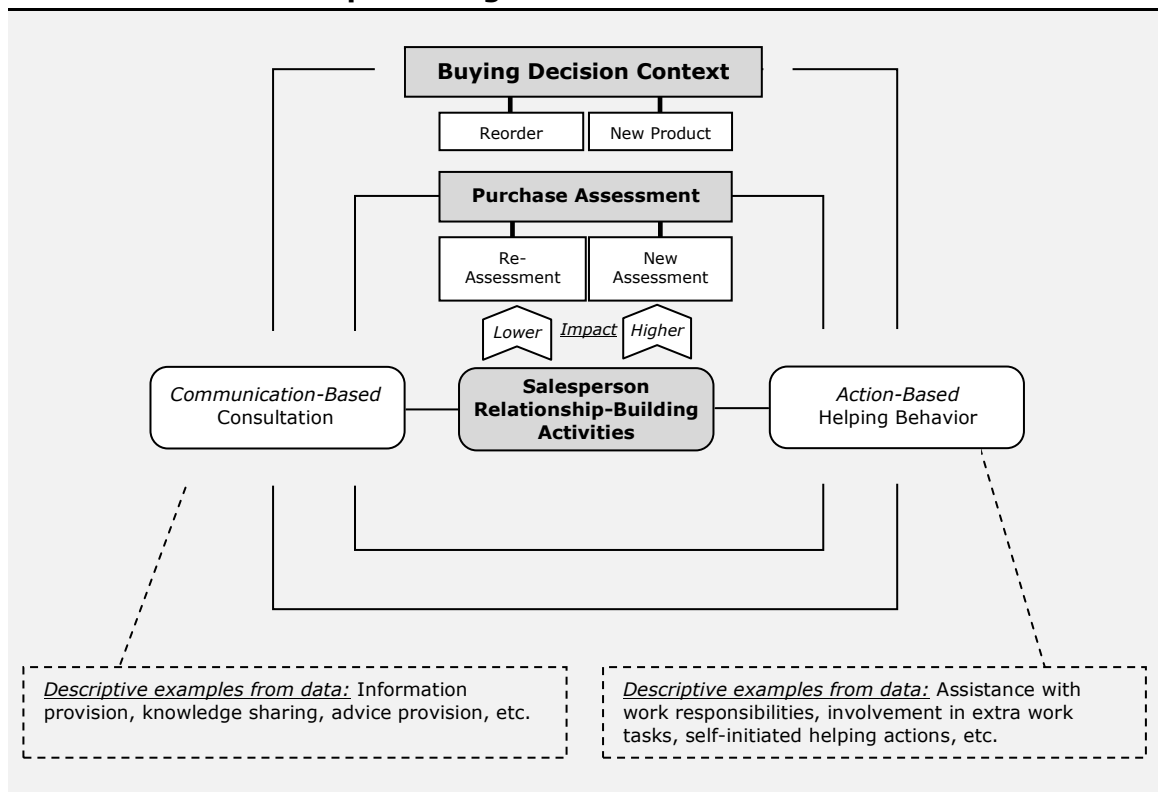
3.4.2 Findings from the Interview Study

The nurturing of customer relationships through the practice of customer-oriented activities appears to be an important part of many sales professionals' work in the retail industry. Although individual buyers' perspectives may somewhat differ with regard to the actual *magnitude* of their importance and/or impact, a certain level of relationship-building activity is commonly appreciated within this business sector. Each of the participating retail buyers reported that their salespeople engage in relationship-building activities, which, depending on the buyer's requirements to interact with the salesperson (i.e. form and depth), appeared to represent an integral aspect of doing business.

Supporting the initial observations, it became apparent from the findings of the interview study that retail buyers primarily value activities of sales personnel that are directed at enhancing the business facets of the customer relationship, and to a lesser extent the social aspects, which have been shown to be cultivated through such as specific socializing behaviors (i.e. use of social events) of B2B salespeople in industrial and service sectors (Geiger & Turley, 2005). Figure 3.4 below represents a basic framework which was developed ex post from the interview data, further extending the preliminary observational-based findings. This framework depicts the emerging concepts - and their descriptive examples - within the context of the retail buying process (i.e. buying decision situation and product purchase assessment). It needs to be emphasized that Figure 3.4 represents the outcome of the data analysis and is presented at this point in order to marshal the subsequent discussion. Verbatim examples are provided throughout the successive sections to illustrate emergent concepts, where appropriate (Beverland & Lindgreen, 2010; Yin, 2003).

² I would like to thank my supervisors, Prof. Nick Lee and Dr. John Rudd, for their helpful comments.

Figure 3.4: A Basic Retail Buyer-Centric Framework on Key Salesperson Relationship-Building Activities



The interviews supported the initial themes uncovered by the observation study, yet provided additional insights and more depth. Whereas the observations showed that sales professionals' activities directed at fostering the customer relationship could be broadly categorized into communication- and action-based activities, the interview data was able to illuminate these acts further, also in relation to the buying decision contexts and the respective purchase assessments. Particularly, all of the retail buyers who participated in the interview study reported on two distinct concepts that they perceived to be critical in sales professionals' relationship-building efforts: salesperson consultation (communication-based) and salesperson helping behavior (action-based). As briefly outlined above, it is important to emphasize that it was especially evident that the interview data suggested that these two concepts were mostly valued for enhancing the business facets of the customer relationship, rather than the social aspects. However, that said, the later concept of salesperson helping behavior certainly comprises specific social characteristics. As compared to the findings from the observations (Figure 3.3), the interviews enabled the author to identify two distinct relationship-building activities as valued by buyers, understand and describe their particular function for the purchasing task from the perspective of the buyer, and frame them within the specific context of retail buying (Figure 3.4). The following sections discuss in depth each of these

relationship-building activities, as well as explicate their potential relevance in retail purchase assessments as manifested in the data.

3.4.2.1 Relationship-Building Activities

It should be noted again that the subsequently discussed findings reflect the view of retail buyers, consistent with the aims of the study as well as Singh and Koshy's (2010) recent call for more customer-centric investigations of salesperson activities. Perspectives of industrial purchasing professionals may differ, not least due to the fact that the purchasing process of industrial goods is quite distinct from the buying process of retail merchandise (Sheth, 1981). Also, one should emphasize that the perceptions of buyers are likely to differ from the viewpoints of sales professionals. Although this appears to be a rather trivial matter at first, it is important to realize this difference with reference to past research results. For example, existing research examining sales taxonomies/sales activities have generated the vast majority of insights based on salespeople's perceptions of the sales job - and typically industrial sales jobs (e.g., Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006). Such examinations have resulted in detailed descriptions and categorizations of various selling activities, including relational activities, as perceived and desired by the sales manager or salesperson, rather than the identification of activities that may actually be valued by the buyer. In the light of this, it should come as no surprise that the present research did not generate a long list of very specific activities (e.g., adapting presentations or overcoming objections), but rather a couple of key concepts that buyers deemed important for the nurturing of relationships in the context of retail buying (for example, compare to seventeen relationship selling activities in Moncrief, Marshall, & Lassk, 2006). Nevertheless, as one important aim of this qualitative inquiry (and of course, the present thesis as a whole) was to generate insights to inform sales managers and representatives about what activities may foster customer relationships, and when those are most critical, an effort was made to 'unpack' the two key activity concepts in order to attain a deeper understanding.

3.4.2.2 Communication-Based: Salesperson Consultation

The retail buyer data revealed that the first critical activity that can foster the business aspects of a client relationship is salesperson consultation. Importantly, every single interviewee referred to this communication-based concept multiple times, and it was noticeable that buyers not only value consultation, but in effect *expect* their salespeople to perform this activity:

“For them [salespeople] to really have that information, and not just to have it, but to take that to the table when you’re buying, is really important” (Supervisor & Retail Buyer).

While the importance of consultation in the development of customer relationships has been widely emphasized in the extant salesperson-oriented literature, often accentuating its relevance for the industrial and service sectors (e.g., Chevalier, 1993; Liu & Leach, 2001; Rackham, 2000), its specific value in the B2B retail buying context is currently highlighted to a lesser extent. Academics have noted that in comparison to industrial purchasing, the “understanding of the nature of purchasing processes in a retail context has been much slower to develop” (Bowler et al., 2011, p.8). Although much of the retail buyer-focused literature provides insights regarding product-related determinants of buying behavior (e.g., product features, market demand, and marketing strategy characteristics) (for example, cf. Hansen & Skytte, 1998), currently less research informs sales managers and representatives about the importance and role of their activities in retail buying. The following sections discuss the consultation concept as represented by the interview data.

Salesperson consultation is an activity that can be described as an ‘in-role’ rather than ‘extra-role’ behavior due to its direct association with the sales function (e.g., see MacKenzie, Podsakoff, & Ahearne, 1998; Van Dyne, Cummings, & McLean Parks, 1995). Participants typically viewed salespeople who performed an appropriate consultation as ‘advisers’ and ‘proactive communicators’ who were willing to actively share product news, expertise, market information, and the like. For example, salespeople would proactively notify retail buyers about changes and updates of suppliers’ marketing programs or advise them on special offers and discounts. Furthermore, analysis revealed that such information provision by salespeople was commonly understood to lead to more informed and potentially better buying decisions. From this it also became apparent that salesperson consultation was mainly targeted at the individual buyer, rather than the company as a whole. Yet, it is also clear that ultimately it would not only be the buyer, but also the buying organization benefiting from effective salesperson consultation. Drawing from interview data, the concept of salesperson consultation can be defined along the lines of Liu and Leach (2001, p.147) as “professionally providing information for helping customers take intelligent actions to achieve their business objectives.” However, the findings suggest the supplementing of this definition with the idea of proactive communication, where the salesperson may offer such information without being specifically asked. The consultation concept was first

highlighted by interviewees' emphasis placed on the great importance of, and need for, relevant information for their success:

“So one of the first things that they [salespeople] have to do is to provide all of the buying information” (Vice President of Merchandising).

“You know, I depend on a lot of that information from my salesperson” (Company Owner & Retail Buyer A).

Specifically, retail buyers commented on a wide range of different types of information sales professionals would - and often are expected - to present to them. Examples included such as sharing knowledge about the market, product lines, and company specials:

“So that's what's important, the sales rep's knowledge about what other people are doing, and then we'll come back to knowledge of the line, what is selling, what is new and then thirdly, knowledge of what they may have on super closeouts or promotions, how we can take some of those items” (Company Owner & Retail Buyer B).

Further, participating retail buyers also described how their salespeople's information provision has guided them in selecting their product assortments. The following example shows that salesperson consultation does not only occur based on information demands/requests made by the buyer, but also through proactive behavior of the sales personnel:

“For instance, when we first opened, we didn't carry [product name], you know, which they do over there. That wasn't even on our radar really. [...] Our store has actually really evolved into something almost different from what we started. It's completely different, yeah. It's because we took their [salespeople's] advice and slowly started bringing this stuff in” (Company Owner & Retail Buyer C).

Thus, salesperson consultation - professional information provision to support customers in achieving their commercial objectives - is a critical customer-focused activity that is evidently important for buyer-salesperson interactions in the context of retail buying; whether carried out based on customer requests and/or proactively. It fosters the business aspects of the customer relationship. In effect, retail buyers specifically noted this significance:

“Those reps who inform you without you having to, you know, take your time away from doing something else to check on it, those are the ones you build relationships with and those are the ones you wanna work with” (President & Retail Buyer A).

Based on the above discussed findings, the following is proposed:

P₁: Salesperson consultation is an important customer-oriented activity that is valued by retail buyers.

P₂: Salesperson consultation nurtures the business aspects of a customer relationship, rather than the social facets.

3.4.2.3 Action-Based: Salesperson Helping Behavior

The interview data further showed that retail buyers value salesperson helping behavior, another key activity that can cultivate a customer relationship. All retail buyers who participated in the study mentioned this concept multiple times. In contrast to consultation, which seemed to be frequently practiced by sales professionals, it appeared that salesperson helping behavior, although highly valued by buyers, was performed less often or sometimes even absent. Regarding the latter, a representative informant statement was such as the following:

“Yeah, the sales rep. It’s just a job with the company and they’re not impressing, they’re not doing anything extra, they’re not going out of their way” (Store Manager & Retail Buyer A).

While helping behaviors have formerly been studied primarily in an intra-organizational context, that is, employees’ helping behaviors directed towards co-workers of the same organization (e.g., Podsakoff & MacKenzie, 1997; Podsakoff et al., 2000; Van Dyne & LePine, 1998), they have rarely been examined from an inter-organizational perspective; that is, helping behaviors that are customer-oriented (for an exception, see for example Bradford, Crant, & Phillips, 2009). From the standpoint of the salesperson, it has been noted that “[B]ecause a salesperson’s focus is largely external (on the customer) rather than internal (on the members of his or her organization), customer-directed helping behaviors seem likely” (Bradford, Crant, & Phillips, 2009, p.390). Nevertheless, until now, research that informs sales managers and sales personnel about the importance and role of this kind of helping behavior is sparse, including research that focuses on the retail industry. The subsequent sections discuss the helping behavior concept as manifested by the interview data.

In comparison to salesperson consultation, which was noted to be an 'in-role' rather than 'extra-role' behavior, it appeared much more difficult to delineate the concept of salesperson helping behavior along similar lines. Although often likely to represent 'extra-role' behavior, in the present study, salesperson helping behavior is viewed as a contextual performance behavior (e.g., Borman & Motowidlo, 1993; 1997). Contextual performance corresponds to those actions that facilitate the wider organizational, social, and psychological environment in which a company's technical core operates (Borman & Motowidlo, 1993). As previously defined, the concept of contextual performance does not require an activity to be 'extra role' (cf. Bradford, Crant, & Phillips, 2009; Organ, 1997).

Salesperson helping behavior was mainly characterized by buyers' perceptions of salespeople's helping actions carried out for the buyer or retail organization. Typically, participants described salespeople carrying out such tasks as 'going the extra mile' or 'going out of their way' to accomplish work - and if carried out, frequently salesperson-initiated, rather than asked for by the buyer. Whereas salesperson consultation was primarily targeted at the individual retail buyer, and typically employed by salespeople during sales conversations only, salesperson helping behavior was broader, in that salespeople's activities did not only assist retail buyers directly but also other employees in the organization, and were not merely bound to buyer-salesperson sales interactions. Specific examples included such as getting involved in product sourcing activities or providing additional demo products to help recover losses indirectly. Although, both salesperson consultation and helping behavior assist customers, the emphasis of the latter is on the 'action', rather than the 'communication'. Consistent with the data analysis, salesperson helping behavior is defined, similar to Bradford, Crant, & Phillips (2009, p.384), as "actions, activities, and deeds that benefit or are intended to benefit a salesperson's customers." That said, the data suggested supplementing this definition by adding a consideration that salespeople may look to benefit the individual buyer *as well as* retail organizations as a whole.

It was evident from the interview data that helping behavior, even though seemingly less often performed by sales professionals, was important to the buyer's and retailer's business success. In this regard, retail buyers describing instances in which particular salespeople have carried out helping behavior showed that assistance with work responsibilities can represent a major contribution on the part of the salesperson:

“Something comes up and you say, dear, I got to get this, I really need this now. [...] You can go and say, hey I really need some help here. These salespeople arrange for you to get products out on a truck sooner, they’ll ... you know, sometimes they’ll drive something for you. I mean, they’ll go out of their way to make sure that it gets taken care of” (President & Retail Buyer B).

Further, it was apparent that retail buyers appreciated helping behavior that involved salespeople in ‘extra’ work tasks which may or may not be related to a buyer’s direct work responsibilities. The following representative verbatim illustrates this:

“And I mean what’s important for me with [salesperson name] is, if you ask him to help you out with something, he’ll always do it. And a lot of sales reps just do the bare minimum and all they want to do is sell you stuff and they don’t want to do extra work. [Salesperson name] does a good job of going the extra mile and saves us time by doing that extra work for us” (Store Manager & Retail Buyer B).

Analysis of the interview data also revealed that salesperson helping behavior is, when performed, frequently salesperson-initiated, rather than asked for or requested by the buyer:

“And then [salesperson name] is out there networking for [company name]. We lost like two or three tissue paper gift wrap companies. So he [salesperson] got us to get all of that thought out. Well, he’s always out there trying to find somebody else” (Store Manager & Retail Buyer A).

“The salesperson would say: Hey, look, I know we’re wrong and I’ll take care of you. And they’ll [salespeople] get you demo products and you know, try to recover your losses indirectly. You’re not going to get credit on account, you’re not going to get that kind of thing but they’ll [salespeople] get creative within their system” (Purchasing Manager).

All in all, salesperson helping behavior - employed to benefit a salesperson’s customers - represents a crucial customer-focused activity that can clearly be important in the interactions between buyer and salesperson in the context of retail buying. Although seemingly not as frequently performed as the consultation activity in this specific industry sector, it appears to cultivate the business as well as social aspects of the customer relationship. Effectively, helping behavior may build strong relationships with clients:

“I guess, it’s kind of interesting that the hardest working sales rep that I know of, who helps us out, is the guy we have the best relationship with” (Store Manager & Retail Buyer B).

Drawing from the above discussion, the following propositions are presented:

P₃: Salesperson helping behavior is an important customer-oriented activity that is valued by retail buyers.

P₄: Salesperson helping behavior can nurture the business aspects of a customer relationship, but also the social facets.

3.4.2.4 Buying Decision Context and Purchase Assessment

Consistent with initial observations, the interview data confirmed that the buying decision context - and the directly related purchase assessment - is critical for understanding the role of relationship-building activities in retail buying. Although this is *per se* quite intuitive because buying professionals are “trained purchasing agents, who must follow their organizations’ policies, constraints, and requirements” (Kotler & Keller 2006, p.211), less intuitive, however, is when and whether relationship-building activities may indeed have an impact.

Based on the data, stronger conclusions could be drawn regarding the heightened significance of the identified activities (i.e. salesperson consultation and salesperson helping behavior) when retail buyers purchase new products. For example, with respect to reorders, informants reported that decisions are typically based on past sales figures, volume or inventory levels, and dealings with salespeople are not always required. From this, it is not inferred that the selling situations of reorders are to be neglected, as it can be assumed that salespeople can play an important role to keep sales levels stable or even increase the number of reorders. However, it is undeniable that the interview data suggests salespeople’s involvement and engagement, and hence, the potential impact of relationship-building activities on purchasing behavior, is severely limited in reorder situations. In light of the increased utilization of online ordering and inventory control systems, retail buyers can often manage reorder purchases in alternative ways. The following verbatim examples illustrate this:

“It’s rare that we even have to see one [a salesperson], if they basically don’t have new merchandise” (Company Owner & Retail Buyer B).

“So we have an item presentation sheet which contains all the buying information, the case pack, the weight, the cube, the UPC [Universal Product Code] number, you know, and we need all that information so we can go ahead and scan it in the register, so that we can reorder it. And a lot of those orders are EDI [Electronic Data Interchange], electronic, you know” (Vice President of Merchandising).

On the contrary, it was evident that salespeople's engagement is much more critical in situations of higher uncertainty and risk, such as in the case of purchasing new merchandise. It appeared that salespeople have more opportunities to personally interact with buyers when selling new products, offering greater chances for activities to carry weight and nurture the relationship:

“Well, when they present a new product. An older product we take an inventory, but a new product they need to present to the buyer” (Company Owner & Retail Buyer D).

“We're always asking, you know, what's new? And they're coming out with goods ... and even if it's two or three new things within a line, they come and say, I've got a couple of new things. It's important to see the sales reps because those new items may add to what you've already got” (Retail Buyer A).

Consequently, it can be suggested that the identified relationship-building activities are likely to carry more weight when selling new merchandise, rather than in reorder situations:

P₅: Salesperson relationship-building activities (as valued by retail buyers, i.e. salesperson customer-oriented consultation and helping behavior) are of higher significance for the buying decision context of new products as compared to reorders.

Furthermore, it was of interest to further explore retail buyers' perspectives on the potential impact of these relationship-building activities in their purchase assessments. In particular, in line with the heightened importance of such activities for the purchasing of new products, all interviewees reported on this specific context. Whereas the interview data showed that the identified relationship-building activities are likely to impact on retail buyers' new product buying behavior, the data analysis did not reveal any findings that would suggest similar effects in the context of reorders (product reassessments). With regard to sales personnel's information provision/sharing of knowledge (consultation), it was evident that the salesperson appears to 'have a say' - that is, the salesperson can guide buyers to make improved buying decisions for new products:

“I think the sales reps definitely have some pull when they present new products and ... what they say carries weight in that they know what are the best sellers, so that influences my buying decision if they can bring me some of that information” (Vice President & Retail Buyer).

“Because they know their product, they know what sells and they know what fits and they know what’s going to turn. I mean, that’s why I rely on it when buying new items” (Company Owner & Retail Buyer C).

Hence, the following is proposed:

P₆: Retail buyers consider salesperson consultation to be an important factor in their purchase assessments of new products.

In view of sales personnel’s actions and deeds carried out to assist the customer (helping behavior), it was apparent that these activities may also have an impact on buyers’ purchase considerations. Especially, the data suggested that helping behavior (whether nurturing the business and/or social aspects of the relationship) is often seen as a means to an end, in that its ultimate role seems to be the support of customers’ business objectives. The following verbatim illustrates how helping actions can be important in buyers’ new product purchase decisions:

“And so, I think it’s really big time when that rep’s going the extra mile to get you a special deal, for example, for a new product; makes the difference between a sale and not” (Supervisor & Retail Buyer).

Based on the above, the following is proposed:

P₇: Retail buyers consider salesperson helping behavior to be an important factor in their purchase assessments of new products.

In conclusion, the data analysis and the thereof resulting propositions (P₁-P₇) suggest that the salesperson relationship-building activities of consultation (communication-based) and helping behavior (action-based) are likely to play a role in, and have an influence on, retail buyers’ new product purchase decisions.

3.5 Summary

The central objective of this Chapter was the presentation of the findings from the qualitative inquiry aimed at exploring *what* and *when* salesperson relational activities are deemed important by retail buyers. Given the predominant focus on industrial or service (rather than retail) industry contexts in much of the extant sales research investigating salespeople’s relational behaviors (see Chapter 2), as well as the scant attention devoted to studying those salesperson activities that are indeed valued by customers (Singh & Koshy, 2010), an exploratory research design was employed. Specifically, a

sequential research strategy using multiple data sources of observations and in-depth interviews was used to generate customer-centric insights on the above research matters (i.e. research objectives 1 and 2, Chapter 1).

In conjunction with pertinent existing literature, the qualitative data suggested two key relationship-building activities carried out by salespeople that are deemed important by retail buyers, salesperson consultation (communication-based) and salesperson helping behavior (action-based). These relational activities were delineated and defined, followed by representative verbatim examples for each of the concepts. In addition, qualitative evidence was provided supporting the notion that these relationship-building activities appear to have the highest impact in retail buyers' purchase decisions of new products.

Building on the findings from this qualitative inquiry, the following Chapter discusses the development of a conceptual framework for the present study. In particular, hypotheses are formulated with regard to the influences of salesperson relationship-building activities (i.e. salesperson consultation and salesperson helping behavior), product-focused variables (i.e. product features, market demand, and marketing strategy characteristics; also see Chapter 2), as well as their respective interactive effects, on retail buyers' new product purchase decisions.

Chapter 4

Conceptual Framework

The preceding two Chapters established the basis for the present study by (a) reviewing the relevant literature streams (Chapter 2) and (b) providing deeper insights into the phenomena at hand, via a qualitative field-based exploration (Chapter 3). The aim of the current Chapter is to build on these previous efforts in order to develop the conceptual framework of the thesis.

Chapter 4 is structured as follows. First, the content of this Chapter is briefly introduced, followed by a discussion on the choice of model variables. Next, the theory-based hypotheses are developed and formulated. The Chapter closes with a summary.

4.1 Introduction to the Conceptual Framework

The subsequent sections synthesize extant knowledge from various research fields, including such as retail buying, personal selling, and the more general marketing domain (among others), to develop and formulate a number of theory-based hypotheses regarding the influences of product-focused variables (i.e. product features, market demand, and marketing strategy characteristics, as suggested by the relevant retail buying literature) and salesperson relationship-building activities (i.e. salesperson consultation and salesperson helping behavior, as delineated in Chapter 3) on retail buyers' new product purchase decisions. First, drawing from existing research as well as the qualitative findings presented in Chapter 3, a justification for the choice of model variables (i.e. the outcome variable and the determinants investigated herein) is provided. Second, hypotheses are developed regarding the influences of the pertinent product-focused variables, salesperson relationship-building activities, and interactive effects, on retail buyers' new product purchase decisions. Fourth, a number of control variables are briefly discussed and their expected impact on the buying decision formulated. Finally, a Chapter summary is provided.

4.2 Justification for Choice of Model Variables: Product-Focused Variables, Salesperson Relationship-Building Activities, and Retail Buyers' New Product Purchase Decisions

First of all, the choice of the dependent variable for the present study's conceptual framework, retail buyers' *new product* purchase decision, was driven by a number of factors. Beginning with previous studies in the field of retail buying, these have paid considerably more attention to retailers' problem of selecting new merchandise, rather than other purchase situations (e.g., reorders) (e.g., see Kaufman, Jayachandran, & Rose, 2006; Montgomery, 1975; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). This specific research focus has been explained by the substantial risk that is often involved in making new product buying decisions - a task even challenging for more experienced retail buyers (Kline & Wagner, 1994). Next, a strong case has also been made for the importance of the new product context in the sales-oriented literature, naturally emphasizing the critical role of the sales force. Particularly, it has been argued that the salesperson, as one of the primary links between an organization and its customers, "plays a significant role in the success of new products", not least due to the fact that "[...] a typical new product's success depends on the success of the sales force in selling the product" (Ahearne et al., 2010, p.764). Other examples exist in the sales literature making similar assertions (e.g., see Fu et al., 2010). In addition to the emphasis placed on the new product setting in these two literature streams (i.e. the retail buying-

and salesperson-oriented research strands), additional - and very concrete - support for a focus on retail buyers' *new product* purchasing decisions in the present conceptualization was derived from the qualitative inquiry discussed in Chapter 3. Specifically, the analysis of the buyer-centric, qualitative data suggested that salesperson relationship-building activities appear to be most critical when retail buyers purchase new merchandise. Together then, the above considerations and findings supported the choice of the new product buying decision as outcome variable for the conceptual framework.

Next, the selection of relevant product-focused determinants of retail buyers' new product purchase decisions had to be deliberated. In this regard, past retail buying research was utilized. More precisely, previous studies in this area have suggested specific product-oriented factors that determine buyers' new product assessments and selections (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). These were already summarized in Chapter 2 as key 'product assessment criteria' for new retail items; these are, product features, market demand, and marketing strategy characteristics (for example, cf. Kaufman, Jayachandran, & Rose, 2006). Hence, existing works on retail buying do not only make a strong case for the importance of the new retail product buying context, but also offer some key product-focused variables to be considered in the examination of retail buyers' new product selections. As a consequence, the present study builds on this prior work by including the suggested key product-focused determinants into the conceptual framework and hypothesizing their influences on the new product buying decision.

Furthermore, consideration had to be given to the choice of pertinent salesperson relationship-building activities. Of course, since existing research alone did not provide a clear picture of what relational activities are indeed deemed important by buyers in the retail industry (see Chapters 1 and 2), the qualitative study (Chapter 3) suggested two critical salesperson relationship-building activities, which seemed to be especially important when buyers purchase new retail merchandise: salesperson consultation and salesperson helping behavior. Consequently, these two salesperson relationship-building activities were included into the conceptual model, representing important relational-oriented variables that are hypothesized to influence retail buyers' new product purchase decisions.

Finally, even though the above presented arguments already provide a good foundation for the development of a conceptual model, that is, they provide justification for the focus

on and inclusion of specific model variables, additional theoretical arguments can be brought forward that further support the conceptualization of the theoretical framework of this study. In particular, institutional theory proposes that economic action, such as buyers' assessment and selection of new retail products, is embedded in personal relationships (e.g., Granovetter, 1985; 1992), which can be of social and/or economic nature (cf. Dacin, Ventresca, & Beal, 1999). In Chapter 2 it had already been discussed that this theoretical perspective suggests that economic agents, such as retail buyers, are influenced by product-focused variables *and* relational aspects (for example, cf. Wathne, Biong, & Heide, 2001), when making economic decisions (e.g., new product acceptance decisions). However, whereas past research work employing this institutional perspective (including retail buying-oriented work; see Kaufman, Jayachandran, & Rose, 2006) has mainly focused on the mere existence/absence or the content of personal relationships between buyer and salesperson (see Chapter 2, Table 2.4 for some examples), attachment theory (e.g., Seabright, Levinthal, & Fichman, 1992), conceptualizations in the relationship marketing literature (e.g., Palmatier et al., 2008), as well as theoretical viewpoints in salesperson-oriented research (e.g., Ahearne, Jelinek, & Jones, 2007) suggest that *salesperson relationship-building activities*, which represent relational investments of time, efforts, attention, and other resources that a salesperson spends on building a customer relationship (e.g., Palmatier et al., 2008), are likely to be the determinants that affect economic actions (e.g., the evaluation and selection of new retail products). Rooted in this latter perspective, a set of theory-based hypotheses regarding the influences of specific product-focused determinants, salesperson relationship-building activities, as well as their respective interactive effects, are formulated in the subsequent sections. In addition, effects of a number of control variables on the buying decision are also explained. Table 4.1 presents an overview of the variables included in the study's conceptual framework, their hypothesized influences on retail buyers' new product purchase decisions, as well as references to the respective hypotheses.

Table 4.1: Model Variables, Hypothesized Influences on Purchase Decision, and Formulated Hypotheses

Category	Model Variable	Hypothesized Influence on Purchase Decision	Hypothesis	
Product features	Product quality (1)	Positive (+)	H ₁	
	Product price (2) <i>(favorable)</i>	Positive (+)	H ₂	
Market demand	Expected customer demand (3)	Positive (+)	H ₃	
Marketing strategy characteristics	<i>Financial</i> Estimated gross margin (4)	Positive (+)	H ₄	
	<i>Marketing support</i> Marketing support (index) (5)	Positive (+)	H ₅	
Salesperson relationship-building activities	Salesperson consultation (6)	Positive (+)	H ₆	
	Salesperson helping behavior (7)	Positive (+)	H ₇	
Interactions	<i>Salesperson consultation</i> (2) x (6), (1) x (6), (3) x (6), (4) x (6), (5) x (6)	Positive (+)	H _{8a} – H _{8e}	
	<i>Salesperson helping behavior</i> (2) x (7), (1) x (7), (3) x (7), (4) x (7), (5) x (7)	Positive (+)	H _{9a} – H _{9e}	
Controls	Product dependence	Positive (+)	C ₁	
	Product importance	Positive (+)	C ₂	
	Customer firm size (# of employees)	Positive (+)	C ₃	
	Buyer-salesperson relationship duration	Positive (+)	C ₄	
	Buyer relationship orientation	Positive (+)	C ₅	
Salesperson Relationship-Building Activities				
Salesperson consultation	→ ⁺ →	Buyer trust	Positive (+)	H _{10a,b}
Salesperson helping behavior	→ ⁺ →	Buyer trust	Positive (+)	H _{11a,b}

4.3 Influences of Product-Focused Variables on Retail Buyers' New Product Purchase Decisions

In the present research, a *new retail product* is defined as “a stock-keeping unit” (e.g., a completely new item [innovation], a new flavor or size of an existing item [line extension], or a ‘me-too’ product) that the retailer has not previously carried (Rao & McLaughlin, 1989, p.84; also cf. Kaufman, Jayachandran, & Rose, 2006; White, Troy, & Gerlich, 2000). It is expected that the product-focused variables examined herein are directly associated with retail buyers' purchase decisions of new products. The following sections develop a number of hypotheses regarding product features as well as other important market and marketing strategy characteristics suggested by the retail buying literature (e.g., Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990; White, Troy, & Gerlich, 2000), that determine buyers' new product acceptance (also see Table 4.1). Both theoretical arguments and empirical evidence are presented.

4.3.1 Product Features and New Product Acceptance

4.3.1.1 Product Quality and New Product Acceptance

A means by which a supplier firm can differentiate a new offering from competitors' products is through a product strategy. For instance, a supplier can carry a new product that is of superior quality as compared to other new and competing products introduced to the marketplace (Porter, 1980). In the present study product quality corresponds to a retail buyer's level of satisfaction with a product offered by a supplier firm (cf. De Wulf, Odekerken-Schröder, & Van Kenhove, 2003; Gaski & Etzel, 1986). In general, a quality product is considered to be appropriate for its purpose, and to meet a buyer's expectations in a specific product category (also cf. Montgomery, 1975).

In the retail industry, many new products are introduced by various supplying firms every day. In a search for items that will meet the expectations of customers, retail buyers are faced with the important, but also risky and challenging, task of choosing the right products (Kline & Wagner, 1994). Previous research rooted in the information processing literature suggests that buyers associate higher product quality with higher value, leading to an increased willingness to buy (e.g., Dodds, Monroe, & Grewal, 1991). In view of this, higher product quality should enhance the likelihood of a new product to be accepted by a retail buyer.

Empirical evidence can be identified in the retail buying literature that indicates a positive association between higher product quality and buyers' new product acceptance. For example, Montgomery's (1975) mean results show that accepted products exhibit

superior quality than rejected products. Similarly, McLaughlin and Rao (1990) report a significant positive effect of product quality (including packaging) on acceptance decisions for new products. In addition, Rao & McLaughlin (1989) also find a positive association and suggest that suppliers may want to consider investing “[...] funds into activities more likely to influence buyers positively, such as improvement of product uniqueness or quality” (p.87). Further support for a positive influence of product quality on retail buyers’ new product purchase decisions is provided in the literature (e.g., Fiorito, 1990; McLaughlin, 1995). Therefore, the following hypothesis is proposed:

H₁: Higher product quality is positively associated with retail buyers’ new product acceptance.

4.3.1.2 Product Price and New Product Acceptance

Another product feature that is expected to impact on buyers’ new product purchase decisions is product price. In the present study, a new product’s price relates to a retail buyer’s perception of the degree to which a new product offered by a supplier firm is expensive (cf. De Wulf, Odekerken-Schröder, & Van Kenhove, 2003; Dodds, Monroe, & Grewal, 1991).

Mere intuition suggests that retail buyers would *ceteris paribus* favor new products that exhibit a better price point, leading to direct cost savings for the retailer. Hence, the lower the price of a new product, the greater the chances of buyers’ acceptance. However, when examining the theoretical perspectives in extant academic literature regarding potential explanations of buyers’ price considerations, one can distinguish between two opposing theoretical viewpoints. First, based on the research stream focusing on information processing arguments (e.g., Dodds, Monroe, & Grewal, 1991; Monroe & Dodds, 1988), lower prices may be associated with lower product quality and hence, under this perspective a lower price would not necessarily offer an incentive to buy. In contrast, the theoretical standpoint developed in the information economics literature (e.g., Kirmani & Rao, 2000) suggests that a lower price may signal higher product quality. In particular, under this perspective it is argued that lower prices can provide credible information regarding the quality of a product. A supplier firm may try to stimulate trial of a quality product by offering lower prices. As higher quality products are likely to attract a higher level of re-buys, a supplier sacrifices short-term profits in lieu of future revenue streams. A supplier firm offering a lower quality product will be unlikely to send such signals due to the product’s limited potential for repeat purchases. Thus, a

lower price may communicate credible information regarding a new product's quality, representing an incentive for buyers to purchase.

Although both of the above theoretical explanations regarding potential effects of product price on retail buyers' acceptance decisions seem feasible, in the present study the perspective expressed in the information economics literature is adapted. Subscribing to this viewpoint also allows for considerations of cost savings as the buyer can realize immediate cost benefits for his/her retailer. Effectively, buyers are expected to seek such financial incentives to buy, often by focusing on 'good' or 'best' prices. This is also consistent with previous empirical evidence showing that accepted items' mean cost is lower than for rejected products (e.g., Montgomery, 1975). Stated formally:

H₂: Lower product price is positively associated with retail buyers' new product acceptance.

4.3.2 Market Demand and New Product Acceptance

4.3.2.1 Expected Customer Demand and New Product Acceptance

An additional important product-focused consideration for retail buyers' new product purchase decisions is the anticipated market demand for a new retail item. In this research, expected customer demand is defined as retail buyers' "perceptions of the likely customer demand" for a new product (Wieseke, Homburg, & Lee, 2008, p.280).

Past research on buying decisions in the retail industry suggests that buyers evaluate the potential salability, and thus, the possible future success of new products in the marketplace (e.g., Gerlich, Walters, & Heil, 1994; Kaufman, Jayachandran, & Rose, 2006). From a theoretical standpoint, this implies that retail buyers need to assess new products from the perspective of potential customers, as well as make judgments about retail competition (e.g., consider other retailers or other products within a specific product category) in order to derive the expected customer demand for new retail products (for example, see Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990). In line with previous work, it is proposed that buyers' positive anticipation regarding customer demand increases the attractiveness to purchase a new retail item, and hence, positively influences new product acceptance (cf. Kaufman, Jayachandran, & Rose, 2006).

Empirical results reported in existing research also indicate that the expected sales potential (i.e. customer demand) derived from information in the marketplace is an

important determinant of retail buyers' new product purchase decisions (e.g., Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990). Hence, the following is hypothesized:

H₃: Higher expected customer demand is positively associated with retail buyers' new product acceptance.

4.3.3 Marketing Strategy Characteristics and New Product Acceptance

4.3.3.1 Financial: Estimated Gross Margin and New Product Acceptance

Also relevant for retail buyers' new product acceptance decisions is the incorporation of financial information. In the present study, this financial element is captured by buyers' judgments of estimated gross margin, which is defined herein as retail buyers' perceptions of "the difference between retail selling price of the product and the retailer's cost of the product" (Gerlich, Walters, & Heil, 1994, p.76).

Theoretically, new retail items with a higher estimated gross margin should have a positive influence on buyers' purchase decisions because the gross margin of a new product is directly linked to the financial performance (e.g., sales objectives) of the retailer (e.g., Gerlich, Walters, & Heil, 1994; White, Troy, & Gerlich, 2000). Despite this theoretical argument, however, past research findings have not always been in line with this prediction. Effectively, empirical examples exist that indicate a slight negative effect of gross margin on the buying decision (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989). These findings have been explained as follows. "Gross margin may be set at high levels to cover required, but perhaps burdensome, tasks to be performed by retailers. In these cases, high gross margins may negatively influence new product acceptance because a high gross margin may not yield a high profit" (McLaughlin & Rao, 1990, p.361). Nevertheless, the present study subscribes to the former perspective, expecting a positive relationship between estimated gross margin and retail buyers' new product purchase decisions. Adopting this perspective also seems appropriate in consideration of the apparent use of gross margin estimations in retail buyers' judgments of return maximizations from limited shelf space (for example, see Kaufman, Jayachandran, & Rose, 2006). Thus, the following is proposed:

H₄: Higher estimated gross margin is positively associated with retail buyers' new product acceptance.

4.3.3.2 Marketing Support and New Product Acceptance

Another important consideration in retail buyers' new product purchase decisions is the evaluation of supplier firms' marketing support strategies. In this regard, various tools are available to sellers that can be offered to retailers. Existing literature on retail buying suggests a set of specific marketing strategy variables that are commonly employed in the retail industry, such as media support and cooperative advertising funds (among others) (e.g., Rao & McLaughlin, 1989). In the present research, marketing support is defined as retail buyers' overall assessment of the marketing support offered by the seller for a new product and is composed of buyers' ratings of media support, couponing, product/sampling demonstrations, introductory allowances, cooperative advertising funds, and slotting fees.

From a theoretical standpoint, a new product's strong marketing support program can be viewed as an additional incentive for buyers to purchase. More specifically, it has been suggested that specific marketing support components offered to a retailer represent "risk-reducing factors" that have the potential to positively impact on retail buyers' new product purchase decisions (White, Troy, & Gerlich, 2000, p.292). Stated differently, the higher the marketing support for a new product, the lower the associated risk with the purchase, and the higher the likelihood of buyers' new product acceptance.

Empirical evidence from existing research generally supports the notion that marketing support increases the chances of new product acceptance (e.g., see Gerlich, Walters, & Heil, 1994; Montgomery, 1975; White, Troy, & Gerlich, 2000). Therefore, the following hypothesis is stated formally:

H₅: Higher marketing support is positively associated with retail buyers' new product acceptance.

4.4 Influences of Salesperson Relationship-Building Activities on Retail Buyers' New Product Purchase Decisions

In addition to the hypothesized influences of product features, market-, and marketing strategy-related characteristics of new retail products (i.e. product-focused variables), it is also anticipated that the salesperson relationship-building activities examined herein, salesperson consultation and salesperson helping behavior, positively affect retail buyers' new product purchase decision. In this regard, it is proposed that these activities influence new product acceptance via different paths. First, salesperson relationship-building activities, which denote relational investments of time, efforts, attention, and

other resources that a salesperson dedicates towards the building of relationships, are hypothesized to be associated with retail buyers' new product purchase decisions directly (cf. Palmatier et al., 2006; Section 4.4.1). Second, these relational activities are also proposed to influence new product acceptance by enhancing (i.e. moderating) the impact of product-focused variables on buyers' assessment and selection of new retail products (Section 4.4.2). Finally, the salesperson relationship-building activities are hypothesized to indirectly impact on the new product buying decision, mediated through buyer trust (e.g., see Palmatier et al., 2008; Section 4.4.3). Together, the hypotheses developed here offer the opportunity - in consideration of product-focused factors - to examine and compare whether specific relationship-building activities indeed have a direct or indirect influence on retail buyers' new product purchase decisions (performance outcome), or whether retail buyers make joint evaluations of the examined product-focused and relationship-oriented variables (cf. Wathne, Biong, & Heide, 2001).

The development of the respective hypotheses is discussed in the subsequent sections. Again, theoretical arguments as well as empirical evidence are presented.

4.4.1 Salesperson Relationship-Building Activities and New Product Acceptance

4.4.1.1 Salesperson Consultation and New Product Acceptance

The first relationship-building activity that is expected to have a direct effect on retail buyers' new product acceptance is salesperson consultation. Consistent with the qualitative findings in Chapter 3, salesperson consultation is defined as "professionally providing information for helping customers take intelligent actions to achieve their business objectives" (Liu & Leach, 2001, p.147; also cf. Chevalier, 1993). Thus, it is mainly characterized by buyers' perceptions of salespeople's information and knowledge provision. Typically, salespeople who carry out consultation tasks are viewed as 'advisers' or 'proactive communicators' who are willing to actively offer guiding advice, share news and expertise, and so forth. Hence, the idea of proactive communication, that is, the salesperson may offer such information without being specifically asked, is inherent to this specific concept.

In extant sales literature the notion of salespersons' professional information provision has been denoted as an important relationship selling task (e.g., Beverland, 2001; Liu & Leach, 2001; Marshall, Goebel, & Moncrief, 2003; Moncrief, Marshall, & Lassk, 2006), and a way to differentiate from competitors (Chevalier, 1993). Particularly, by communicating helpful information and providing solutions to specific problems, a salesperson can add value to the customer's business through adopting the role of an

expert adviser (Chevalier, 1993; Liu & Leach, 2001; Rackham, 2000). Consequently, the consultation of the sales force can deliver clear benefits for a buyer, such as opportunities to make more informed (and hence, improved) purchase decisions. In view of this, it is theorized that salespeople's efforts focused on customer consultation promote positive buyer behaviors, including retail buyers' behavioral responses to new products. Therefore, a higher level of consultation provided by the salesperson should enhance the likelihood of buyers' new product acceptance.

Additional theoretical support for a positive association between the level of salesperson consultation and buyers' new product acceptance can be deduced from previous research in the organization literature. In Chapter 3, the concept of salesperson consultation had already been delineated as an 'in-role' rather than 'extra-role' behavior due to its direct relation to the sales function (e.g., see MacKenzie, Podsakoff, & Ahearne, 1998; Van Dyne, Cummings, & McLean Parks, 1995). As customer-oriented in-role behaviors are intimately linked to salespeople's work duties, it can be expected that such behaviors have a direct impact on job-related performance outcomes (Podsakoff & MacKenzie, 1997).

To the best of the author's knowledge, direct empirical evidence regarding the positive influence of salesperson consultation on *retail buyers' new product acceptance* is not available in existing literature. Yet, past empirical results provide support for the positive impact of business partners' professional information provision/communication behavior on performance outcomes. In the general terminology of Ahearne, Jelinek, and Jones (2007, p.607), "previous sales research suggests that customers rate exchanges that are high in information sharing more favorably." Specific to the B2B buyer-salesperson context, a positive effect of the exchange of information on salesperson performance has been reported in earlier studies (e.g., Biong & Selnes, 1996). As a salesperson's sales performance is contingent on buyers' purchasing decisions (Kaufman, Jayachandran, & Rose, 2006), it is thus expected that salesperson consultation directly impacts on retail buyers' new product purchase decisions. Hence, the following is hypothesized:

H₆: Higher salesperson consultation is positively associated with retail buyers' new product acceptance.

4.4.1.2 Salesperson Helping Behavior and New Product Acceptance

The second relationship-building activity that is expected to directly impact on retail buyers' new product purchase decisions is salesperson helping behavior. In line with the previous findings from the qualitative explorations (Chapter 3), salesperson helping behavior is defined, similar to the specification of Bradford, Crant, and Phillips (2009, p.384), as "actions, activities, and deeds that benefit or are intended to benefit a salesperson's customers." In addition, this definition is supplemented by the notion that such helping behavior is mainly characterized by salespeople's *voluntary* actions, carried out for the buyer or buying organization as a whole. As compared to salesperson consultation, the emphasis of salesperson helping behavior is on the 'action', rather than the 'communication'.

Helping behaviors, previously for the most part examined in an intraorganizational context (e.g., Podsakoff & MacKenzie, 1997; Podsakoff et al., 2000; see Mulki, Jaramillo, & Marshall, 2007, for an investigation in the sales domain), have more recently also been emphasized to represent an important relationship-building behavior of B2B salespeople (Bradford, Crant, & Phillips, 2009). Specifically, sales force members carrying out helping deeds volunteer to aid their customers. For example, salespeople may exhibit actions such as helping a buyer to accomplish a certain work task. Accordingly, salespeople who demonstrate helping behavior deliver benefits for their customers. As past research has shown that helping behaviors are related to positive evaluations of the individual displaying such behaviors (Organ, Podsakoff, & MacKenzie, 2006; Podsakoff et al., 2000), it is posited that salespeople's efforts directed towards helping their customers evoke positive buyer responses, including such as retail buyers' positive assessments and purchase decisions of new products. In the light of the above, and in a similar vein as salesperson consultation, it can thus be expected that a higher level of customer-focused helping behavior provided by the salesperson enhances the likelihood of buyers' new product acceptance.

In the previous Chapter, salesperson helping behavior was described as a contextual performance behavior (e.g., Borman & Motowidlo 1993; 1997). Essentially, contextual performance corresponds to those actions that facilitate the wider organizational, social, and psychological environment in which a company's technical core operates (Borman & Motowidlo, 1993). As such, the concept of contextual performance does not require an activity to be 'extra role' (cf. Bradford, Crant, & Phillips 2009; Organ, 1997), and is consistent with modern conceptualizations of the helping behavior construct (Bradford,

Crant, & Phillips, 2009; Mulki, Jaramillo, & Marshall, 2007).¹ Theoretically, the notion of contextual performance supports the idea that helping behavior contributes to the effectiveness of a salesperson (cf. Borman & Motowidlo, 1993), and hence, performance outcomes, such as retail buyers' new product acceptance decisions.

As in the case of salesperson consultation, to the best of the author's knowledge, direct empirical evidence regarding the positive impact of salesperson helping behavior on *retail buyers' new product acceptance* is not available in extant literature. However, in general, past research has established empirical support for a positive association between helping behaviors and various performance outcomes (e.g., see Podsakoff & MacKenzie, 1997; Podsakoff et al., 2000), including sales performance (e.g., see George, 1991, for a concrete example). Further to this, researchers in the sales research domain have provided empirical evidence that helping behavior is positively linked to in-role behavior performance/task performance, that is, carrying out/meeting work responsibilities (Mulki, Jaramillo, & Marshall, 2007; Piercy et al., 2006). Again, as a salesperson's success in selling new products is contingent on buyers' purchasing decisions (Kaufman, Jayachandran, & Rose, 2006), it is therefore expected that salesperson helping behavior is directly associated with retail buyers' new product acceptance. Extrapolating from the discussion above, the subsequent hypothesis is proposed:

H₇: Higher salesperson helping behavior is positively associated with retail buyers' new product acceptance.

4.4.2 The Moderating Role of Salesperson Relationship-Building Activities and New Product Acceptance

4.4.2.1 Moderating Effects of Salesperson Consultation and Salesperson Helping Behavior

Based on different theoretical arguments and empirical support, the previous sections have developed a set of hypotheses regarding how the examined product-focused variables and salesperson relationship-building activities directly influence retail buyers' new product acceptance (Sections 4.3 and 4.4.1). Additional considerations, however, suggest that potential interactive (i.e. moderating) effects exist between these two types of determinants. The sales literature is indicative of such modifying effects. For example,

¹ The conceptual progression of this (and related) construct(s) can be identified in extant literature. For example, Organ (1997) has highlighted several difficulties with delineating such behaviors (e.g., helping behavior) along the lines of 'discretionary', 'rewarded', and 'extra-role'. Furthermore, previous studies have shown that employee perceptions frequently differ regarding whether behaviors are 'role prescribed', 'discretionary', or 'rewarded' (cf. McAllister et al., 2007).

extant work on relationship selling advocates that salespeople's relational activities add value to the selling process (e.g., DeVincentis & Rackham, 1998; Moncrief & Marshall, 2005), such as the selling of new retail products. In view of this, one would anticipate then to find a reinforcing effect of new product-focused variables as relationship-building activities (e.g., consultation and/or helping behavior) performed by the salesperson increase. But why can this be expected? From a theoretical perspective, existing marketing research proposes that "buyers do make joint assessments of different sources of utility" (Wathne, Biong, & Heide, 2001, p.62), such as product-focused variables and salesperson relationship-building activities. In the previous sections it has already been discussed how retail buyers assess and derive utility from new product-focused factors (i.e. product features, market demand, and other marketing strategy variables) as well as how they receive additional benefits (i.e. additional utility) from the relationship-building activities of salesperson consultation and salesperson helping behavior. If a salesperson performs consultation and/or helping behavior tasks, this means that the retail buyer's utility increases when assessing and selecting new products. Thus, it is expected that the positive effects of product-focused variables on retail buyers' new product acceptance are reinforced as salesperson consultation and/or helping behavior increase(s).

In addition to the theoretical arguments provided above, specific examples can be suggested as to how salesperson consultation and salesperson helping behavior may reinforce new product offerings. In the case of salesperson consultation, for instance, a salesperson may be able to provide supplemental information on market prices (e.g., competitiveness of a new product's price) or the quality of the packaging (important for point of sales [POS] display) in order to reassure or improve the buyer's perceptions of specific new product features. Other examples may include such as consulting the buyer on demand forecasting (e.g., based on test marketing results), the setting of retail price (related to gross margin estimations), or the effective utilization of potential marketing support elements (e.g., planned couponing or product sampling/demonstrations). Similarly, in the case of salesperson helping behavior, a salesperson may be able to aid the buyer with product assortment planning tasks, which provide opportunities to demonstrate how specific product features of new items (i.e. product quality and product price) complement the existing product assortment of the retailer. This could include demonstrations on the actual sales floor or in product presentation rooms. Other examples may comprise helping with display or other point of sale (POS) issues to improve customer targeting, supporting the retailer in cost savings-related matters (margin), or helping to coordinate retailer's marketing activities with planned media

support for new products. Effectively, these and similar other examples can be brought forward that illustrate how salesperson consultation and salesperson helping behavior may provide additional benefits (i.e. additional utility) to retail buyers when new products are assessed, potentially increasing the likelihood of retail buyers' new product acceptance. Based on the discussion above, including the theoretical arguments and practical examples provided, the following hypotheses are posited:

H_{8a} - H_{8e}: Higher salesperson consultation increases the positive association of (a) lower product price, (b) higher product quality, (c) higher expected customer demand, (d) higher estimated gross margin, and (e) higher marketing support with retail buyers' new product acceptance.

H_{9a} - H_{9e}: Higher salesperson helping behavior increases the positive association of (a) lower product price, (b) higher product quality, (c) higher expected customer demand, (d) higher estimated gross margin, and (e) higher marketing support with retail buyers' new product acceptance.

4.4.3 Salesperson Relationship-Building Activities, the Mediating Role of Buyer Trust in the Salesperson, and New Product Acceptance

4.4.3.1 Salesperson Relationship-Building Activities and Buyer Trust in the Salesperson

The variables examined in the present study; salesperson relationship-building activities, salesperson consultation and salesperson helping behavior, are also expected to (at least partially) indirectly influence retail buyers' new product acceptance through buyer trust in the salesperson. Hence, first, it is proposed that salesperson consultation and salesperson helping behavior are positively associated with buyer trust in the salesperson. In the extant literature, trust has been defined as "confidence in an exchange partner's reliability and integrity" (Morgan & Hunt, 1994, p.23). In the buyer-salesperson context, therefore, "buyer trust reflects the buyer's confidence in the salesperson's reliability and integrity" (Palmatier et al., 2008, p.178/179; drawing from Crosby, Evans, & Cowles, 1990).

In previous research, it has been argued and demonstrated that trust is a key relational mediator (e.g., Doney & Cannon, 1997; Morgan & Hunt, 1994), driving important relational (e.g., cooperation) and performance-related outcomes (e.g., see Palmatier et al., 2006, for a meta-analysis). Specific to the buyer-salesperson context and salesperson relationship-building activities, existing studies show that salespeople's

relational activities positively influence buyer trust in the salesperson (e.g., Ahearne, Jelinek, & Jones, 2007; Palmatier et al., 2008).

Consistent with the employed definitions of salesperson consultation and salesperson helping behavior (see Section 4.4.1), it is proposed that both of these relationship-building activities can yield additional benefits for the buyer and her/his retailer, which encourage buyer's trust. For example, salesperson consultation can provide valuable information to the buyer that may lead to improved decision making. In a similar vein, salesperson helping behavior can aid the buyer (and its organization) with critical work tasks that help the retailer to achieve its business objectives. When the salesperson performs consultation and/or helping behavior, it signals that she/he is willing to support and aid the retailer, as well as that she/he cares about the retailer's success. Thus, retail buyers are likely to judge salespeople who carry out consultation and/or helping behavior as more benevolent and trustworthy. In view of the above discussion, the following hypotheses are presented:

H_{10a}: Higher salesperson consultation is positively associated with buyer trust in the salesperson.

H_{11a}: Higher salesperson helping behavior is positively associated with buyer trust in the salesperson.

4.4.3.2 Buyer Trust in the Salesperson and New Product Acceptance

In addition to the hypothesized positive influences of salesperson consultation and salesperson helping behavior on buyer trust in the salesperson, it is also posited that buyer trust positively impacts on new product acceptance.

Prior empirical research has shown that buyer trust in salesperson is positively associated with selling performance, such as share of customer (e.g., Ahearne, Gruen, & Jarvis, 1999; Ahearne, Jelinek, & Jones, 2007). Theoretically, this may occur because in the presence of trust, the buyer has a greater confidence that the salesperson does not follow opportunistic goals, which can result in positive buyer behaviors (e.g., the acceptance of new products). As discussed at an earlier stage in this Chapter, retail buyers' new product selection decisions often inherent risk and uncertainty, which can create a considerable challenge for buyers, even if they are experienced (Kline & Wagner, 1994). Hence, in cases where buyer trust in the salesperson exists, the retail

buyer should be motivated to respond more positively to new product offers. Based on the above, the subsequent hypothesis is formulated:

H_{10b/11b}: Higher buyer trust in the salesperson is positively associated with retail buyers' new product acceptance.

4.5 Control Variables

Further to the hypothesized influences of product-focused variables and salesperson relationship-building activities, the effects of a number of important control variables on retail buyers' new product acceptance are also specified. Particularly, controls were employed in order to enable an assessment of the robustness of the previously hypothesized influences on the new product buying decision (Sections 4.3 and 4.4) in later conducted analyses (Chapter 7). Existing literature suggests a set of variables that are likely to be important within the context of the present research; that is, controls relating to the product, customer firm (i.e. retailer), and the buyer-salesperson relationship. The following sections discuss the employed variables and their expected effects on retail buyers' new product acceptance.

4.5.1 Control Variables: Product

4.5.1.1 Product Dependence and New Product Acceptance

In situations where retail buyers have few or no product sourcing alternatives, buyers may be more likely to purchase a new product. Limited sourcing options may be due to a single seller offering a new retail item or few similar new products being offered in the marketplace. Previous marketing research has addressed (and controlled for) the issue of 'availability of sourcing alternatives' (e.g., Cannon & Homburg, 2001; Cannon & Perreault, 1999), yet, to the best of the author's knowledge, none of the relevant existing retail buying-oriented studies (e.g., Rao & McLaughlin, 1989) have taken this notion into consideration. For the purposes of this study, the control variable of product dependence is employed, which is defined as retail buyers' need to source a specific new product from a particular supplier firm (drawing from Palmatier et al., 2008). It is anticipated that retail buyers' product dependence is positively related to the decision to purchase a new product. Stated formally:

C₁: Higher product dependence is positively associated with retail buyers' new product acceptance.

4.5.1.2 Product Importance and New Product Acceptance

When retail buyers perceive a new product to be of high importance for the retailer (i.e. it is important for the retailer to carry a specific new item), it can be expected that this increases the likelihood of buyers' new product acceptance. Again, past marketing studies have considered (and controlled for) the notion of product importance (e.g., Cannon & Homburg, 2001; Cannon & Perreault, 1999), however, none of the previous retail buying-oriented works pertinent to the present research appear to have considered this issue. In this study, product importance reflects retail buyers' evaluation of the significance of a specific new product for the retail organization (drawing from Cannon & Homburg, 2001; Cannon & Perreault, 1999). The following is posited:

C₂: Higher product importance is positively associated with retail buyers' new product acceptance.

4.5.2 Control Variable: Retailer

4.5.2.1 Customer Firm Size and New Product Acceptance

Buyers at larger retail organizations may be expected to purchase larger numbers and volumes of new products than their counterparts at smaller retailers. Hence, it seems reasonable to posit that customer firm size is positively related to new product acceptance. In the present study, customer firm size is captured by the number of employees of a retailer. The following hypothesis is proposed:

C₃: Greater customer firm size is positively associated with retail buyers' new product acceptance.

4.5.3 Control Variables: Relationship

4.5.3.1 Buyer-Salesperson Relationship Duration and New Product Acceptance

Business relationships between buyer and salesperson develop over time (Dwyer, Schurr, & Oh, 1987; Morgan & Hunt, 1994). Based on previous successful trade interactions, buyer-salesperson business dealings can evolve into strong, trust-based relationships (e.g., Doney & Cannon, 1997; Dwyer, Schurr, & Oh, 1987). Although stronger relationships may not always lead to higher performance (Cannon & Perreault, 1999), they have often been shown to entail such results (Palmatier et al., 2006). Thus, from a relational perspective, it would seem likely that retail buyers prefer to purchase new products from salespeople with whom they have longer-lasting (and possibly stronger and trust-based) business relationships. In this study, this notion is captured by controlling for buyer-salesperson relationship duration. It is posited:

C₄: Longer buyer-salesperson relationship duration is positively associated with retail buyers' new product acceptance.

4.5.3.2 Buyer Relationship Orientation and New Product Acceptance

Relational theory would also suggest that retail buyers who are more receptive to salespeople's relationship-building activities should be more likely to accept a new product when such relational efforts are performed. In order to incorporate this idea, the concept of buyer relationship orientation is utilized, which is defined in this study as retail "buyer's need to engage in a relationship with a salesperson to purchase a specific product category" (Palmatier et al., 2008, p.181). The following hypothesis is proposed:

C₅: Higher buyer relationship orientation is positively associated with retail buyers' new product acceptance.

4.6 Summary

The central objective of this Chapter was the development of a conceptual framework regarding the influences of specific product-focused variables and salesperson relationship-building activities on retail buyers' new product purchase decisions. Employing theoretical arguments and empirical evidence (including the qualitative field-based findings presented in Chapter 3), a set of formal hypotheses were developed and formulated. While product-focused variables (i.e. product features as well as other key market and marketing strategy variables) were conceptualized to be directly associated with retail buyers' new product acceptance, salesperson relationship-building activities (i.e. salesperson consultation and salesperson helping behavior) were proposed to influence retail buyers' new product acceptance through three distinct paths; that is, directly, indirectly through buyer trust in the salesperson, and by way of moderating the effects of the product-focused variables on retail buyers' new product acceptance. In addition, a number of control variables were deliberated and their anticipated influences on the new product buying decision specified.

The subsequent Chapter (Chapter 5) describes the study's research design, the operationalization of the utilized model variables, as well as the data collection procedure used to generate appropriate primary data in order to test the afore developed conceptual framework.

Chapter 5

Research Methodology

The previous Chapter provided details on the study's conceptual framework. At this point, the central focus is directed towards the quantitative data generation process, which led to the data required to test the theory-based hypotheses.

Chapter 5 adopts the following structure. First, a brief introduction to the study's research methodology is presented, followed by a discussion on some general data collection issues. Hereafter, the development process of the measuring instrument is explained, details on the employed measures are provided, and the physical design of the data collection device is specified. Next, the pretesting stages and the main data collection procedure are discussed. Finally, a summary concludes the Chapter.

5.1 Introduction to the Research Methodology

In order to test the theory-based hypotheses (Chapter 4) and investigate the central research objectives of the present study (Chapter 1), it was necessary to collect primary data in the field. The main purpose of this Chapter is to discuss the process utilized to generate the required data. In particular, the first section provides details on more general data collection issues, discussing the choice of research design, data type, respondents, and the method of administration. Thereafter, more specific matters are addressed, including such as the development process of the data collection device, the operationalization of the employed constructs, and the physical design of the instrument. Finally, the pretesting stages and modifications to the measuring device are examined, followed by a discussion on the main data collection procedure.

5.2 Choice of Research Design, Data Type, Respondents, and Administration Method

5.2.1 Choice of Research Design

As in the case of any academic research project, the design of the methodology needs to be consistent with the study's objectives. In other words, the study's methodological approach needs to be able to provide useful answers to the previously posed research questions (Lee & Lings, 2008). With respect to the present work, one of the key objectives is the examination of the relative and interactive effects of salesperson relationship-building activities and product-focused marketing variables in retail buyers' new product purchase decisions. Hence, it is an important aim to determine any influence of the operationalized measures of the investigated (a) salesperson relationship-building activities, (b) product-focused variables, and (c) interaction terms (i.e. modifying effects) of interest on buyers' new product acceptance.

Many different research designs are available to researchers in the social sciences, with each serving specific purposes and occupying a number of advantages as well as disadvantages. Typically, one can distinguish between the following main data collection methods: experiments (i.e. causal designs), qualitative research designs (e.g., exploratory approaches), and surveys (i.e. descriptive designs) (Iacobucci & Churchill, 2010). The methods of experiments and qualitative designs were discounted as inappropriate approaches for the present study primarily due to the following reasons. First, although experiments can establish causality and represent a strong form of research design, this method could not be employed primarily because of (1) the key aim to investigate *actual* new product purchase decisions of retail buyers and (2) the number of independent variables examined. Laboratory-based experiments would have failed to

examine 'real' purchase decisions made by retail buyers, and in both field- and laboratory-based experiments it would have been virtually impossible to control for the number of independent variables examined in the present work, especially in a realistic or natural setting. Therefore, it was neither suitable nor practical to employ an experimental design. Second, even though a qualitative research design proved helpful to explore and better understand *what* salesperson relationship-building activities may play an important role in the study's context, qualitative methods do not allow for robust tests of associations among variables, nor do they typically lend themselves to generalization. Thus, the employment of further qualitative methods was also unsuitable. Yet, when the survey or questionnaire approach was investigated, it was deemed to appropriately capture the objectives of the present study, including such issues as the number of independent variables or the aim to examine 'actual' new product purchase decisions. Importantly, a survey design allowed the investigation of associations between variables - a key aim of this project. With respect to the questionnaire method, there are two main approaches which can be used: longitudinal and cross-sectional (e.g., Iacobucci & Churchill, 2010). These two forms are discussed in the subsequent section.

5.2.2 Choice of Data Type: Longitudinal versus Cross-Sectional Data

When choosing a survey method, one has generally an option between longitudinal and cross-sectional research designs. One of the key determinants for the choice between these two approaches was the availability of resources - such as time and financial matters (Lee & Lings, 2008) - which largely made it untenable to employ a longitudinal design for the present research. In particular, a longitudinal approach requires collecting data in several intervals, leading to a far more time-consuming data collection period on the one hand, but also considerably increased monetary expenses due to repeated measurements on the other hand. Furthermore, the access to a longitudinal sample was of major concern. Consistent with the exploratory research work (Chapter 3), the aim was to collect data from a U.S. sample of retail buyers working for 'brick-and-mortar' (store-based) retailers. In this regard, access and/or granted cooperation from the participating organizations was limited to a predefined time period. Also, sample attrition was likely to prove problematic in the study's context (cf. Lee & Lings, 2008). For example, retail buyers or salespeople may become unavailable because they change jobs or organizations, or simply decide not to participate anymore.¹ Therefore, based on

¹ Although retail buyers were the respondents to the survey (as discussed in the following section), the evaluation of *specific* salespeople and their relationship-building activities was a central part of the questionnaire. Hence, not only the potential 'unavailability' of the same buyers, but also of the particular salespeople, had to be considered.

the above arguments, it was decided to utilize a cross-sectional design for the present study.

At this point it should be noted that longitudinal research generally has some advantages over the cross-sectional approach. Typically, a major strength of the longitudinal design is the confidence in the findings that can be derived from the analysis. Specifically, this research design facilitates stronger inferences regarding causal relationships between variables due to the ability to establish temporal precedence (Halinen & Törnroos, 1995; Lee & Lings, 2008). Further to this, one can achieve a greater familiarity with the context under investigation, which can help in the interpretation of results. Nevertheless, the cross-sectional design is most frequently used in survey studies (Iacobucci & Churchill, 2010) and commonly applied in the social and organizational research domains (Lee & Lings, 2008). This might be partially due to some of the problems inherent in the longitudinal method (such as those detailed above). In view of sales research, the cross-sectional design is widely accepted and many studies can be identified that have utilized this approach (e.g., Ahearne, Gruen, & Jarvis, 1999; Ahearne, Jelinek, & Jones, 2007; Biong & Selnes, 1996; Bradford & Weitz, 2009; Guenzi, Pardo, & Georges, 2007; Johnson, Barksdale, & Boles, 2003; Krafft, 1999; Marshall, Goebel, & Moncrief, 2003; Piercy, Low, & Cravens, 2011; Wieseke, Homburg, & Lee, 2008). Importantly, studies in the extant retail buying literature, which examine buyers' new product purchase decisions, have commonly employed the cross-sectional survey design (e.g., Gerlich, Walters, & Heil, 1994; Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). In spite of the prevalent utilization and acceptance of cross-sectional designs in the sales and retail buying domains, this approach has important implications for the data analysis and the resulting conclusions. More precisely, cross-sectional data collection methods allow researchers to draw inferences regarding associations between the studied variables only, rather than conclusions of causal linkages (Iacobucci & Churchill, 2010). One is generally limited to the investigation and interpretation of correlation patterns, and tentative causal implications can only be drawn in light of the study's underlying theory (Lee & Lings, 2008). However, in consideration of the present study, the developed theory regarding the interactive and relative effectiveness of salespeople's relationship-building activities and product-focused marketing variables is at a rather early stage (in contrast to more 'maturing' literature strands). Therefore, at this point one would not expect a longitudinal (or experimental approach) towards the present study in order to establish causality, but instead an inspection of the associations (i.e. patterns of correlations) between the theoretically relevant constructs. Consistent with the preceding arguments, the

hypotheses developed in Chapter 4 - even though rooted in causal logic - are concerned with relationships between the studied variables, and do not represent causal assertions. Yet, once cross-sectional descriptive research has established first empirical support regarding the interactive and relative influences of salespeople's relationship-building activities and product-focused variables on retail buyers' purchase behavior, future research attempts can then build on this newly gained knowledge with longitudinal methods in order to establish improved evidence through the use of more causally-strong approaches.

5.2.3 Choice of Respondents

Previous academic studies conducted in similar contexts as the present research (i.e. B2B buyer-salesperson settings) have used a number of different respondents. In extant scholarly work, data has been collected from salespeople (e.g., Bradford & Weitz, 2009; Guenzi, Pardo, & Georges, 2007), buyers (e.g., Biong & Selnes, 1996; Kaufman, Jayachandran, & Rose, 2006; Liu & Leach, 2001), or from buyer-salesperson dyads (e.g., Bradford, Crant, & Phillips, 2009; Palmatier et al., 2008). The utilization of each of these methods comprises pros and cons. With regard to the choice of respondents for the present research, these are discussed below.

Conceptually, one could maintain the relevance of investigating the salesperson's or buyer's point of view, or both. In particular, this implies that one could collect data from either one side or both sides of the dyad. In light of the current research, various important decision criteria had to be considered for the final choice of respondents. Based on the present work's theory developed from the field-based explorations (Chapter 3) and the literature study (Chapter 4), the fact that the research includes salesperson- and buyer-oriented constructs may intuitively suggest a potential dyadic approach. From this point of view, a dyadic data collection method was deliberated first. However, although collecting data from multiple sources has advantages, such as overcoming potential problems of common method bias (cf. Kaufman, Jayachandran, & Rose, 2006), it has specific disadvantages. In particular, obtaining an appropriate sample size was of major concern. As dyadic data collection methods require the researcher to 'match' salesperson and buyer responses, the response rates of both sides of the dyad are critical. Especially, gaining required access to a high number of relevant retail buyers *and* salespeople, as well as to ensure their participation, appeared to be very difficult. Furthermore, a dyadic method is far more resource intensive with regards to both, time and financial expenses. This represented another important concern which had to be

considered. Consequently, a dyadic approach was discounted as a feasible method for the present research.

Next, the consideration moved to the individual examination of salespeople or retail buyers as potential respondents. Each of these two options has its strengths. On the one hand, it could be argued that salespeople have more knowledge of their own actions as well as specific product-focused variables, which in combination represent the independent variables examined in the present study. On the other hand, one may argue that salespeople could be expected to 'overstate' the relevance of their own actions as well as constructs such as 'product quality' (and similar others). Further to this, the critical dependent variable of buyers' new product acceptance, the potential mediating variable of buyer trust, and many of the control variables can be expected to be captured in a more appropriate manner from the buyer's perspective. In fact, perhaps the key criterion was the study's objective to examine buyers' *actual* purchase decisions. A closer examination of the constructs included in the theory led to the decision that, very likely, retail buyers are in the best position to evaluate their own purchase behavior, not at least due to the fact that they are the decision makers (Cannon & Perreault, 1999; Kaufman, Jayachandran, & Rose, 2006). More precisely, buyers appeared to be able to report more accurately on their actual buying decisions, evaluate the drivers of these decisions (i.e. their perceptions of product-oriented variables and salespeople's relationship-building activities, as examined in this study), and assess the significance of the product offering for their organizations. As the central unit of analysis for the present research study is the new product selection decision, buyers represent the critical data source. Therefore, based on the consideration of the above arguments as well as the study's aim to conduct a customer-centric examination (see Chapter 1), the retail buyer was chosen as the most suitable respondent for the purposes of the current study. Also, this choice is consistent with the qualitative explorations (Chapter 3) and previous research examining retail buyers' new product acceptance decisions (Kaufman, Jayachandran, & Rose, 2006; Montgomery, 1975; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). As a result, the subsequent research methodology considerations were tailored to fit the focus on the retail buyer as respondent for the questionnaire. Interestingly, the importance of the views of the buyer further mitigated against the use of a dyadic approach (above).

5.2.4 Choice of Administration Method

The previous sections 5.2.1 to 5.2.3 have already elaborated on the choices made regarding the overall research design, the type of data to be sought, and the respondents

to this study - a cross-sectional survey design using retail buyers. At this point, it needs to be determined what administration method is most appropriate for this research design. In the case of a cross-sectional survey approach, one typically has the options to choose between four main 'communication' or 'interactive' methods to collect data: Mail questionnaires, personal interviews, telephone interviews, and internet-based surveys, including web-based questionnaires and email surveys (Dillman, 2007; Iacobucci & Churchill, 2010; Lee & Lings, 2008).² For the purposes of the present study it was decided that it was suitable to employ the method of a paper-based mail questionnaire. The following discussion explains why the other methods appeared to be less adequate and presents reasons for the choice of a paper-based survey.

Personal interviews were regarded as an inadequate method for the purposes of the present study. The main factor was maybe the access to the respondents in the U.S.A. As personal interviews would have been very time- and cost-inefficient (Iacobucci & Churchill, 2010), due to the traveling of long distances and research activities at the respective retail organizations, for example, this method seemed not to be feasible. In addition, other important concerns to be considered were the highly non-anonymous nature of personal interviews as well as the potential for interviewer bias. Although both of these previously stated issues did not play a particular role during the interview study (Chapter 3) as interviewees were willing to share a great deal of information, including sensitive issues, mail questionnaires would surely minimize these possible problems.

The consideration to collect the relevant data via telephone interviews was discounted for the subsequent reasons. Firstly, probably the main argument against the employment of this method was the measurement of the key dependent variable, the examination of retail buyers' *actual* purchase decisions for new products. As the recording of these decisions as well as the corresponding questions was intended to be conducted in a timely fashion after salespeople's presentations of new products, the scheduling of telephone interviews seemed virtually impossible (including reaching buyers via telephone at an appropriate time). Also, drawing from the experiences during the qualitative explorations (Chapter 3), retail buyers have multiple work assignments and a lot of different demands on their time. Hence, it was feasible to assume that it would be best to utilize a method (i.e. paper-based mail questionnaires) that would allow them to complete the additional task of reporting on their new product selection decisions after

² Due to the choice to employ a cross-sectional survey design, 'observation' or 'non-interactive' methods such as human observation (e.g., pencil and paper 'head counts'), mechanical observation (e.g., radar tracking of traffic), and physiological measurement (e.g., eye-tracking) are not discussed herein. See for example Iacobucci and Churchill (2010) or Lee and Lings (2008) for more information.

meetings with salespeople in a way, that 'fits in' with their work responsibilities. Furthermore, additional considerations regarded the length of the questionnaire and the responses to sensitive questions. As the questionnaire had a considerable length, telephone interviews are typically less adequate (Iacobucci & Churchill, 2010). Next, seeking answers to sensitive questions via the phone may prove difficult as it represents a more distant form of interviewing technique (as compared to personal interviews) and consequently, respondents may be reluctant to provide accurate information to sensitive questions due to an absence of trust in the researcher.

The utilization of the internet, that is, the use of a web- or email-based questionnaire, appeared to be an appealing method, not least due to the generally quick turnaround time, considerably low expenses, and its convenience (Iacobucci & Churchill, 2010). However, the use of emails in order to approach potential participants and receive completed questionnaires was seen as less adequate. This was mainly due to the argument that this administration method is typically considered to be less anonymous than mail or web-based questionnaires because emails can often be traced back to the sender - an important consideration, especially with regard to the provision of information that may be viewed as potentially sensitive data by respondents (e.g., personal and company information, etc.). Next, the use of a web-based questionnaire, a data collection method that is already being used widely for research studies (Dillman, 2007), appeared to be suitable for the purposes of the present study. First, in nowadays most firms provide internet access to their employees (including such as retail buyers) and the heightened number of hand-held devices (e.g., smart phones) utilized by individuals that have the necessary internet access capabilities is steadily increasing. Second, familiarity with computers and the internet (including necessary knowledge of different software applications) is often a requirement in today's business arena to carry out specific job functions. Thirdly, a web-based survey would offer retail buyers the possibility to complete surveys fairly quickly and in a timely fashion after buyer-salesperson meetings. In spite of the appropriateness and advantages of a web-based questionnaire, ultimately, the decision was made to not select this method of administration. The key reason for this was the following. Access to some U.S.-based retailers had already been negotiated for two of the pretesting stages of the questionnaire (i.e. 'protocol' interviews and small-scale pilot study) after the exploratory study (Chapter 3) and prior to the questionnaire development process. Since some of these companies were of smaller size, appropriate internet access could not necessarily be guaranteed for all participating retail buyers.³

³ The difficulty of gaining access to U.S.-based retailers should also be stressed at this point. Thus, it was important to utilize an administration method that was consistent with the study's research objectives *and* could make use of the previously negotiated access to retailers.

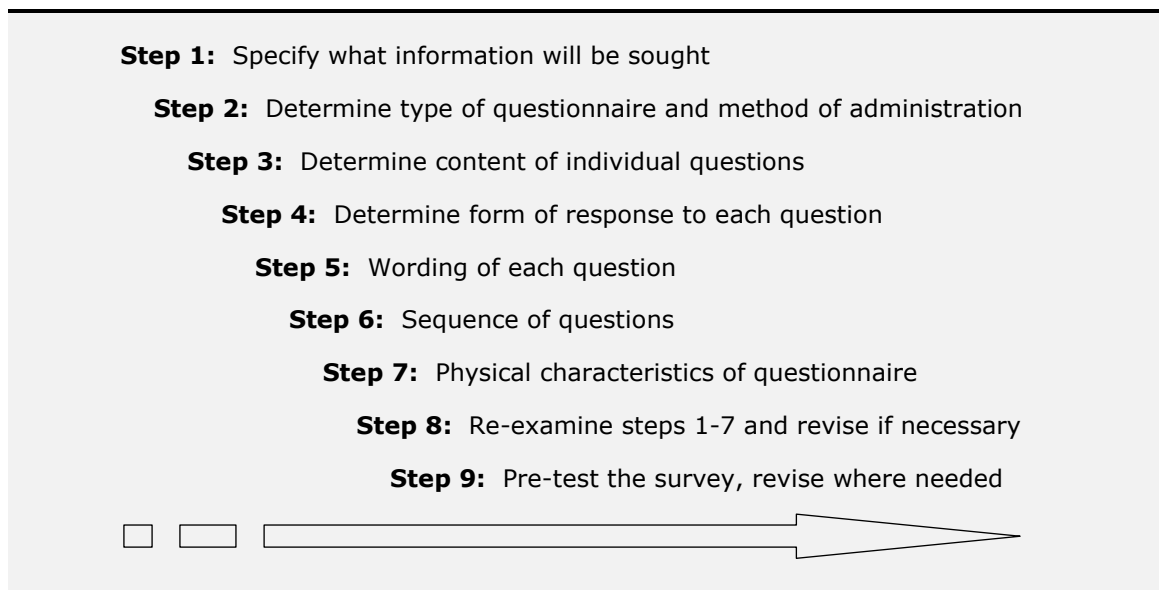
Finally, the choice of a paper-based mail questionnaire was considered and seemed an adequate administration method for the present research. First, a mail survey was also considerably time- and cost-efficient (keeping in mind that internet-based methods typically represent the cheapest approach). Second, mail questionnaires are also more anonymous than personal and telephone interviews or email-based surveys. As a result, this method reduces biases, such as the interviewer bias (Iacobucci & Churchill, 2010), but also regarding the generation of data originating from sensitive questions. Third, a mail questionnaire also offered great flexibility in terms of buyers' ability to report on their purchase decisions without greater time restrictions on work responsibilities (as compared to personal and telephone interviews, for example). Furthermore, mail questionnaires are also very frequently used (Iacobucci & Churchill, 2010) and previous studies examining *actual* new product purchase decisions of retail buyers have successfully utilized this survey approach to generate data (e.g., Kaufman, Jayachandran, & Rose, 2006; White, Troy, & Gerlich, 2000).

Despite the previous discussion, it needs to be noted that the employment of a paper-based mail questionnaire also generally involves some deficiencies. Especially the following two potentially problematic issues are often pointed out with respect to this form of administration: low response rate and non-response bias (e.g., Diamantopoulos & Schlegelmilch, 1996; Iacobucci & Churchill, 2010). However, researchers have suggested various approaches to improve response rates (e.g., Dillman, 2007; Dillman, Sinclair, & Clark, 1993; Phillips & Phillips, 2004) and have recommended methods as well as provided guidelines to assess non-response bias (e.g., Armstrong & Overton, 1977; Mentzer, Flint, & Hult, 2001). In particular, the role of such issues in the present research will be discussed at a later stage when the main data collection procedure is presented, including the process of the 'actual' sample frame selection and more precise details on the questionnaire administration.

5.3 Measuring Instrument Development Process (Questionnaire Design)

The aim of the present section is to provide an overview of the measuring instrument development process utilized to design the paper-based mail questionnaire for the present study. Figure 5.1 presents a graphical depiction of this procedure. Although this illustration presents a sequence of 'steps', it needs to be noted that the questionnaire development process is rather iterative and therefore, Figure 5.1 is to be understood as a "guide" or "checklist" for researchers (Churchill, 1999, p.329; also see Iacobucci & Churchill, 2010).

Figure 5.1: Questionnaire Development Procedure



Note: Adapted from Iacobucci and Churchill (2010), Figure 9.1, p.205.

The previously developed hypotheses (Chapter 4) have already determined what information will be sought as they specify the relationships between the variables/constructs that will be examined (Iacobucci & Churchill, 2010). Table 5.1 below presents the central information to be collected regarding the earlier described conceptual framework. In particular, this overview further depicts the required variables/constructs (including descriptions, measures and their sources). Next, the choices concerning data type, respondents, and administration method have been discussed in the previous sections. Hence, the following will provide details on the remaining steps of the questionnaire development procedure for the present research, outlining the operationalized scales⁴ (and demographic questions in order to collect data on the characteristics of the participants), response formats, the physical questionnaire design, the pretesting stages, and the main data collection process.

⁴ It should be noted that the preliminary (i.e. before any pretesting) and final questionnaire contained some additional measurement scales which are outside of the scope of the present study. They were included for potential future research work.

Table 5.1: Variables/Constructs, Descriptions, Operationalization, and Measure Source(s)

Category	Construct/Variable	Description/ Measure	Source(s) (If # of authors >2, then here denoted by 'et al.')
PRODUCT-FOCUSED VARIABLES			
Product features	Product quality	Buyer ratings on 1-7 Likert-type scale	De Wulf et al. (2003)
	Product price	Buyer ratings on 1-7 Likert-type scale	De Wulf et al. (2003)
Market demand	Expected customer demand	Buyer ratings on 1-7 Likert-type scale	Wieseke et al. (2008)
Marketing strategy characteristics			
<i>Financial</i>	Estimated gross margin	Buyer rating on 1-7 Likert-type scale	Kaufman et al. (2006)
<i>Marketing support</i>	Media support, couponing, product sampling/demonstrations, introductory allowances, cooperative advertising funds, slotting fees	Index of buyer ratings for all items (on 1-7 Likert-type scale)	Kaufman et al. (2006)
SALESPERSON-SPECIFIC ACTIVITIES			
Salesperson relationship-building activities	Salesperson consultation	Buyer ratings on 1-7 Likert-type scale	Agnihotri et al. (2009)
	Salesperson helping behavior	Buyer ratings on 1-7 Likert-type scale	E.g., Bradford et al. (2009)
BUYER-SPECIFIC VARIABLE			
Buyer mediator	Trust in salesperson	Buyer ratings on 1-7 Likert-type scale	Palmatier et al. (2008)
BUYING DECISION			
New product buying decision	Accept/reject decision	Buyer dichotomous yes/no answer	E.g., Rao & McLaughlin (1989)
CONTROLS			
Product	Product dependence	Buyer ratings on 1-7 Likert-type scale	Palmatier et al. (2008)
	Product importance	Buyer ratings on 1-7 semantic differential scale	Cannon & Homburg (2001)
Retailer	Customer firm size	Buyer report of # of employees (see demographics)	E.g., Cadogan et al. (2005)
Relationship	Buyer-salesperson relationship duration	Buyer report in # of years/months	E.g., Palmatier et al. (2008)
	Buyer relationship orientation	Buyer ratings on 1-7 Likert-type scale	Palmatier et al. (2008)
DEMOGRAPHICS			
Buyer	Gender	Buyer report (M/F)	n/a
	Age	Buyer report (years)	n/a
	Education	Buyer report (highest)	n/a
	Work experience	Buyer report (years)	n/a
Retailer	Annual sales	Buyer report (US\$)	n/a
	Number of employees	Buyer report (#)	n/a
	Number of buyers	Buyer report (#)	n/a

5.4 Employed Measures

In this next step of the questionnaire development process the focus was directed towards the operationalization of the constructs and variables examined in the present research. More specifically, it needed to be determined what measures to employ in order to collect the relevant information regarding the study's theory-based hypotheses (conceptual framework) as previously developed and discussed in Chapter 4. Therefore, the extant literature was re-examined in a search for appropriate measures. This review resulted in the conclusion that all of the investigated constructs and variables could be measured through the utilization of existing scales. Hence, previously employed measures were used (and adapted where necessary), every one of which had been published in reputable academic outlets. Existing scales were used (or adapted) from similar B2B buyer-salesperson (or buyer-supplier) contexts if possible. More specifically, in order to assess the key variables of the conceptual model, multi-item reflective measures (see product features, market demand, salesperson relationship-building activities, buyer mediator, and product/relationship controls), a single-item reflective measure (estimated gross margin), a multi-item formative index (marketing support), a dichotomous yes/no measure (new product buying decision), and two single-item measures (see retailer and relationship controls) were used.⁵ The following outlines each operationalized measure by providing details on its source/successful use in extant scholarly work and the number of items per scale. The order of discussion is in line with the structure of Table 5.1 (top to bottom). An overview of the actual scale items employed to measure the constructs/variables included in the conceptual framework (Chapter 4) can be found in Appendix 1.1.

5.4.1 Product-Focused Variables

5.4.1.1 Product Features: Product Quality

Product quality was measured using a 3-item scale, comprising of an adapted version of De Wulf, Odekerken-Schröder, and Van Kenhove's (2003) 2-item scale based upon Gaski and Etzel (1986), supplemented by one additionally generated item.

5.4.1.2 Product Features: Product Price

The measure employed to evaluate product price was a 3-item scale adapted from De Wulf, Odekerken-Schröder, and Van Kenhove's (2003). These three items were originally sourced from an established measure of Dodds, Monroe, and Grewal (1991).

⁵ More details on scale development theory and formative index construction pertinent to the present study can be found in Chapter 6.

5.4.1.3 Market Demand: Expected Customer Demand

In order to capture expected customer demand a 3-item measure adapted from Wieseke, Homburg, and Lee (2008) was used. This scale originates from the sales literature, initially measuring expected customer demand of B2C salespeople and sales managers.

5.4.1.4 Marketing Strategy Characteristics: Financial - Estimated Gross Margin

The financial component (a subcategory of marketing strategy variables) was captured by one item, estimated gross margin, previously utilized and measured on a 7-item scale by Kaufman, Jayachandran, and Rose (2006) in a retail buying study.

5.4.1.5 Marketing Strategy Characteristics: Marketing Support

Marketing Support (a subcategory of marketing strategy variables) was measured by forming an index measure using Kaufman, Jayachandran, and Rose's (2006) six scale items, developed from earlier work of Rao and McLaughlin (1989). These measurement items have originally been constructed for a B2B retail buying context. The measure includes buyer ratings of media support, couponing, product sampling/demonstrations, cooperative advertising funds, introductory allowances, and slotting fees for a new product.

5.4.2 Salesperson-Specific Activities

5.4.2.1 Salesperson Relationship-Building Activities: Salesperson Consultation

Salesperson consultation was measured using a 6-item scale adapted from Agnihotri, Rapp, and Trainor (2009), sourcing from earlier developed items of Ahearne, Gruen, and Jarvis (1999) and Ahearne, Jelinek, and Jones (2007). All of the previously published measurement items have been used in B2B buyer-salesperson research contexts (for example, cf. Ahearne, Jelinek, & Jones, 2007).

5.4.2.2 Salesperson Relationship-Building Activities: Salesperson Helping Behavior

Salesperson helping behavior was captured using an 8-item scale, consisting of a 3-item measure adapted from Bradford, Crant, and Phillips (2009) based on the work of Van Dyne and LePine (1998), two items directly adapted from Van Dyne and Le Pine (1998), and a 3-item scale adapted from Bagozzi, Verbeke, and Gavino (2003). Bradford, Crant, and Phillips' (2009) measure was originally developed for a B2B customer-salesperson context. Similarly, Bagozzi, Verbeke, and Gavino's (2003) 3-item scale was applied to the sales context. Regarding the latter measure, other scholars have used this 3-item scale in additional sales research studies (e.g., Mulki, Jaramillo, & Marshall, 2007).

5.4.3 Buyer-Specific Variable

5.4.3.1 Buyer Mediator: Buyer Trust in Salesperson

Buyer's trust in a salesperson was captured using a 3-item measure of Palmatier et al. (2008), based on earlier work of De Wulf, Odekerken-Schröder, & Iacobucci (2001). This scale has been employed in a similar B2B buyer-salesperson context.

5.4.4 Buying Decision

5.4.4.1 New Product Buying Decision: Accept/Reject Decision

New product buying decisions were measured by a dichotomous measure (yes/no) in order to report on retail buyers' new product selections. This is consistent with other studies in the B2B research domain examining retail buyers acceptance decisions of new products (e.g., Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000).

5.4.5 Controls

5.4.5.1 Product: Product Dependence

Product dependence was measured using a 3-item scale of Palmatier et al. (2008), based on earlier work from Kumar, Scheer, and Steenkamp (1995). This scale has originally been developed for a similar B2B buyer-salesperson context.

5.4.5.2 Product: Product Importance

The measure employed to evaluate product importance was a 4-item scale of Cannon and Homburg (2001), based on earlier work of Cannon and Perreault (1999). In both studies, this importance scale was operationalized in buyer-supplier specific contexts.

5.4.5.3 Retailer: Customer Firm Size

In order to measure customer firm size, organizational data was collected on retailers' number of employees, measured by a single question (for example, cf. Cadogan et al., 2005).

5.4.5.4 Relationship: Buyer-Salesperson Relationship Duration

In order to collect data on the buyer-salesperson relationship duration, a single question was employed asking buyers to report on how long they have known a particular salesperson. This is consistent with prior scholarly work collecting data on buyer-salesperson relationship duration in the B2B research domain (for example, cf. Palmatier et al., 2008).

5.4.5.5 Relationship: Buyer Relationship Orientation

Buyer relationship orientation was measured by a 5-item scale developed by Palmatier et al. (2008). This particular scale originates from a B2B buyer-salesperson context.

5.4.6 Characteristics of the Data Sample

In order to describe the characteristics of the data sample, several demographic and organizational variables were incorporated into the study's questionnaire. The following outlines these and provides some details on the employed questions.

5.4.6.1 Buyer Demographics (Gender, Age, Education, and Work Experience)

As retail buyers were chosen as respondents to the survey (as discussed earlier), the collection of data regarding demographic variables was mainly concerned with the characteristics of retail buyers.⁶ In particular, information was gathered on respondents' gender, age, education, and work experience. Gender and age of buyers were collected by simply asking informants to 'tick' their gender (male or female) and provide their age (number of years). Information on buyers' education was gathered by asking respondents to 'tick' their highest educational qualification (ranging from 'partial high school' to 'postgraduate degree'; an 'other' option was also provided, giving informants the possibility to write down a different qualification than offered in the list, if appropriate). Data on retail buyers' work experience was collected in four ways; respondents were asked to provide information on their work experience in the retail industry, in buying throughout their career, for their current organization, and in their current job as a buyer (all measured in years).

5.4.6.2 Retailer Characteristics (Annual Sales, Number of Employees, and Number of Buyers)

Organization-specific data was inquired regarding companies' annual sales (in U.S. \$), number of employees (also see customer firm size), and number of buyers - each measured by a single question.

5.5 Form of Response

The operationalization of the constructs and variables also implied that choices had to be made concerning the form of response for each measure. All in all, the present questionnaire contains a number of different response forms of which each was selected for a particular reason (as discussed herein). Nevertheless, for most of the scales a

⁶ Additionally, data was collected on two salesperson attributes, that is, salesperson gender and type/employment status of salesperson (e.g., manufacturer-employed, distributor-employed, etc.).

closed-ended format was employed, with the majority of these measures utilizing seven-point Likert-type scales, anchored by '*strongly disagree*' ('1') and '*strongly agree*' ('7').⁷ The main reason for this choice was that many of the used measures had been previously successfully employed as Likert-type rating scales. Examples include such as the previously published measures of Agnihotri, Rapp, and Trainor (2009), Bagozzi, Verbeke, and Gavino (2003), Bradford, Crant, and Phillips (2009), and Palmatier et al. (2008), among others. However, in cases where a different response format had originally been utilized for a scale (i.e. other than Likert-type rating scales), the initial form of response was maintained. In particular, closed-ended scales that followed a different response format included the measure for product importance (semantic differential scale scored 1, 2, 3, 4, 5, 6, 7) and the new product accept/reject decision (dichotomous, yes/no response).

In general, besides the wide-spread use of closed-ended scales (especially Likert-type scales), a clear advantage exists when employing such measures. As this response format tends to reduce the time required by participants to complete a questionnaire - as compared to open-ended questions - chances are higher that respondents may be more willing to complete a questionnaire, and ultimately, this may actually lead to an improved response rate. Nevertheless, despite this advantage, a number of measures were employed as open-ended questions, mainly due to two reasons. First, data on some of the employed measures has been consistently collected in this manner (see earlier discussion on 'employed measures' for some examples of prior work). Second, a variable such as time, for instance, is by its nature a ratio variable (cf. Churchill, 1999; Iacobucci & Churchill, 2010; Lee & Lings, 2008), and measuring it by an open question provided the benefit of a higher level of measurement - as compared to employing an ordinal measure through the utilization of categories.⁸ Furthermore, besides the previously stated reasons, the relevant open-ended questions did not appear to pose a high degree of difficulty on the respondents. In particular, data was collected via the use of open-ended questions for the measures of customer firm size (number of employees) and buyer-salesperson relationship duration (number of years). In addition, many of the demographic and organizational variables were also measured by the use of open

⁷ It is appreciated that a debate exists in the social sciences whether data resulting from the utilization of itemized rating scales (e.g., Likert-type scales) is to be treated as ordinal or interval (cf. Churchill, 1999; Iacobucci & Churchill, 2010). Although a detailed discussion on this matter goes beyond the scope of the present study, at this point it should be noted that in many research domains (including marketing research and sales-oriented scholarly work), Likert-type and other itemized scales are employed as interval (cf. Lee & Lings, 2008). Primarily, this is due to the fact that a mean can be taken on interval data which enables researchers to run more powerful statistical analyses on the collected data.

⁸ In general, measures can be classified into four main levels of measurement: nominal, ordinal, interval, and ratio, with 'nominal' representing the lowest and 'ratio' the highest measurement level (e.g., Churchill, 1999; Iacobucci & Churchill, 2010; Lee & Lings, 2008).

questions, including buyers' age and work experience (both, measured in number of years), as well as retailers' annual sales (in U.S. \$), number of employees, and number of buyers. Merely the variables of buyers' gender and education were measured by dichotomous and multichotomous measures respectively (cf. Iacobucci & Churchill, 2010).

5.6 Physical Questionnaire Design

The physical design of the data collection instrument is another important step in the instrument development process for the collection of high quality data (cf. Lee & Lings, 2008). The following sections will discuss some general design considerations, the questionnaire structure, and some other physical characteristics of the instrument. The preliminary questionnaire is presented in Appendix 1.2.

5.6.1 General Design Considerations

Although there are no universal 'rules' or 'principles' on how to design the physical characteristics of a questionnaire, some important guidelines and considerations have been suggested (e.g., Dillman, 2007). A number of recommendations have been made regarding important issues that may affect respondents' cooperation, and hence, the potential response rate for a questionnaire-based study. In particular, questionnaire length, a logical structure, the order of items/questions, and a professional appearance have been deemed to be critical variables when designing questionnaires (cf. Churchill, 1999; Dillman, 2007; Iacobucci & Churchill, 2010; Lee & Lings, 2008). For example, it has been suggested that shorter questionnaires have higher chances of being completed by participants than longer ones. In addition, the questionnaire design should be based on a division of logical subsections that organizes questions according to topics.⁹ Also, the sequence of the subsections, as well as the items/questions within these subsections, plays an important role. For instance, one should arrange items/questions based on considerations of importance, sensitivity, and the like. Introductory items/questions are crucial as they can have a strong impact on whether a participant will actually complete the questionnaire. It has been suggested to keep more personal or difficult items/questions towards the end of a questionnaire, yet, for the research study important constructs and variables reasonably close to the beginning. Furthermore, a

⁹ It is appreciated that one could argue for another viewpoint. One could maintain to 'mix up' topics and questions on purpose in order to avoid that respondents "get lazy", which may result in respondents being less attentive when reading questions (Lee & Lings, 2008, p.280). However, after careful consideration of this view, it was decided to organize the questionnaire in logical sections as often proposed in extant literature (cf. Churchill, 1999; Dillman, 2007; Lee & Lings, 2008). In particular this literature suggests that, grouping questions according to topics has clear advantages, among which are helping informants to focus on one specific theme at a time, avoiding respondents' confusion when completing a questionnaire, and limiting informants' effort to provide a reasoned answer.

questionnaire's clear and easy to follow structure should also be reflected by its professional design. The data collection instrument has to 'look' like it is being used for an official research study, and its physical layout (e.g., paper size and quality, formatting, color printing, etc.) needs to be chosen with care.

With respect to the present study, general design considerations also played an important role in the development of the questionnaire. After careful investigation, questionnaire length did not seem to pose a major 'problem' for the current research. As shown in Appendix 1.2., the preliminary questionnaire was composed of a total of eight pages (including front cover page, 'thank you/contact details' page, and back cover page) of which respondents would be filling-in an actual number of five pages that comprised the items/questions to be completed or answered respectively.¹⁰ As the actual completion time per questionnaire was approximated to be at most 15-20 min, the questionnaire length was deemed to be reasonable. Next, the focus of design considerations was directed towards a logical structure, the sequence of the items/questions, and a professional appearance (i.e. 'look and feel') of the questionnaire. These deliberations are discussed in the following sections.

5.6.2 Questionnaire Structure and Sequence of Items/Questions

Based on the previously discussed suggestions in extant literature, the present questionnaire was divided into four main sections. Section 1 was labeled "Your Purchase Decision and Intentions". This section included the measure of the new product buying decision (*accept/reject decision*). It seemed that this question was straight forward and easy to answer, especially since this first question regarding buyers' actual purchase decisions only required a dichotomous yes/no answer. Furthermore, the collection of data on this key dependent variable (actual new product buying decision) was important and supported the choice to ask this question at the beginning of the questionnaire.

Section 2 was entitled "Your Supplier Firm's Offering" and structured into five subsections. It contained the measures regarding the product-focused variables (*product features, market demand, and marketing strategy characteristics*) and two control variables (*product*). Further to this, a question on the *product category* of the evaluated product and a buyer's business dealings with the supplier (*relationship duration with*

¹⁰ As stated earlier, the preliminary and final questionnaire contained some additional measures not investigated in the present study's conceptual framework. These measurement scales are included in the five pages to be completed by respondents, but excluded from the subsequent description of the questionnaire structure and sequence of items/questions. In addition, it should be noted that the final questionnaire had the exact same number of pages as the preliminary version.

supplier firm) were included in this section.¹¹ Since the evaluations regarding the 'product offering' were naturally in line with the new product buying decision in section 1, it seemed appropriate to place these items and questions in section two of the questionnaire. The scales employed to measure the different constructs/variables were clearly presented at the beginning and throughout this section, due to their importance.

Section 3 was comprised of two subsections and concerned with the salesperson-specific activities (*salesperson relationship-building activities*) measured in the present study. It was labeled "Your Salesperson's Activities" and contained the scale of *salesperson helping behavior*, followed by the *salesperson consultation* measure. Each item employed for these two measures clearly referenced the salesperson as the focal party. Based on the relevance of the salesperson relationship-building activities for the present research, it was deemed critical to measure the two respective constructs immediately after the product offering evaluations, rather than at the end of the questionnaire. In cases where respondents may not finish the entire questionnaire, chances would be higher to have at least data available with regard to the most important constructs and variables.

Section 4 was entitled "You and Your Salesperson" and was split into two subsections. It included the measures of the buyer-specific variable (*buyer trust in salesperson*), as well as a control variable (*buyer-salesperson relationship duration*). Perhaps the main reason for placing these items towards the end of the questionnaire was that they were considered to be less important than the examined salesperson relationship-building activities. Further to this, section 3 already focuses respondents' minds on salesperson-related topics, hence, it was expected that section 4 would be easier for participants to complete after an evaluation of the investigated salesperson activities.

Next, it has been suggested to place questions on demographics reasonably close to the end of a questionnaire (cf. Churchill, 1999; Lee & Lings, 2008), as they are more sensitive and personal, or require specific company-related knowledge respectively, which may lead to respondents' unwillingness to answer them if they were presented at the beginning of a questionnaire. In the present study, however, information on both retail buyer demographic characteristics (*age, gender, education, and work experience*) and organizational variables (*annual sales, number of employees, and number of buyers*) was collected through the utilization of two separate data collection sheets (also

¹¹ Although not part of the conceptual framework, these two items were included for the purpose of later performed descriptive and post hoc analyses.

see Appendix 1.2). This was due to the specific data collection procedure employed in this research, outlined in detail at a later stage of this Chapter (see 'questionnaire pretest' and 'main data collection and sample' sections for more information).¹²

In order to assist respondents in completing the questionnaire, a number of strategies have been employed. First, respondents were supplied with an instruction letter "Instructions for Completing Questionnaires" (see Appendix 1.3) that explained how to fill out the questionnaire. Next, the data collection instrument itself started with a short introduction, setting the context for the questionnaire. Furthermore, much attention was paid to clearly indicating the separate sections of the instrument by referencing each with an appropriate header (and sub-headers). Finally, throughout the questionnaire the relevant scales were depicted at the beginning of each section (and subsection, where appropriate), alongside with guidelines on how to use them.

5.6.3 'Look and Feel' of the Questionnaire

When determining the actual physical appearance of a questionnaire, a vertical booklet format has been suggested to be the preferred choice (Dillman, 2007). Since in many Western societies a booklet represents a common reading format (i.e. page height exceeds page width), it is "handled more or less automatically and usually without error" (Dillman, 2007, p.82). As previously mentioned, the preliminary (and final) questionnaire was composed of a total of eight pages (including front cover page, 'thank you/contact details' page, and back cover page), and hence, was well suited for the utilization of a booklet format, leading to two sheets per questionnaire (printing two pages per sheet and double-sided). This particular questionnaire design was deemed to be appealing to potential respondents, not least to the fact that the questionnaire 'looked' rather short.

Furthermore, standard A4 paper was used for the physical layout, folded to A5 booklet format, and stapled twice along the spine to reflect a professional appearance. None of the previously prepared questionnaire pages was reduced in size to 'fit' this format, nor was the font size or space on each page adapted subsequently. Much attention had been directed towards the initial preparation of questionnaire pages, including considerations on sufficiently large font size and space to complete the relevant scales

¹² Although the specific data collection procedure used in the present research is explained in detail at a later stage, at this point it is noteworthy that each participating buyer could complete multiple questionnaires (under the restriction that each new product [and the corresponding supplier firm] and salesperson could only be evaluated once during the data collection period), as the unit of analysis for the current research was the new product selection decision (for example, cf. Kaufman, Jayachandran, & Rose, 2006; White, Troy, & Gerlich, 2000). As information on buyer demographics was only to be collected once per respondent and organizational characteristics only once per participating firm, it was appropriate to collect demographic information via two separate data collection sheets.

and questions. In order to underscore the professional appearance of the booklet, color printing was used.

5.7 Questionnaire Pretest

Extant literature suggests that it is crucial to pretest the questionnaire before commencement of the main data collection procedure (e.g., Iacobucci & Churchill, 2010; Lee & Lings, 2008), as it generates important “feedback that is not likely to come from other methods in a timely way” (Dillman, 2007, p.140). Principally, the objective of pretesting the data collection instrument is to examine how it performs and to get an indication regarding the potential response rate for the main data collection process. In consideration of a reasonable timeframe and adequate monetary expenses, the pretesting process of the present study was characterized by three main stages: review by academic peers, personal interviews (‘protocol’ interviews), and a small-scale pilot study (cf. Dillman, 2007; Lee & Lings, 2008). The subsequent sections discuss this pretesting procedure.

5.7.1 Review by Academic Peers

It has been recommended that the first stage in pretesting a questionnaire should be a peer-review (Dillman, 2007). In the present case, detailed comments were sought from two marketing/sales research experts (Prof. Nick Lee and Dr. John Rudd). Specifically, these colleagues provided valuable feedback on the comprehensiveness/completeness of the questionnaire, suggested improvements regarding particular items and questions (e.g., wording), and commented on the overall structure of the data collection instrument. On the basis of the received feedback, a number of minor modifications were made to the questionnaire. For example, a few items and questions were slightly rephrased to ensure an improved ‘fit’ with the study’s context. Also, some minor adjustments were made to the layout, such as adding ‘guiding arrows’ at appropriate places to improve the ease of completing questionnaires. Finally, a short introduction at the top of the data collection instrument was added to reinforce the goals of the questionnaire.

5.7.2 Personal Interviews (‘Protocol’ Interviews)

After the peer-review process and the thereof resulting minor adjustments to the questionnaire, the focus was directed towards the conduction of personal interviews - also referred to as ‘protocol’ interviews (cf. Lee & Lings, 2008). The central objective of protocol interviews is to receive feedback on the data collection instrument by observing participants complete the questionnaire and obtaining comments from them as they advance through the instrument. In essence, protocols could be regarded as a first test in

the field with the major aim of further improving the actual questionnaire, rather than identifying any potential problems concerning the employed administration method. Hence, personal interviews were conducted to obtain feedback on issues such as the clarity of items and questions, the sequence of items/questions, and the utilized answering formats (Dillman, 2007). In addition, observing respondents fill in the instrument reveals insights regarding the time it takes to complete a particular section or the questionnaire as a whole.

In the first step, protocol interviews were conducted with three MBA students at Aston Business School, U.K. Each of the participating respondents had considerable work experience in organizational buying (including retail buying). Based upon their comments and suggestions, several minor modifications were made to the data collection instrument. More specifically, slight adjustments were made to the wording of individual items and the clarity of answering items or questions (e.g., in some cases additional instructions have been added, such as “please tick” or “please estimate”). Furthermore, some key words were underlined to emphasize important words (e.g., in the case of the salesperson helping behavior scale). Besides these aforementioned improvements, none of the participants had specific difficulties understanding or answering individual items and questions. Also, questionnaire length did not appear to be of any concern, neither did the fact that the demographic variables were collected on separate data collection sheets. Finally, after the conducting of the protocols it was decided to add a small section to the front page of the data collection instrument, asking respondents to record the name of the first new product presented to them, the first name of the salesperson, and the name of the supplier firm. This would allow keeping records of evaluations, which was important as respondents were instructed to evaluate each new product (and the corresponding supplier firm) and salesperson only once during the entire data collection period. The revised questionnaire (including the two separate data collection sheets for buyer demographics and organizational characteristics) is shown in Appendix 1.4.

In the second step, two U.S. retail company owners, who have worked in the retail industry for 56 (46) years and had 45 (40) years of work experience in retail buying respectively, examined the instrument and provided feedback. No further modifications seemed necessary. Hence, the pretest moved on to the third stage, a small-scale pilot study utilizing the actual mode of administration (self-administered questionnaires). This pretest is discussed in the next section.

5.7.3 Small-Scale Pilot Study

Following Dillman's (2007) recommendations, stage three of the pretesting phase involves a small-scale pilot study - the last important pretesting procedure before commencement of the main data collection process (e.g., Iacobucci & Churchill, 2010; Lee & Lings, 2008). In particular, this step of the questionnaire pretest is mainly aimed at identifying any potential problems with (a) the mode of administration (self-administered questionnaires) and (b) respondents' task of actually completing the questionnaire. Furthermore, some first inferences can typically be drawn with regard to the likely response rate in the main data collection stage.

For the conducting of the pilot study, it was decided to carry out a mail survey (here, survey packages were personally 'handed over' to potential respondents by the researcher and mailed back to the U.K. by participants) through the utilization of personal contacts in the U.S.A., rather than a mail survey method using a U.S. mailing list. The reason for this choice was mainly driven by the following issues. As mentioned at an earlier point, access had already been gained to U.S.-based retailers after the completion of the exploratory study (Chapter 3). This also offered the possibility to conduct protocol interviews with U.S. retail buyers prior to the commencement of the pilot study. This part of the pretesting process was deemed important because U.S. retail buyers of 'brick-and-mortar' (store-based) retailers represented the target population for the present study. As protocol interviews (as compared to telephone interviews) require the researcher to be present in order to observe participants complete the questionnaire (including the receiving of prompt feedback and discussion with respondents), this step in the pretest procedure required a lot of resources (e.g., time, traveling, and other monetary expenses). Hence, it was decided to also utilize the time spent in the U.S.A. to commence the pilot study in the field (i.e. 'drop-off' survey packages to respondents who had to mail them back to the U.K. after completion).

In effect, the only difference concerning the mode of administration of the pilot study - as compared to the utilization of a mail survey via a mailing list in the main data collection phase - was that the survey packages were delivered to participants in person (instead of being mailed out). Whereas it is appreciated that this minor difference exists, it is most important to emphasize that any other detail regarding the execution of the pilot study was precisely the same as in the main data collection stage (e.g., the questionnaires, instruction letter, prepaid return envelope, the mailing of the return envelopes to the U.K., etc.) (also see Churchill, 1999, for a discussion on mail survey administration

variations).¹³ Consequently, both approaches could generate the same type of data that were required for the present study.

By means of personal contacts, it was possible to gain direct access to buyers working for store-based retailers in the North-West of the U.S.A. A total of nine organizations were contacted of which eight agreed to participate in the study. The company that refused to take part in the research reasoned that they had no time and were too busy. Of the eight organizations contributing to the study, a total of 20 retail buyers agreed to complete questionnaires. Usually, retail buyers are allocated to one (sometimes several) product categories. For the purposes of the present study, buyers for the non-perishable retail categories (excludes perishable product categories such as fish, meat, or bakery produce, etc found at food grocers, for example) were selected.¹⁴ All participants confirmed that they make buying decisions independently. The survey packages were delivered in person to the respective buyers, apart from one case (i.e. one organization) in which management demanded to be briefed about the study, viewed the questionnaire packages, and promised to pass these on to three of their buyers. However, in all instances participants mailed back their responses personally in order to ensure anonymity and confidentiality.

Each survey package that was handed over to participating buyers included (a) five questionnaires, (b) one separate buyer demographics data collection page, (c) one separate organizational characteristics data collection page, (d) an instruction letter, and (e) a prepaid return envelope (with 'real' stamps). As mentioned earlier, because the research materials were 'dropped-off' and the study could be introduced in person, no additional cover letter was needed at this stage of the research process.¹⁵ In order to encourage participation and minimize potential response bias, each participant was assured of their anonymity and confidentiality through personal communication as well as the provided instruction letter (Appendix 1.3).

¹³ Of course, 'dropping-off' the survey packs offered the chance to introduce the study in person as well as reassure participants of confidentiality and anonymity. However, this did not influence the actual administration method, i.e. self-administered questionnaires.

¹⁴ Although some of the previous new product acceptance studies do not make a distinction between the *perishables* and *non-perishables* product category (e.g., Gerlich, Walters, & Heil, 1994; White, Troy, & Gerlich, 2000), others have distinguished between these categories (for example, cf. Kaufman, Jayachandran, & Rose, 2006, non-perishables product category). In line with the latter stream of work, as well as considerations regarding the interpretations of the present study's results, the focus of this work is on the non-perishable product category.

¹⁵ An exception had to be made to the procedure in one case as management requested to be briefed before commencement of the data collection (as detailed above) and agreed to only one questionnaire per package.

Since for the present study the unit of analysis is the *new product buying decision* made by individual retail buyers, every respondent could complete multiple questionnaires. Importantly, however, each new product (and the corresponding supplier firm) and salesperson could only be evaluated once during the entire data collection process. Further to this, retail buyers were instructed to complete questionnaires promptly after sales calls (i.e. buyer-salesperson meetings), reporting on the first new product which had been offered to them by the respective salesperson. Consequently, one buyer-salesperson meeting could be used by respondents to complete one questionnaire. To facilitate the minimization of carry-over effects from evaluation to evaluation, two versions of the same questionnaire were crafted by arranging the item sequence on the questionnaires in two different ways (see Appendix 1.4 for version one of the questionnaire), and included in each survey package provided to respondents. At this point, it should be noted that this data collection method - as described above - seems to be well accepted in the extant retail buying literature investigating new product acceptance decisions (e.g., see Gerlich, Walters, & Heil, 1994; Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). As a result of the above detailed process, a total of 88 questionnaires (i.e. $(17 \times 5) + (3 \times 1)$) were handed out to the 20 respective retail buyers.

5.7.4 Response to the Small-Scale Pilot Study

With the aim of encouraging and motivating participants to respond, incentives were offered and follow-up contacts established. In particular, a prize draw for four restaurant vouchers was provided and repeat contacts were carried out via telephone and/or email (where possible) in an attempt to increase the response rate. This approach led to 41 returned and fully useable questionnaires (including the appropriate number of accompanying separate data collection sheets on buyer demographics and organizational characteristics). Importantly, each new product (and respective supplier firm) as well as salesperson was only evaluated once. Furthermore, all of the evaluated new products belonged to the product category of non-perishable merchandise. Based on the 88 questionnaires administered (handed out) during the pilot study, the response rate based on numbers of completed questionnaires is 46.6% (i.e. $(41 \div 88) \times 100$). However, at this point it needs to be noted that this response rate differs from the actual rate of response based on buyer participation. Since 13 out of the 20 retail buyers returned completed questionnaires, the response rate based on actual buyer participation is 65.0% (i.e. $(13 \div 20) \times 100$). Furthermore, it is important to mention that the number of completed questionnaires per respondent ranged from one to five, with only

four buyers who actually filled in five surveys. The average for returned questionnaires per participant is 3 (i.e. $41 \div 13 = 3.2$).

The analysis of the response to the small-scale pilot study has led to the following conclusions and considerations for the main data collection stage. First, taking into account that the questionnaires were 'dropped-off', providing the opportunity to introduce the study in person (as well as reassure participants of confidentiality and anonymity), the rate of actual participation and returned questionnaires was considerably high. Although these results have demonstrated that practitioners show interest in the work, achieving comparable response rates for a mail survey utilizing a U.S. mailing list (main data collection phase) appears too optimistic. Next, an investigation of the non-respondents has revealed that three of the seven participants who did not return any questionnaire(s) were the buyers who could only be approached via management. Hence, it seems crucial for the main data collection procedure to only contact retail buyers directly. Finally, the number of questionnaires administered to respondents is worth reconsideration. It appears that the inclusion of five questionnaires per survey package has been rather overconfident in that participants tend not to be willing to complete as many. In fact, if the administered packages contain too many questionnaires it may even lead to non-participation of potential respondents due to the anticipated time and effort needed to complete them. In view of the above points, the pilot study has highlighted some considerations which should be incorporated into the design of the main data collection process. The subsequent section will discuss this main data generation procedure.

5.8 Main Data Collection and Sample

As briefly mentioned at an earlier point, for the purposes of the main data collection process a mail survey via a mailing list was employed. The use of personal contacts (and a 'drop-off' approach) was not deemed possible, given the intended sample size for the present study. Nevertheless, as a result of the previously conducted pilot study, a few important considerations were taken into account regarding the actual main data collection process. In particular, the decision was made to reduce the number of questionnaires per survey package to three, yet still keeping the data collection method consistent by retaining the option for respondents to complete multiple questionnaires. Especially in view of participants' limited willingness to complete as many as five and the utilization of a mailing list (no personal contacts could be established prior to the commencement of the data collection as access was restricted to mailing addresses) had raised concerns regarding a more reasonable number of questionnaires per

administered survey package. The average for returned questionnaires per respondent of 3 (i.e. $41 \div 13 = 3.2$) in the pilot study was deemed to provide a good guidance in this matter.

Also, additional considerations were incorporated with respect to the actual 'mail out' of the questionnaires. Specifically, it was decided to mail survey packages directly to retail buyers *only*. This was deemed important as attempts to administer questionnaires via management had been unsuccessful during the pilot. Further to this, it was reasonable to expect a considerably lower response rate to the 'mail out' survey than for the 'drop-off' survey. Hence, an appropriate sample size of larger scale had to be determined. Finally, the mail out of the questionnaires required the preparation and use of a personalized cover letter in order to introduce the purpose of the study as well as ask for retail buyers' participation. This cover letter is presented in Appendix 1.5.

Next to the above considerations for/modifications to the main data generation procedure, it also needs to be noted that *no* changes were deemed necessary regarding the actual data collection instrument, i.e. the questionnaire (including version one and two) as well as the two separate sheets for buyer demographics and organizational characteristics. In particular, respondents correctly filled in all of the scales and provided the required demographic and organizational information. Therefore, all of the measures employed in the pilot study remained exactly the same, which made it possible to combine the data obtained from the pilot with the data generated during the main data collection process in order to facilitate an increase in the overall sample size at a later stage (for example, cf. Morgan & Hunt, 1994; Rauyruen & Miller, 2007).

Furthermore, the size and layout of the questionnaire seemed to be appealing - both in terms of 'looks' and length. Also, no problems emerged during the pilot study with respect to the employed instruction letter and thus, it was decided to utilize the same instructions in the main data collection phase. Subsequent to all the discussed considerations, the preparation of the survey packages commenced, including the printing of the questionnaires, instruction letters, and so forth.

5.8.1 Sample Frame Selection

The choice of an appropriate sampling frame was guided by a number of different factors, including considerations based on previous research efforts, i.e. the literature review (Chapter 2), exploratory study (Chapter 3), and the questionnaire pretest stages (as described in the present Chapter). As a point of departure, in order to continue to be

consistent throughout the research project, a sample of U.S. retail buyers had to be drawn for the main data collection phase similar to the samples employed in the exploratory study (Chapter 3) and the pilot study (see above). In this regard, the 'ideal scenario' or 'gold standard' would be to generate a probability sample from the target population (Lee & Lings, 2008). In the present case, the target population would be all U.S. retail buyers working for store-based retailers (rather than online retailers), who make buying decisions independently (rather than within a committee-based decision structure) and purchase non-perishable merchandise. However, as it has been virtually impossible to accurately determine the overall population of this specific group of retail buyers in the U.S.A. (let alone actual contact details), drawing a probability sample was unfeasible. Therefore, a convenience sample was generated - a non-probability sample very commonly employed in the social sciences (Lee & Lings, 2008).

With the aim of drawing an appropriate sample for the purposes of the present study, a large U.S.-based association for professionals working in the field of supply management was contacted and access to its database obtained. In order to conduct a nationwide survey, a random sample of 1,500 U.S. retail buyers was generated from the institute's database.¹⁶ Only purchasing professionals from the retail industry were selected (Standard Industrial Classification codes 530 [general merchandise stores] and 590 [miscellaneous retail]). All seniority-levels were included in the sample (e.g., Director of Purchasing, Purchasing Manager, Senior Buyer, Purchasing Agent, and the like). However, based on the primary job title, 77 undesired contacts (e.g., Operations Analyst) were excluded prior to the generation of the random sample due to considerable concerns about their suitability for the present study (i.e. concerns about their direct retail buying responsibilities and knowledge).¹⁷ The actual sample size of 1,500 purchasing professionals was determined based on considerations derived from previous research works as well as the pilot study. In particular, prior scholarly research that has utilized databases of buying professionals for mail surveys was used as a *general* guidance in terms of a potential response rate. For example, Ulaga and Eggert (2006) report response rates of 22.4% and 21.3% (exploration and validation sample respectively), whereas Hansen and Riggle (2009) achieved a considerably lower response rate of 13.7% for their overall sample (web-based survey). Although these results are not specific to the present study, they certainly informed the current research, leading to a rather conservative/cautious expectation of a potential response rate of around 10%.

¹⁶ Retail buyers were selected by randomly assigned numbers via a random number generation process in Microsoft Office Excel 2007 (Microsoft Corp., 2007a).

¹⁷ The purging of mailing lists in order to exclude undesired contacts is not uncommon (see for example, Hansen & Riggle, 2009).

Therefore, with the aim of generating an appropriate dataset for the present work, and keeping in mind that 41 useable questionnaires had been collected during the pilot study, a sample size of 1,500 U.S. retail buyers seemed appropriate for the main data generation process.

5.8.2 Questionnaire Administration

Although the administration of the questionnaires during the main data collection stage was in general the same as in the pilot study, some modifications followed from the choice of a 'mail out' survey as well as the analysis of the response to the pilot study. In essence, each survey package contained (a) three questionnaires (included version 1 and 2 of the questionnaire to minimize carry-over effects), (b) one buyer demographics data collection sheet, (c) one organizational characteristics data collection sheet, (d) the instruction letter (see Appendix 1.3), (e) a prepaid return envelope, and (f) a personalized cover letter (forms of personalization: respondent's address, salutation, 'real' digital signature, and date - see Appendix 1.5). In order to manage the printing and matching of the personalized questionnaire pack elements, i.e. the cover letters and outgoing envelopes, the mail merge functionality in Microsoft Office Word 2007 (Microsoft Corp., 2007b) was utilized. Of the 1,500 prepared survey packages, each was then individually posted to the randomly selected buying professionals (the sample frame selection was already discussed in the previous section).

5.8.3 Methods Employed to Improve the Response Rate

An issue of potential concern in the use of mail surveys is the problem of non-response. In fact, Diamantopoulos and Schlegelmilch (1996, p.505, emphasis as in original text) state that "[U]ndoubtedly, the most serious problem of the mail questionnaire is that of *non-response*, as it has implications for both the quantity and quality of the data obtained." Besides the possibilities of estimating non-response bias (e.g., Armstrong & Overton, 1977), researchers have examined and suggested a variety of techniques which can be employed in the stages of survey design and implementation in order to minimize the number of non-responses (e.g., Diamantopoulos & Schlegelmilch, 1996; Dillman, 2007; Phillips & Phillips, 2004). For the present work, the "five needed elements for achieving high response rates" recommended by Dillman (2007, p.150) have been used as a central guideline. Table 5.2 below presents a general overview of these elements.

Table 5.2: Elements for Achieving High Response Rates

Element	Description
1	• Respondent-Friendly Questionnaire
2	• Multiple Contacts
3	• Prepaid Return Envelopes
4	• Personalization of Correspondence
5	• Token Prepaid Financial Incentives

Note: Based on Dillman (2007), Chapter 4, pp.149-193.

As discussed by Dillman (2007), all of the above five elements have been shown to improve response rates of mail surveys in some way. However, it appears that it is hard to judge which of them may be the most effective ones. Furthermore, taking into consideration that certain elements are quite resource intensive (e.g., money and time), it needed to be determined which of them would be feasible for employment within the bounds of the present Ph.D. dissertation. Nevertheless, attempts have been made to address all of the five elements (at least to some extent) in order to improve the response rate of the mail survey.

Firstly, a considerable amount of time has been dedicated towards the design of a respondent-friendly data collection instrument. In particular, the questionnaire contained clear questions/items which were arranged in a logical order, was fairly short (effectively, five A5 pages had to be completed by respondents), and the layout was characterized by a professional design (A5 booklet format; also see Section 5.6, 'Physical Questionnaire Design'). The two separate data collection pages (buyer demographics and organizational characteristics) were designed along similar guidelines. Furthermore, it was decided to contact respondents multiple times in an effort to increase the response rate. In particular, four mailing waves were used, i.e. (1) a questionnaire mailing, (2) reminder/thank you postcards (see Appendix 1.6), (3) first 'special contact' letters (see Appendix 1.7), and (4) second 'special contact' letters (see Appendix 1.8). All of these contacts made were via post as only mailing addresses were available (i.e. access to email addresses or telephone numbers was not granted by the association). Based on the chosen data collection method, which included the option for participants to complete multiple questionnaires, postcards were sent out three weeks after the initial questionnaire mailing, then the posting of the first 'special contact' letters followed about

one week after the postcards, and finally a wave of second 'special contact' letters were sent. In both, the questionnaire mailing and the 'special contact' letters respondents were assured of their anonymity and confidentiality. Next, prepaid return envelopes were also provided to respondents. However, for the present study 'International Business Reply' envelopes were used, rather than envelopes with 'real' stamps as recommended by Dillman (2007). The main reason for that was the large amount of financial resources required for the implementation of this recommendation. In addition, a lot of care was taken with regard to the personalization of correspondence. As previously discussed, personalized cover letters (each included four forms of personalization) were crafted and all mailings (i.e. the questionnaire mailing, postcards, and 'special contact' letters) were directly addressed to the participants. Finally, considerations with respect to incentive provision were made. Due to the high cost of using prepaid financial incentives (such as one dollar coins) to improve the response rate, a prize draw was utilized as incentive. Although deemed to be less effective than direct financial incentives, Dillman (2007, p.153) notes that "[O]thers, such as material incentives, might be considered when the far more powerful token financial incentives cannot be used." In view of this, a prize draw was offered to respondents for three vouchers of monetary value, redeemable at a chosen online retailer.

5.8.4 Response to Mail Survey

Despite the successful use of databases of buying professionals in previous studies (e.g., Hansen & Riggle, 2009; Ulaga & Eggert, 2006), unfortunately, the response to the mail survey of the present research work was extremely disappointing. First of all, the initial sample size of 1,500 (i.e. 1,500 buying professionals in the retail industry contacted) was substantially reduced due to 378 undeliverable mailings ('Return to Sender' - RTS), a rate of 25.2% (i.e. $(378 \div 1,500) \times 100$). Although comparable rates of undeliverable mail questionnaires have been reported for studies utilizing buying professionals in the U.S.A. (e.g., Brown et al., 1993), this high number was still considered rather surprising because of the reputable data source employed (i.e. parts of the association's database) to generate the mailing list. Further to this, an additional 13 contacts acknowledged via mail or e-mail that they could not participate in the research project because they were either not involved in retail buying activities, were already retired, had switched jobs, could not respond due to company policy, and similar. This further reduced the actual sample size to 1,109 (i.e. $1,500 - (378 + 13)$) and a contact rate of 73.9% (i.e. $(1,109 \div 1,500) \times 100$).

Next, the number of participating buyers was very low. Only a total of 22 retail buyers returned useable questionnaires, resulting in a response rate based on buyer participation of 2% (i.e. $(22 \div 1,111) \times 100$). Since five respondents completed multiple questionnaires (i.e. 3x3 and 2x2), the number of usable paper questionnaires was slightly higher than the number of participants and amounted to 30 (i.e. $(17 \times 1) + (3 \times 3) + (2 \times 2) = 30$). The total of 30 questionnaires excludes five questionnaires filled in by three respondents (i.e. $1 \times 3 + 2 \times 1$) who reported that they were already retired or had switched jobs.¹⁸ Given that each survey pack included three questionnaires, the effective response rate based on the number of mailed out questionnaires was 0.9% (i.e. $(30 \div 3,333) \times 100$). It is stressed at this point, that this extremely low response rate was obtained despite the different methods employed to improve the response rate (see Section 5.8.3) and the attempt to encourage participation via e-mail, if preferred by contacts (see second 'special contact' letter, Appendix 1.8). Also, the response outcome was especially disappointing considering the onerous application process that had to be gone through in order to attain access to the institute's database, and of course, the time and monetary resources spent to conduct this mail survey.

Interestingly, e-mails were received from the participating retail buyers either confirming the mailing of their completed questionnaire(s) and/or commenting on their general interest in the study. Since only access to mail addresses of the association's database was granted, these e-mails represented an opportunity to follow up with respondents. Attempts to achieve a higher response rate (based on number of questionnaires) by asking those respondents who only completed one questionnaire to fill in additional questionnaires, however, were unsuccessful. Nevertheless, it could be confirmed that participants work for store-based retailers in the U.S.A. and that they make their retail buying decisions independently (rather than within a committee). At this point, this was deemed important information, especially due to growing concerns about the appropriateness of the provided database (e.g., concerns regarding incorrect classifications of buyers into the retail industry category, outdated job functions, outdated contact details, etc). In addition, checks of the 30 completed questionnaires revealed that they had been filled in correctly; each new product (and respective supplier firm) as well as each salesperson was only evaluated once. All completed questionnaires had been filled in for new products belonging to the non-perishable product category.

¹⁸ These three respondents were already excluded from the actual sample size and included in the 13 contacts that had to be excluded from further considerations (as discussed previously).

Although the 30 questionnaires were consistent with the study's objectives and suitable for later data analysis, it was also clear that more data was necessary for the purposes of the present work. Combining the data resulting from the pilot study (41 cases) with the 30 cases obtained from the mail survey, led to a preliminary overall sample size of 71 cases - not sufficient to test the study's hypotheses. Hence, additional data collection efforts had to be undertaken in order to generate an adequate sample size. This data collection process is discussed in the following sections.

5.8.5 Web-Based Survey

In order to generate a sufficient sample size for the present study, the different available administration methods suitable for cross-sectional survey designs were revisited (see Section 5.2.4 for the discussion on 'Choice of Administration Method'). It was decided to proceed with further data collection efforts by means of a web-based survey. First and foremost, a web-based survey was suitable and consistent with the research aims (see Section 5.2.4 for reasons). Second, the central motive behind the initial decision to select a mail survey (over a web-based survey) was the appropriate utilization of the pilot study sample (access to retailers had already been negotiated; some of these retailers were of smaller size and adequate internet access could not necessarily be guaranteed for all retail buyers). Third, after the conduction of the mail survey, time and monetary resources were further factors to be considered. Since web-based surveys have generally quick turnaround times and require considerably low monetary expenses (Iacobucci & Churchill, 2010), the use of a web-based survey to collect additional data was not only appropriate, but also appealing.

The choice of a web-based survey entailed a number of deliberations regarding the overall data collection process. Especially, it was important to keep central criteria of the data generation procedure consistent with the pilot study and the mail survey. First, based on previous considerations, the option was retained for participants to complete multiple questionnaires - a maximum of three questionnaires per respondent, the same number as in the mail survey (more details are provided in Section 5.8.5.2 'Questionnaire Administration'). Next, in line with the approach taken in the mail survey, retail buyers were only contacted directly. Furthermore, as web-based surveys may result in considerably low response rates (e.g., see Hansen & Riggle, 2009, 13.7%), it appeared to be critical to determine a sample size of large scale (similar to or larger than the mail survey sample).

In addition to the above deliberations, a number of other factors had to be considered with respect to the data collection instrument. In particular, an online version of the survey had to be produced (Appendix 1.9). Great effort was dedicated towards keeping the design (such as colors, appearance, etc.) as similar to the paper-based version as possible. The web-based survey seemed to be appealing in ‘length’, and navigation through the survey was rather easy (mainly ‘ticking’ circles). Importantly, all of the employed measures (scales, questions, etc.) for the relevant constructs/variables and demographic data were *exactly* the same as in the pilot study and the mail survey, which ensured the consistent generation of the same type of data and permitted the combining of the data from the pilot study with the data from the main data collection process at a later stage (e.g., cf. Morgan & Hunt, 1994; Rauyruen & Miller, 2007). Also, the division of the survey sections was the same as in the paper version and respondents were provided with adequate ‘instructions’ on how to complete the questionnaire at the beginning of the survey. In order to minimize ‘carry-over’ effects for cases where respondents completed multiple questionnaires, a version 1 and 2 of the web-based questionnaire were produced.¹⁹

Due to the nature of a web-based survey, some minor modifications to the instrument were necessary. First, an additional question was added to the survey in order to direct respondents to version 1 or version 2 of the questionnaire (Survey page 3). Next, the questions on buyer demographics and organizational characteristics were asked at the end of the survey (replacing the two separate data collection sheets of the paper-based version). Finally, the decision was made to include four additional questions in the survey (Survey page 2) in order to ensure that respondents indeed (a) work in the U.S.A., (b) work for a store-based retailer, (c) work in retail buying, and (d) make their retail buying decisions independently (also see Section 5.8.5.1 ‘Sample Frame Selection’). Overall, these adjustments to the data collection instrument resulted in a total questionnaire length of 11 pages (screen pages).

5.8.5.1 Sample Frame Selection

A list of contacts generated from special member groups of a large professional online network (registered members only network) was used to collect additional data. Just as the pilot and mail surveys, the web-based survey had to be in line with the aims of the study, of course. Importantly, the actual sample frame selection for the web-based

¹⁹ Respondents were directed to version 1 or version 2 at the beginning of the questionnaire (Survey page 3). In order to check how many respondents completed multiple questionnaires, data on “Collector IDs” (Link IDs), “IP Addresses”, and personal notifications by respondents were matched. In some cases data on demographics could be compared too (where provided more than once).

survey had to be consistent with a number of key selection criteria for respondents. These are summarized in Table 5.3 below.

Table 5.3: Key Considerations for Selection of Respondents

Key Criteria	<i>Interviews</i>	Pilot Contacts (Paper-Based Survey)	Mail Contacts (Paper-Based Survey)	Online Contacts (Web-Based Survey)
Work in the USA?	✓	✓	✓	✓
Work for a store-based retailer?	✓	✓	✓	✓
Work in retail buying?	✓	✓	✓	✓
Make retail buying decisions independently?	✓	✓	✓	✓

These key considerations ensured consistency throughout the data generation process and guided the selection of the sample frame - also for the web-based survey. Although the description of the target population for the present study has been discussed before and will not be repeated at this point, it is critical to mention that respondents needed to fulfill the four criteria presented in Table 5.3 above.

The same general approach was taken towards the sample generation procedure as for the mail survey, that is, a convenience sample (non-probability sample) was drawn for the web-based survey. Convenience samples are commonly utilized and widely accepted in the social sciences if probability samples are unattainable (as previously explained for the present study) (e.g., Lee & Lings, 2008). In particular, for the conduction of a nationwide survey, a list of 2,890 buyers from the U.S. retail industry was generated from 67 special interest member groups of the professional online network.²⁰ Contacts were selected based on their job title (e.g., Retail Buyer, Buyer, Retail Merchant, Merchant, etc.), including all seniority-levels (e.g., Senior Buyer or Merchandising Manager). A total of 2,100 retail buyers were randomly selected (and subsequently contacted). Based on earlier considerations regarding potential low response rates for web-based surveys, the decision was made to utilize a larger number of contacts for the web-based survey (in comparison to the random sample of 1,500 for

²⁰ In order to gain access to most of these professional groups, membership had to be permitted by the group owners/moderators.

the paper-based survey) in order to attain a sufficient number of useable responses (keeping in mind that a total of 71 cases had been obtained through the pilot study and the mail survey).

5.8.5.2 Questionnaire Administration

Since a web-based survey was employed, the administration of the online questionnaires differed from the one used for the paper-based version. Specifically, the contacts were sent invitations to participate in the present research study via a 'Send Message' option, which allows members of a specific group to contact other members of the same group. As in the case of any standard e-mail or letter, this function allows the use of a subject line and a text box (main text). Appendix 1.10 presents the initial invitation sent to each of the contacts, which introduced the research project and asked for retail buyers' participation. All invitations included a link to the web-based survey (link form: https://www.name_survey_website_provider.com/collector_extention).

5.8.5.3 Methods Employed to Improve the Response Rate

In accordance with the guidelines followed for the mail survey, Dillman's (2007) suggestions for the improvement of response rates were revisited for the web-based survey (also see Table 5.2, Section 5.8.3). Particularly, three methods were utilized in an attempt to increase the response to the survey, that is, efforts were undertaken to (a) craft a respondent-friendly questionnaire (i.e. design and easy navigation), (b) personalize the messages (invitations) sent to buyers by means of using contacts' names, and (c) approach buyers multiple times (see Appendix 1.10 to 1.12 for initial invitation and two reminder messages). However, due to the nature of the online survey 'prepaid return envelopes' were not applicable. Furthermore, since it was not possible to match individual responses to names (only to "Collector IDs" (Link IDs) and "IP Addresses"), it was also not possible to employ an incentive strategy (e.g., offering a prize draw).

5.8.6 Response to Web-Based Survey

The response to the web-based survey resulted in 121 useable questionnaires completed by 111 participants (i.e. $(104 \times 1) + (4 \times 2) + (3 \times 3) = 121$), leading to an overall sample size of 192 responses (pilot survey: 41 cases, mail survey: 30 cases, and web-based survey: 121 cases). This sample size was sufficiently large for the purposes of the present study.²¹ Importantly, as in the case of the pilot study and mail survey, the 121

²¹ Although discussed at length in Chapter 7, in brief the overall *sample size* as well as the *observation-to-predictor ratio* were sufficiently large for the intended analyses.

useable web-based questionnaires were consistent with the aims of the research, that is, all useable questionnaires were filled in by respondents who (1) work for a store-based retailer in the U.S.A. and (2) make their retail buying decisions independently. Further to this, all evaluated new products belonged to the product category of non-perishable merchandise, and each new product (and its respective supplier firm) as well as salesperson was only evaluated once.

The initial number of approached contacts (2,100) had to be adjusted due to a number of messages that could not be delivered as well as contacts who declared that they were not (or were not anymore) in retail buying functions. In total, the initial sample size had to be reduced by 29 contacts, leading to a reduced sample of 2,071. Furthermore, several respondents who had started the questionnaire, reported that they were not (or not anymore) involved in retail buying, and hence, could not complete the survey. A total of 132 respondents specified that this was the case, resulting in a further reduced contacted sample of 1,939. Based on the number of respondents (rather than the number of completed questionnaires), the response rate then was 5.7% (i.e. $(111 \div 1,939) \times 100$). This response rate does not seem to be too impressive either. However, two potential points can be brought forward as to why this rate of response may not represent a conclusive determination. First, it is difficult to assess how many of the messages (invitations and reminders) sent to contacts have actually been received/read. In general, such messages are delivered to recipients' message inboxes and to their provided e-mail addresses (if this option has been chosen by account holders). However, it cannot be determined how many of the contacts really checked their inboxes or have provided 'junk mail' addresses for their accounts, for example. This may have led to fewer contacts in the original sample to start with. Second, based on the relatively high number of respondents who have started the survey (i.e. 575²²) and reported that they are not (or not anymore) involved in retail buying (132 or 23% of respondents who have started the questionnaire, i.e. $(132 \div 575) \times 100$), it seems likely that there were additional contacts among the chosen sample who were not involved in retail buying during the data collection period (yet, did not report it). An out-dated job title/status on some of the online profiles may have led to the inclusion of inappropriate survey candidates. A potential indication of an actual higher response rate may be derived - very cautiously - from the number of retail buyers who have indeed viewed/accessed the survey (excluding the 132 contacts who reported not to be involved in retail buying) and the number of retail buyers who have completed useable questionnaires. It is at least interesting that this form of response was 25.1% (i.e. $((111) \div (575 - 132)) \times 100$).

²² This number excludes multiple responses (i.e. $585 - (4 \times 1) - (3 \times 2) = 575$).

5.8.7 Non-Response Analysis

A potential source of concern in many survey-based studies is that of non-response bias or non-response error (e.g., Diamantopoulos & Schlegelmilch, 1996; Iacobucci & Churchill, 2010). Essentially, non-response error “represents a failure to obtain information from some elements of the population that were selected and designated for the sample” (Churchill, 1999, p.580). In cases where non-response error occurs, implications result from this for the quality and quantity of the collected data (Diamantopoulos & Schlegelmilch, 1996). For example, the identification of a non-response bias could have important implications with respect to the generalizability of a study’s findings. For non-response to denote a problem the researcher “need[s] to expect that non-responders are systematically different in some important ways to those who do respond” (Lee & Lings, 2008, p.272-273). At this point it is worth noting that increased rates of response do not inevitably reduce or remove this potential bias (e.g., Malhotra & Birks, 2007). Thus, in most survey-based research it is typically important to conduct a non-response analysis in order to ascertain that respondents are not fundamentally different from non-respondents (with regard to certain aspects important to the conducted study).

Several different approaches have been suggested in extant literature in order to estimate and adjust for non-response error (for example, cf. Iacobucci & Churchill, 2010). In the marketing research domain, one of the most commonly applied strategies to investigate potential problems of non-response bias is the comparison of ‘early responders’ with ‘late responders’ (Armstrong & Overton, 1977). Based on the assumption that respondents who reply later (‘late responders’) are more similar to non-respondents, this method can provide an indication of non-response (i.e. indicate whether non-respondents differ systematically from respondents) (cf. Armstrong & Overton, 1977). However, this approach towards investigating potential problems of non-response bias “is only applicable to mail surveys, and has also been criticized on a number of levels, even by its originators” (Lee & Lings, 2008, p.273; also see Blair & Zinkhan, 2006). Furthermore, this analysis method appears to be unsuitable for application to the dataset of the present study due to mainly two reasons. First, retail buyers evaluated new products (and respective supplier firms) and salespeople after new product presentations. However, new product presentations (buyer-salesperson meetings) are not always scheduled on a regular basis, and hence, this most likely had an influence on when respondents would be able to complete questionnaires and reply. Second, retail buyers had the option to complete multiple questionnaires, another factor that was likely to impact on when buyers would respond. Therefore, a different strategy

has been utilized to examine potential non-response bias. Specifically, data from a sample of non-respondents was collected on some key characteristics relevant to the current research and compared to the respective data of respondents (cf. Lee & Lings, 2008) - a method to assess non-response bias also frequently used in extant marketing research (see e.g., Mentzer, Flint, & Hult, 2001; Ulaga & Eggert, 2006).

Data from 21 non-respondents was collected who were part of the web-based survey (the employed survey mode that generated the most responses), and non-response bias was mainly assessed by comparing the t-statistics of group means between non-respondents and respondents, that is, non-respondents and web-based respondents, non-respondents and mail respondents, non-respondents and pilot respondents, as well as non-respondents and the overall sample. Of course, ideally, data from non-respondents from both survey modes (i.e. web/online-based and paper/offline-based survey modes) would be collected and compared. However, this objective was unattainable due to mainly two reasons. Firstly, the number of non-respondents during the pilot study was too small to conduct a meaningful comparison (despite the fact that the participation rate of 65% was arguably high). Secondly, the great concerns regarding the appropriateness of the utilized mailing list for the mail survey made it unfeasible to generate enough suitable and reliable information using mail-outs (also see Section 5.8.4). Nevertheless, from a theoretical perspective, the herein employed approach should provide a good indication of potential non-response problems because all collected data (i.e. 192 responses) were generated from the same theoretical population of retail buyers working for U.S.-based retail operations. Hence, although acknowledged that the employed approach is not 'ideal', it can be deemed as a 'best effort' to conduct a meaningful non-response analysis given the study's data sample, which is arguably still a more preferable examination of non-response when compared to the often utilized 'early versus late responders' estimation procedure discussed above.

Information obtained from non-respondents represented answers to a few questions from the original questionnaire (also see Appendix 1.13 and Appendix 1.14). Specifically, these data included personal and company information (i.e. buying experience; industry experience; number of employees [retailer size]) as well as information on the dependent variable (i.e. new product purchase decision) and two constructs of interest (i.e. estimated gross margin and product importance).²³ The number of questions answered

²³ It is noted that final measures were used (also see Chapter 6). The dependent variable (i.e. the new product purchase decision) was evaluated based on the χ^2 test of homogeneity of proportions.

and included in the analysis compares favourably to several previous non-response evaluations (for example, cf. Cannon & Homburg, 2001; Mentzer, Flint, & Hult, 2001).

The results of the conducted t-tests of group means, as well as the χ^2 test of homogeneity of proportions for the dependent variable, are presented in Table 5.4. It can be seen that there is little reason for concern at the 5% significance level (two-tailed). Nevertheless, it needs to be mentioned that the 'number of employees' variable for the mail and pilot responses, and the 'buying experience' variable for the mail responses, returned significant test results. Importantly, however, none of these two variables is of any specific analytical interest in later conducted statistical analyses (Chapter 6 and 7).²⁴ Also, no significant differences exist between non-respondents and the combined responses (i.e. the overall sample) for any of the examined variables. Together, these findings indicate that in the present study non-response bias does not appear to be a problem.

Table 5.4: Examination of Non-Response

Variables	Non-Respondents	Web Responses	Mail Responses	Pilot Responses	Overall Sample
<i>Personal information</i>	<i>Mean</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>
Industry work experience	17.48	17.20 (0.91)	18.07 (0.84)	24.73 (0.14)	18.05 (0.82)
Buying experience	12.81	12.14 (0.74)	18.07 (0.04)*	18.38 (0.23)	13.80 (0.66)
<i>Company information</i>	<i>Mean</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>
Number of employees	9,184	10,003 (0.86)	274,873 (0.04)*	54 (0.01)*	70,790 (0.42)
<i>Constructs (product)</i>	<i>Mean</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>	<i>Mean (sig.)</i>
Estimated gross margin (financial)	4.43	4.71 (0.49)	4.57 (0.79)	3.95 (0.35)	4.53 (0.81)
Product importance	3.98	4.18 (0.59)	4.83 (0.09)	4.49 (0.23)	4.35 (0.32)
<i>Dependent variable</i>					
Proportion of new product acceptance	14/21 ---	74/121 χ^2 (sig.) ---	24/30 χ^2 (sig.) ---	29/41 χ^2 (sig.) ---	65/192 χ^2 (sig.) ---
		1.66 (0.20)	2.40 (0.12)	0.30 (0.58)	0.02 (0.88)

Note: *T-test significant at 0.05 (two-tailed).

²⁴ First, the 'buying experience' variable is not part of the theoretical framework, and hence, unimportant in terms of any hypotheses tests. Second, for the 'number of employees' measure, a control variable, it will be shown that it did not significantly influence retail buyers' new product purchase decisions within the tested conceptual framework (see Chapter 7). In addition, the identified differences with respect to 'number of employees' are not unexpected for these subsamples because the mail survey favored larger retailers and the pilot study small- and medium-sized retail ventures.

5.8.8 Combining the Collected Data

5.8.8.1 Mixed Mode Survey (Paper/Offline-Based and Web/Online-Based Modes)

As previously described, in order to generate an appropriate sample size for the present study, a mixed mode survey was adopted, utilizing both paper/offline-based and web/online-based data collection modes. Such a data collection approach is in line with increasing numbers of survey research using mixed mode designs of various types, including paper-/ and web-based media (e.g., see Couper, 2011; De Leeuw, 2005). Commonly referred to advantages of mixed mode surveys are such as increased coverage and number of responses, improved timelines, and cost savings (e.g., De Leeuw, 2005). However, while such benefits are emphasized in the literature, researchers have also highlighted potential measurement error that may be introduced due to the employment of more than one mode (e.g., Couper, 2011; De Leeuw, 2005). In other words, there may be potential influences on measurement due to the different data collection instruments used to collect the data - paper-based and web-based surveys in the case of the present study. For example, did respondents to the paper-based medium perceive and answer certain questions in a systematic different manner than respondents to the web-based medium (e.g., mean scores are all higher or lower)? Although extant literature suggests to carefully design questionnaires in order to reduce potential mode effects (e.g., see De Leeuw, 2005; Dillman & Christian, 2005) and past research results on mode effects examining web and mail surveys are encouraging insofar as few differences have been identified (cf. Couper, 2011), it was deemed important to investigate whether potential mode effects appeared to be an issue in the present study.

In a similar vein as in Section 5.8.7, in order to obtain an indication of whether the data collection modes significantly influenced respondents' answers to survey questions, the mean scores of the examined variables determining retail buyers' new product purchase decisions (conceptual framework; also see Chapter 4) were compared between the responses collected via the web/online-based survey (121 responses) and the paper/offline-based survey (71 responses).²⁵

The results of the t-tests are shown in Table 5.5. As indicated by the p -values (5% significance level, two-tailed test), there is again little reason for concern. Specifically, only two mean comparisons returned statistically significant results, that is, for the variables of product price and marketing support, which are unsystematic differences. The mean value of price is higher for the paper/offline-based mode ($p = 0.04$), whereas

²⁵ Final measures were used (also see Chapter 6).

the mean value of marketing support is higher for the web/online-based mode ($p = 0.01$). Together, the findings suggest that mode effects did not appear to cause a problem in the present study.

Table 5.5: Comparison of Web/Online and Paper/Offline Survey Modes

Variables	Web/Online (Mean Values)	Paper/Offline (Mean Values)	Significance (T-Test)
<i>Product features</i>			
Product quality	5.40	5.75	0.08
Product price	4.95	5.39	0.04*
<i>Market demand</i>			
Expected customer demand	5.10	5.10	1.00
<i>Marketing strategy characteristics</i>			
Estimated gross margin (financial)	4.71	4.21	0.05
Marketing support (index)	2.96	2.45	0.01*
<i>Salesperson relationship-building activities</i>			
Salesperson consultation	4.85	4.69	0.42
Salesperson helping behavior	4.31	3.92	0.12
<i>Buyer mediator</i>			
Buyer trust	5.42	5.29	0.48
<i>Controls</i>			
Product dependence	3.93	4.38	0.08
Product importance	4.18	4.63	0.06
Customer firm size (# of employees)	20,438	113,023	0.09
Buyer-salesperson relationship duration (in months)	40.29 (3.36 yrs.)	57.92 (4.83 yrs.)	0.08
Buyer relationship orientation	4.42	3.94	0.05

Note: *T-test significant at 0.05 (two-tailed).

5.8.8.2 Representativeness of the Overall Data Sample

Since the dataset was generated through responses from web, mail, and pilot survey, another issue worth deliberating at this point is the representativeness of the overall data sample. More precisely, it seems important to consider how well the collected data represents the theoretical target population of retail buyers working for U.S.-based retail ventures. In the marketing literature, different theoretical views exist on how representative (or heterogeneous) a sample has to be for the purpose of theory testing (e.g., see Calder & Tybout, 1999; Calder, Phillips, & Tybout, 1982; Lynch, 1983). Despite such varying views, however, it should be clear that the representativeness of a data

sample has implications for the generalizability of the findings resulting from any statistical tests utilizing this same sample.

In the present case, the objective was to be able to generalize the study's findings to the entire target population; precisely that is, U.S. retail buyers who make independent purchasing decisions for store-based retailers. Hence, the overall data sample should be representative of this theoretical population. Lee and Lings (2008) suggest that researchers need to show that the generated dataset does not seem to systematically differ from the respective target population by (a) providing theoretical justifications and (b) alluding to the demographic characteristics of the sample. Following these recommendations, the subsequent paragraphs discuss and present information on the representativeness of the collected dataset.

From a theoretical perspective, the utilized data sample should be rather heterogeneous with respect to its characteristics. Employing some of the same logic and arguments expressed in the academic literature on mixed mode surveys (e.g., De Leeuw, 2005), the composition of the dataset (i.e. web, mail, and pilot responses) increased the coverage as well as the number of responses, resulting in an enriched heterogeneity of the collected data. For example, while the use of a professional association's mailing list for the conduction of the mail survey has arguably favored better educated buyers from larger retailers (for example, cf. Ulaga & Eggert, 2006), the responses during the pilot study were generated from small-/ and medium-sized retail businesses. Furthermore, the web-based survey was generally broader and included retail buyers of various demographic profiles from a range of different retailers (e.g., number of employees, annual sales, etc). Hence, the heterogeneity of the dataset could be expected to be enhanced by its specific composition.

Besides the above arguments, it was also deemed important to provide an overview of the data's actual characteristics at this stage. Without wishing to pre-empt the more detailed analysis of the data sample's profile presented in Chapter 6 (among other analyses), Table 5.6 below summarizes the key characteristics of the dataset.

It is evident that the characteristics of the overall data sample attest to the heterogeneity, and hence, the likely representativeness of the dataset. Especially, there appears to be little reason to suggest that the generated dataset is systematically different from its theoretical population. Both, the profiles of buyers and their retail organizations represent a broad range of demographic and organizational characteristics respectively.

Table 5.6: Summary of Key Dataset Characteristics

Characteristics	Data Range	Mean Value
<i>Retail buyers¹</i>		
Age (in years)	17–72	45.0
Industry work experience (in years)	1–56	18.1
Buying experience (in years)	1–45	13.8
Work experience in current firm (in years)	1–56	8.0
Work experience in current job (in years)	1–45	6.4
<i>Retail firms</i>		
Annual sales (in \$000)	50–436,000,000	9,145,744
Number of employees	1–2,200,000	37,188
Number of buyers	1–2,000	95

Note: ¹Gender: 56.5% female and 43.5% male. Education: all achievement 'categorizations' included in the survey are represented (for more details, see Chapter 6).

Based on the above deliberations and assessments (including the non-response analysis), which go beyond those presented in some previous marketing studies utilizing a merged data sample and mixed modes (for example, cf. Morgan & Hunt, 1994; Rauyruen & Miller, 2007), the use of the combined dataset for later analyses was considered to be appropriate.

5.9 Summary

This Chapter has provided a detailed overview of the methodology employed in the present research work. In the main, a self-administered questionnaire (paper/offline-based and web/online-based) has been developed, designed, and utilized as measuring instrument in order to survey U.S. retail buyers. The construction of this data collection instrument (including design, choice of constructs/variables, selection of measures, etc.) was based upon (1) an in-depth literature review as well as (2) the conduction of exploratory research work (discussed in Chapter 3). After a thorough three-phase pretesting stage, including review by academic peers, protocol interviews (U.K. MBA students and U.S. retail buyers), and a small-scale pilot study (U.S. retail buyers), as suggested by extant literature, the main data collection was conducted by surveying U.S. retail buyers utilizing the developed measuring instrument (paper/offline-based and web/online-based versions). The entire data generation process resulted in a total of 192 useable questionnaires. First analyses of this dataset revealed that non-response and mixed mode effects did not cause a problem in this study. In addition, it was shown that the overall data sample is appropriately representative (i.e. *here*, adequately

heterogeneous) of its theoretical target population. Hence, the combined dataset of 192 responses was deemed to be suitable for further analyses, presented in the subsequent Chapters 6 and 7.

Chapter 6

Descriptive Analysis and Measure Validation Process

The foregoing Chapter detailed the research methodology employed for the present study. The aim of the following two Chapters is the discussion of the analysis of the obtained quantitative data. More precisely, this analysis is depicted in two parts. First, the current Chapter focuses on the presentation of the descriptive analysis and the measure validation process. Then, Chapter 7 discusses the results of the hypothesis-testing stage.

Chapter 6 is structured into two main components. After a brief introduction, the central focus is directed towards the analysis of the characteristics of the dataset (demographics). Subsequently, the discussion centers on the exploration, development, and explanation of the multi-item measures utilized in the present work. The Chapter closes with a summary.

6.1 Introduction to the Descriptive Analysis and Measure Validation Procedure

Prior to testing the theory-based hypotheses (conceptual framework), a preceding analysis had to be conducted on the generated dataset. This analysis had two central components: investigation of (a) dataset characteristics and (b) multi-item measures. First, the profiles of the responses were examined, including the demographic characteristics of the respondents (retail buyers), the organizational characteristics (retailers), as well as additional data collected on the evaluated salespeople (assessed by retail buyers). *Retail buyers'* profiles were explored based on the variables of gender, age, education, and work experience. *Retailers* were profiled on the variables of annual sales, number of employees, and number of buyers. Furthermore, it was possible to profile the assessed *salespeople* based on their gender and employment status (i.e. manufacturer-employed, distributor-employed, independent sales rep working on commission basis, and other). Mainly measures of central tendency and dispersion were employed in order to analyze the data, but also some graphical techniques to support interpretation. Second, the other part of the analysis concerned the exploration, development, and validation of the utilized multi-item measures in this study. More precisely, first the existing multi-item reflective measures used (i.e. product quality, product price, expected customer demand, salesperson consultation, salesperson helping behavior, buyer trust, buyer relationship orientation, product dependence, and product importance), were analyzed.¹ In general, more advanced analysis techniques, such as exploratory and confirmatory factors analysis, could be employed to investigate these measures. Yet, additional techniques were also used to explore central tendency and dispersion (including graphical representations). In addition, the choice and index construction of the composite (formative) 'marketing support' measure are discussed.

Both parts of the analysis were important to be conducted prior to the hypothesis-testing stage (presented in Chapter 7) due to mainly the following reasons. In the first step, it was necessary to gain a better appreciation of the obtained data (i.e. the characteristics of the responses), also in order to inspect whether any findings may have a potential bearing on conclusions drawn from later results. A possible example may be such as a highly skewed dispersion of a measure. In the second step, it was necessary to examine the properties and the statistical robustness of the employed multi-item reflective

¹ Note: Measures utilized in this study that are *not* multi-item reflective measures are estimated gross margin (single-item measure; at a later point also included in the CFA analysis and the examination of measure distributions), marketing support (multi-item formative index), new product buying decision (dichotomous yes/no measure), as well as customer firm size (number of employees) and buyer-salesperson relationship duration (years/months), both measured by single items.

measures to ensure their appropriateness for the hypothesis-testing stage (i.e. inspect their appropriateness for inclusion into the model). Further to this, it was investigated whether these utilized measures would violate any general assumptions of the multivariate analysis techniques (e.g., normal distribution assumption).² Finally, it was deemed important to specify the selection and construction of the ‘marketing support’ index; that is, explain how the choice of the index fits with the study’s research objectives, how it was conceptualized, as well as how this index was formed.

6.2 Characteristics of the Dataset

The dataset utilized for the present study, consisting of 192 responses (i.e. 192 different new products, supplier firms, and salespeople evaluated), was profiled based on data specific to the surveyed (1) retail buyers (respondents), (2) retailers (organizational units), and (3) salespeople (assessed by retail buyers) - subsequently presented in this order. Retail buyers are profiled in terms of their gender, age, education, and work experience. Retailers are described by the variables of annual sales, number of employees, and number of buyers. Evaluated salespeople are profiled based on their gender and employment status (i.e. manufacturer-employed, distributor-employed, independent sales rep working on a commission basis, and other). In addition, information is provided on buyer-salesperson relationship durations as well as buyers’ relationship durations with their supplier firms. In order to analyze the characteristics of the dataset, PASW Statistics 18.0.0 (SPSS Inc., 2009) was utilized.

6.2.1 Profile of the Retail Buyers: Demographic Characteristics

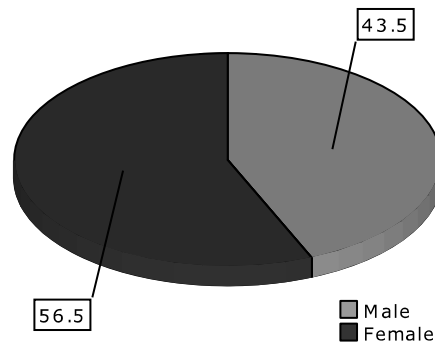
The 192 responses were obtained from a total of 146 participating retail buyers (due to the nature of the data collection method, enabling each respondent to evaluate multiple new products). These retail buyers are profiled hereafter.

6.2.1.1 Retail Buyer Gender

The distribution of gender within the data sample is displayed in Figure 6.1. There were 22 missing values for this demographic variable. As shown by the pie chart, the gender distribution is fairly equal with about 56.5% of the respondents being female and 43.5% being male. Hence, both males and females are represented well in the dataset.

² Although the choice of multivariate analysis method in the present work for the purposes of theory-testing - *logistic regression* - is discussed at length in Chapter 7, it appears to be important to mention at this point that *logistic regression* “does not assume that predictor variables are distributed as a multivariate normal distribution with equal covariance matrix” (Peng, Lee, & Ingersoll, 2002, p.9; also see, for example, Green et al., 1998; Peng et al., 2002). Nevertheless, it was deemed important to examine the final measures’ distributional characteristics.

Figure 6.1: Retail Buyer Gender



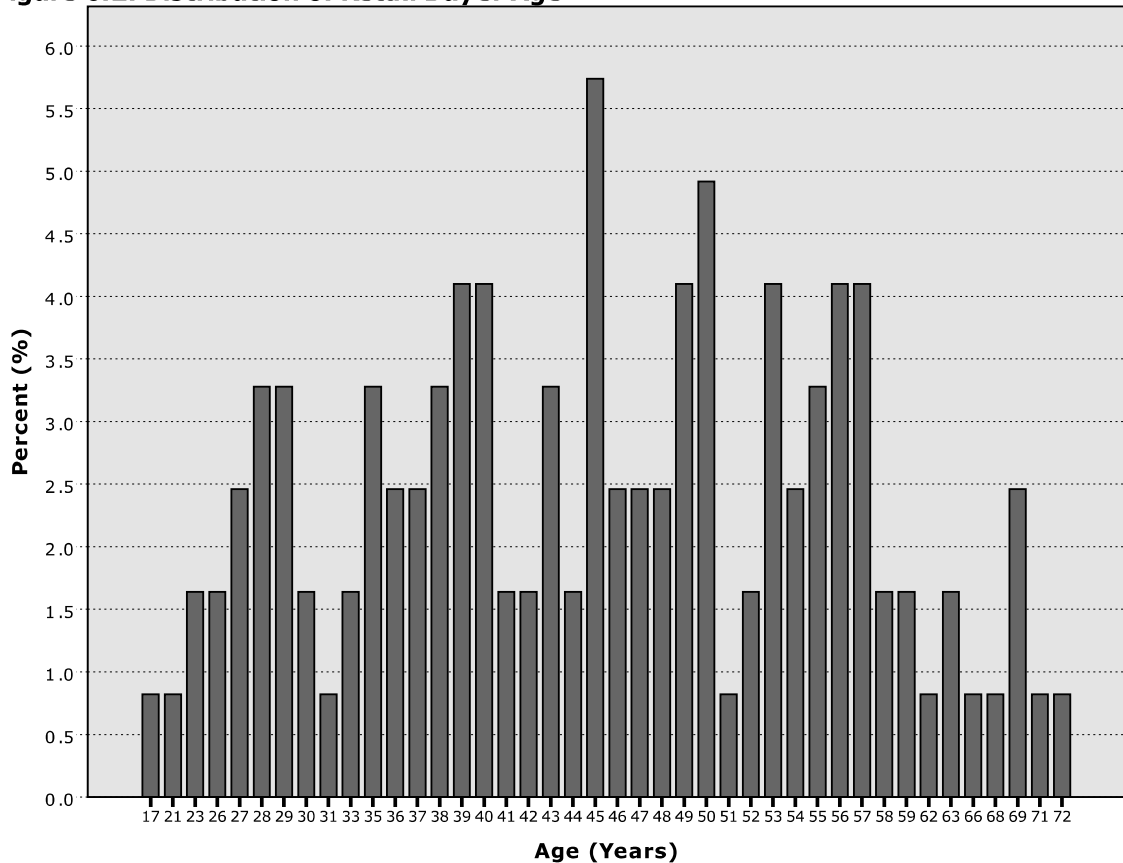
It is noted that many of the previous studies examining retail buyers' new product acceptance decisions have not reported on the gender distribution of participating buyers (e.g., Gerlich, Walters, & Heil, 1994; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). An exception is Kaufman, Jayachandran, and Rose (2006) who reported that 75% of their respondents were men. Although the frequent absence of previous reports makes a comparison to prior scholarly work rather difficult, it seems that in the U.S. the current buying profession is generally a less male-dominant function when compared to the present state of many sales occupations, for example (cf. McQuiston & Morris, 2009). Nevertheless, it is evident that both genders are appropriately represented by the present dataset.

6.2.1.2 Retail Buyer Age

Retail buyers' age distribution is shown in Figure 6.2. For this demographic variable there were 24 missing values. Participants' age - measured in years - represents a wide range from a minimum of 17 (youngest respondent) to a maximum of 72 (oldest respondent). With both the mean and median of the sample being 45 (and a standard deviation of 12), the age distribution depicts a fairly symmetrical (bell) shape.

Based on the age distribution of the participating retail buyers in the present dataset, it can be concluded that various age groups are represented; from young professionals to senior buying professionals.

Figure 6.2: Distribution of Retail Buyer Age

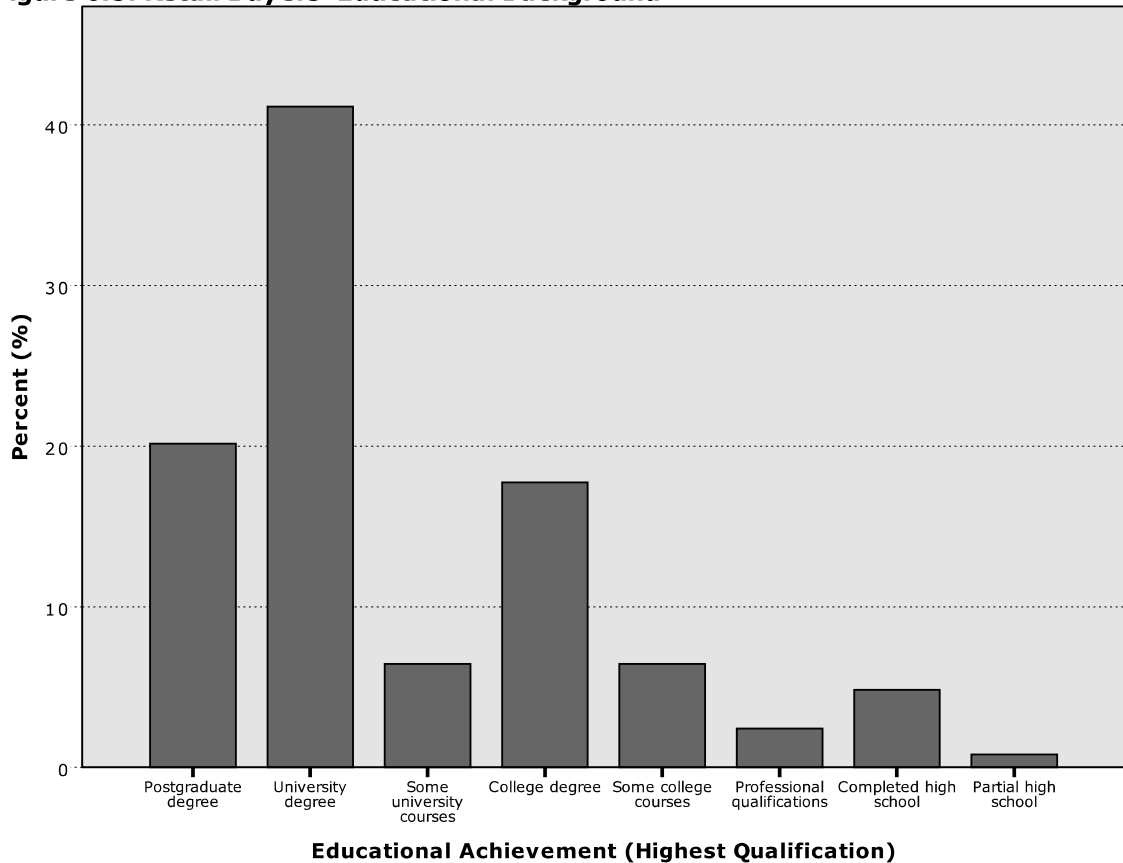


6.2.1.3 Retail Buyer Education

Respondents also reported on their educational background (highest qualification). This demographic variable had 22 missing values. Figure 6.3 shows the educational achievements of the study’s participants.

It is evident that many of the respondents have attained a university degree (about 40%) or a postgraduate degree (approximately 20%), and hence, were academically well educated. Besides this, many other participants had some university or college education, or held a college degree. Although there appears to be somewhat of a skew towards degree-qualified respondents in the dataset, all educational achievement ‘categorizations’ from the questionnaire are represented in the present sample (no one ‘ticked’ the ‘other’ option). Furthermore, with more young people acquiring university degrees nowadays, and many organizations (especially larger firms) requiring university degrees for occupations such as buying functions, the high amount of highly educated respondents is not specifically surprising.

Figure 6.3: Retail Buyers' Educational Background



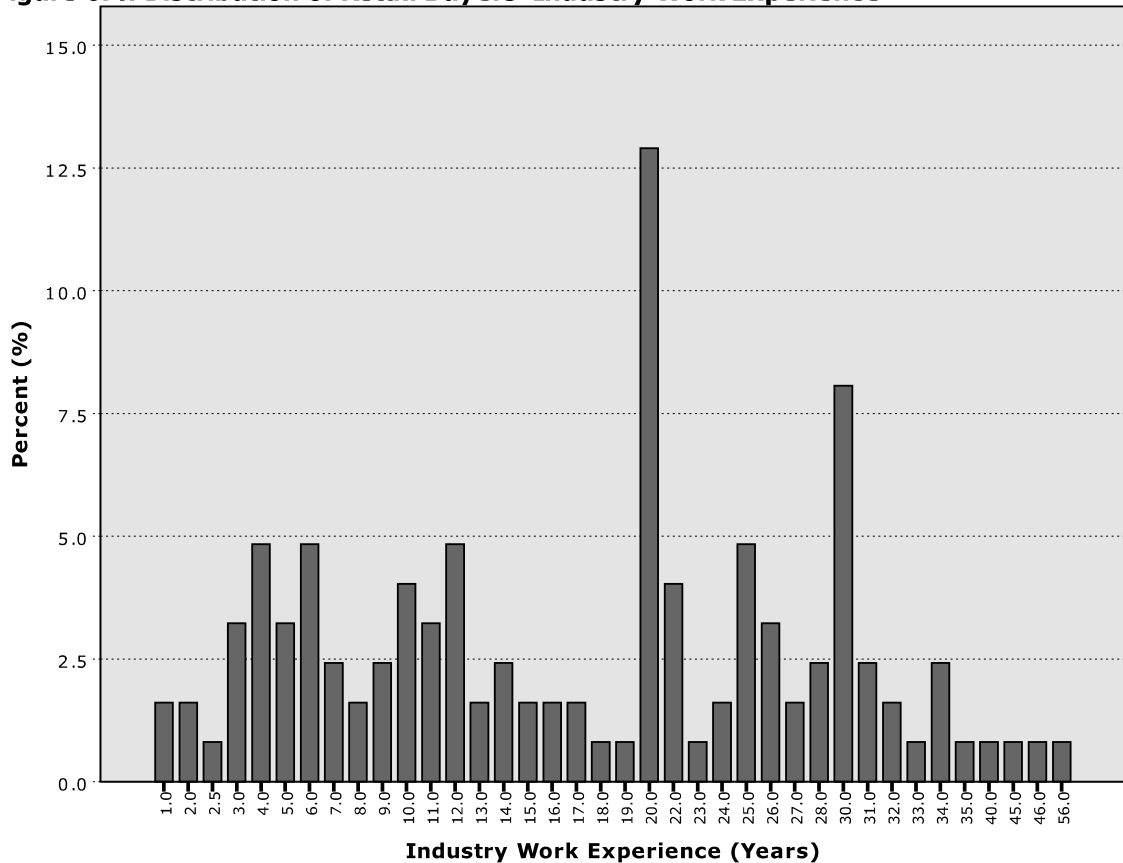
6.2.1.4 Retail Buyer Work Experience

Data was also collected on respondents' work experience. In particular, retail buyers reported on their experience in (a) the retail industry, (b) buying, (c) their current firm, and (d) their current job (all measured in years). For each of these variables there were 22, 22, 23, and 24 missing values respectively.

The distribution of respondents' work experience in the retail industry is shown in Figure 6.4. It is represented by a wide range with a minimum of 1.0 year and a maximum of 56.0 years. As depicted, the dispersion of the values looks somewhat symmetrical, with a mean of 18.1 (standard deviation of 11.0 years) and a median (and mode) of 20.0 years.

Importantly, many respondents had a great amount of experience in the retail industry, with 50.8% having 20 years or more experience in the industry, and only 12.1% having less than 5 years of experience in the retail sector.

Figure 6.4: Distribution of Retail Buyers' Industry Work Experience



Respondents' buying experience is displayed in Figure 6.5. The distribution ranges from a minimum of 1 to a maximum of 45 years. Although the mean is 13.8 (standard deviation is 9.6) and the median 13, there also appears to be a slight peak for values in the range of 1 to 8 years. In particular, 37.9% of the respondents reported to have buying experience within this range.

Overall, a wide variety of different buying experience levels (based on years) is represented in the present data sample, attesting the heterogeneity of respondents on this variable.

Figure 6.5: Distribution of Retail Buyers' Buying Experience

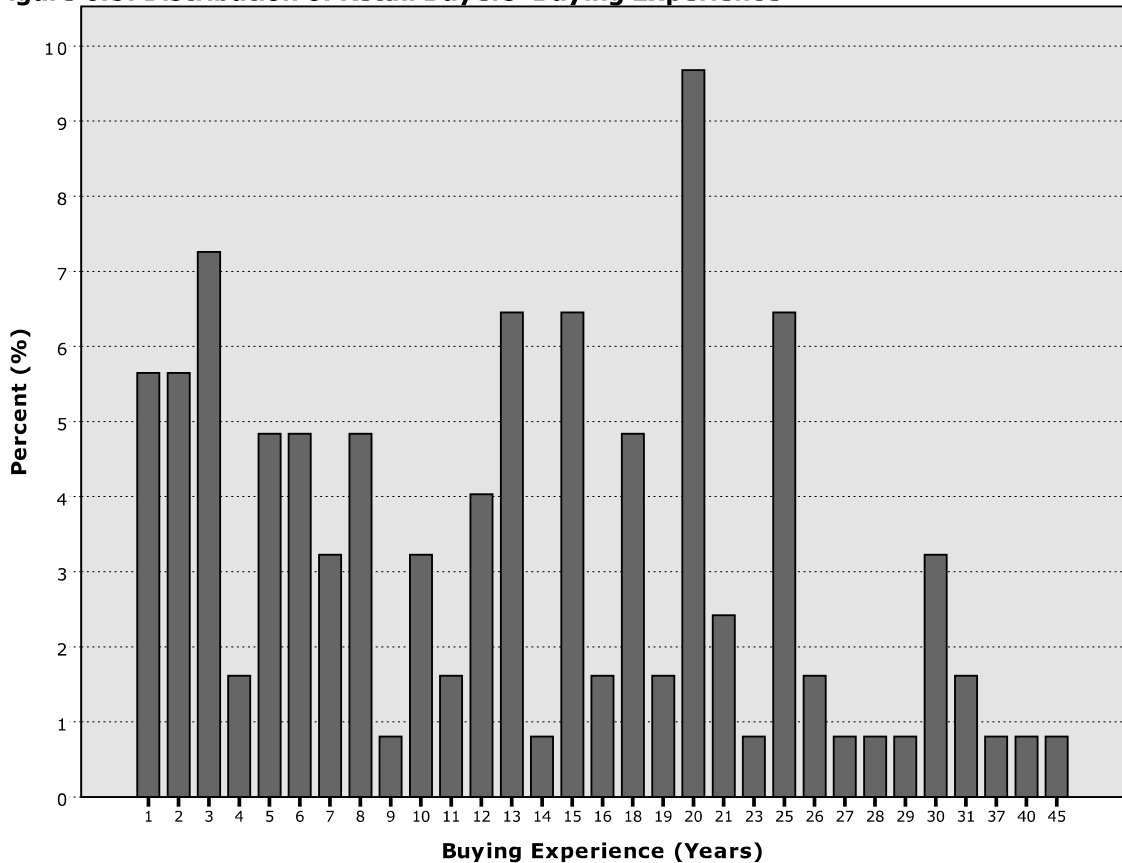
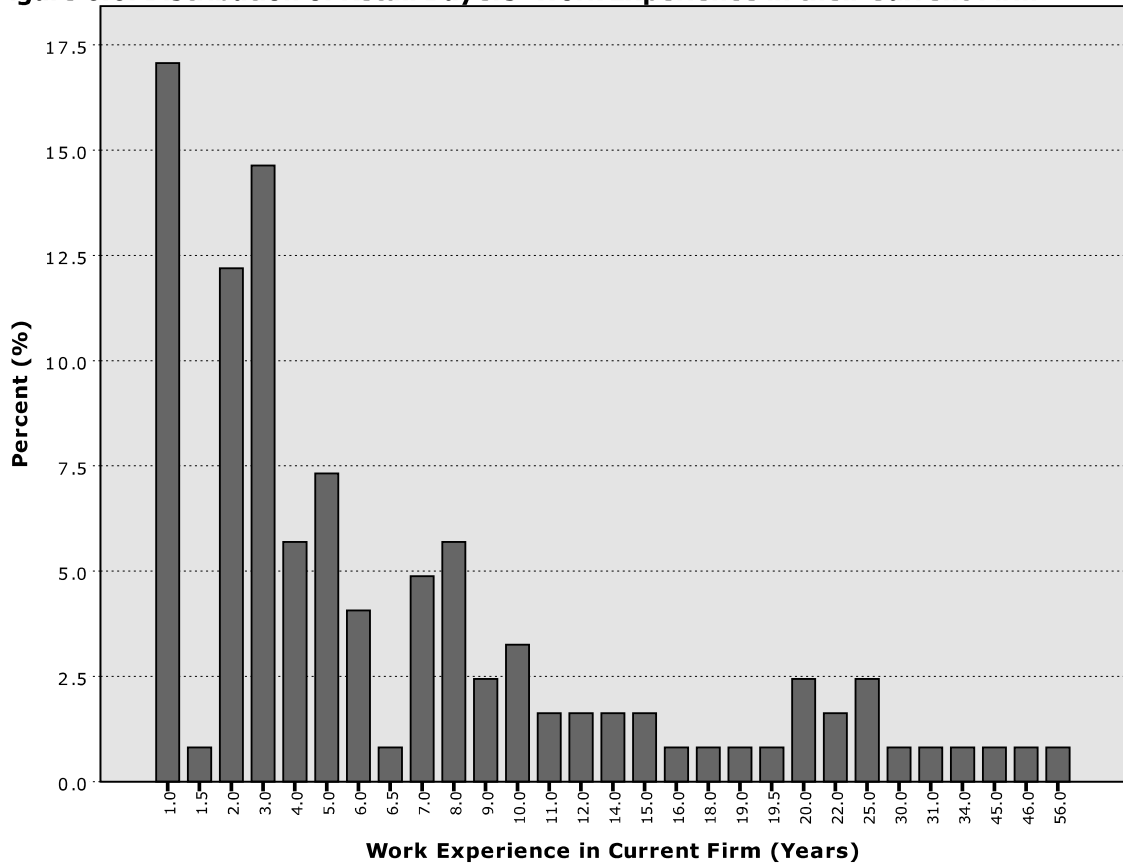


Figure 6.6 displays the distribution of buyers' work experience in their current firm. Again, a wide range of values is represented, from a minimum of 1 year to a maximum of 56 years. The mean of the distribution is 8 (with a standard deviation of 9.7) and the median is 4.

As depicted, a skew towards lower values can be observed, that is, in the range of 1 to 10. This may be explained with the more recent trends on the labor market. Specifically, nowadays employees tend to switch jobs more frequently (both, within and between companies). Hence, a skew towards lower values on this variable (work experience in current firm) is rather unsurprising. Recalling that the distribution of respondents' age was fairly symmetrical (Figure 6.2), and thus, the observed skew in 'work experience in current firm' is not particularly related to age in the present dataset. In effect, a cross-tabulation of 'age' and 'work experience in current firm' showed that older respondents also reported values of 1 to 8 for this variable.

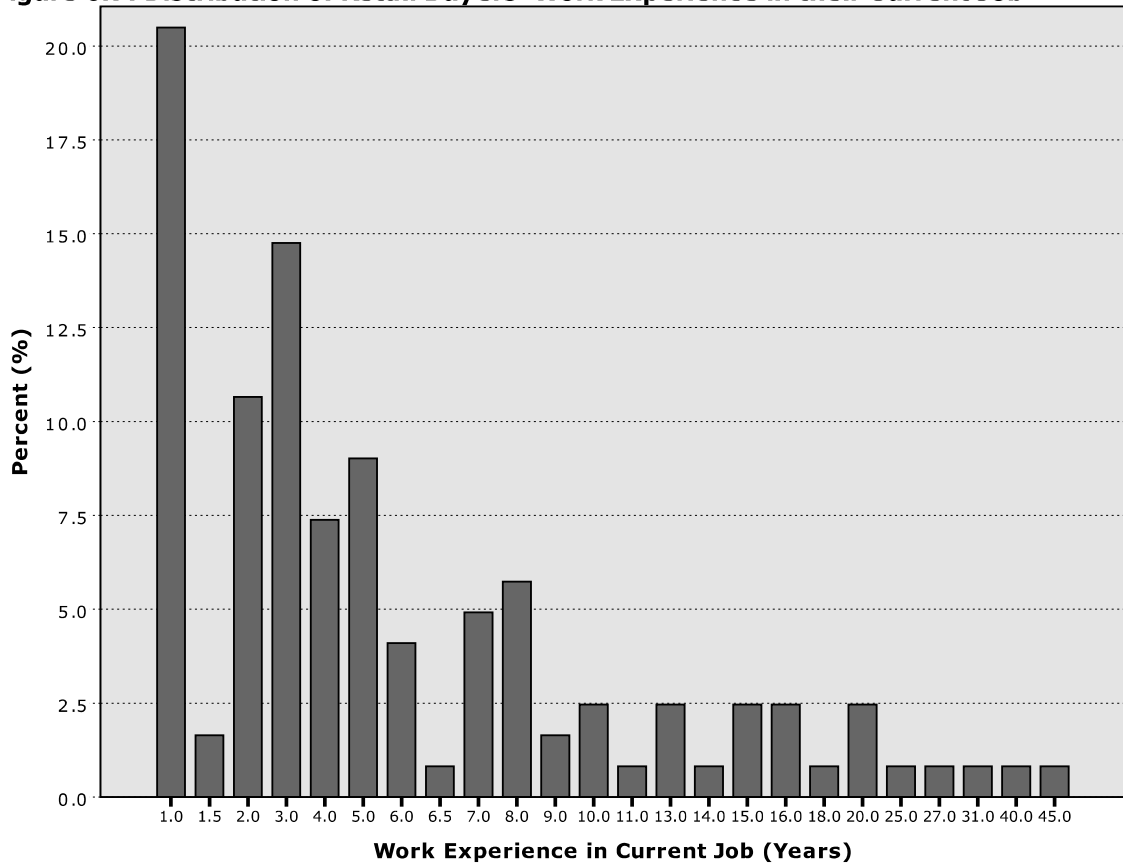
Figure 6.6: Distribution of Retail Buyers' Work Experience in their Current Firm



Finally, respondents also reported on their experience in their current job as a buyer. These results are shown in Figure 6.7. It is important to emphasize that this variable reports on respondents' experience in their *current job* as a buyer; retail buyers' buying experience throughout their career was depicted in Figure 6.5.

As for the other examined 'experience' variables, a wide range is represented in the dataset, with a minimum of 1.0 and a maximum of 45.0. The mean was 6.4 (with a standard deviation of 7.5) and the median 4. Again, a skew can be observed towards lower values, this time in the range of 1 to 8. Certainly, it could be expected that this variable is highly related to participants' reports on their work experience in their current firm. Hence, the observed similar skew for respondents' work experience in their current job is rather unsurprising. In a similar vein to the investigation of 'age' and 'work experience in current firm', a cross-tabulation of 'age' and 'work experience in current job' showed that older respondents also reported lower values in the range of 1 to 8.

Figure 6.7: Distribution of Retail Buyers' Work Experience in their Current Job



6.2.2 Profile of the Retailers: Organizational Characteristics

The 146 participating buyers - evaluating a total of 192 new products, supplier firms, and salespeople - represented 137 different retailers (i.e. in a few cases there was more than one respondent per retail firm). These retailers are profiled hereafter.

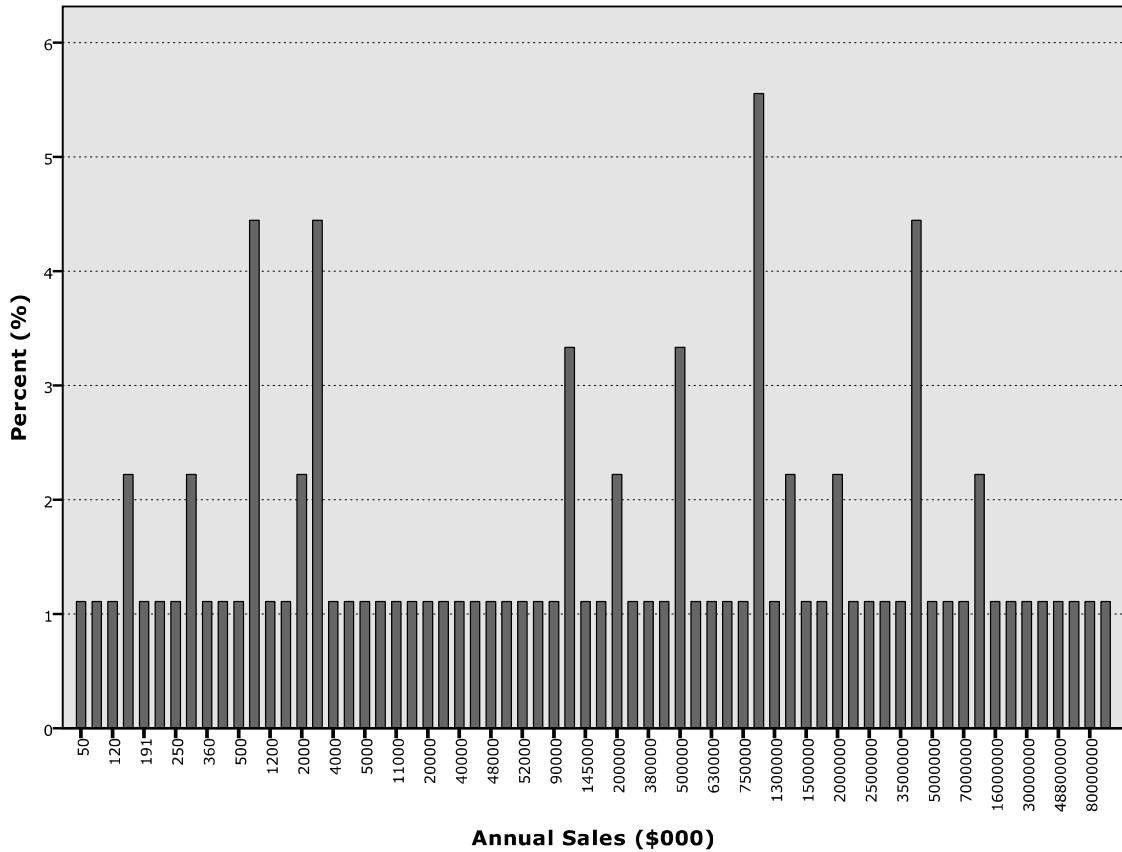
6.2.2.1 Retailer Annual Sales

The distribution of retailer annual sales is shown in Figure 6.8. It needs to be noted that this variable had 47 missing values. Consequently, the results should be interpreted with caution. Annual sales for the smallest retailer are \$50,000 (minimum), and \$436,000,000,000 for the largest (maximum). Whereas the median is \$180,000,000, the mode is \$1,000,000,000 and the mean is \$9,145,744,230 (with a standard deviation of \$47,241,550,481). Especially one large outlier contributes to this high mean and standard deviation (outlier size \$436,000,000,000).

However, as depicted by Figure 6.8, a wide range of annual sales were reported by the respondents without any major skew towards smaller or larger retailers in the data. Yet, two 'peaks' can be identified in the value ranges of \$150,000 to \$3,000,000 and \$100,000,000 to \$12,000,000,000 respectively. Nevertheless, a wide scope of retail firms

is represented by the present dataset, attesting the heterogeneity of the participating retailers.

Figure 6.8: Distribution of Retailer Annual Sales (in \$000)

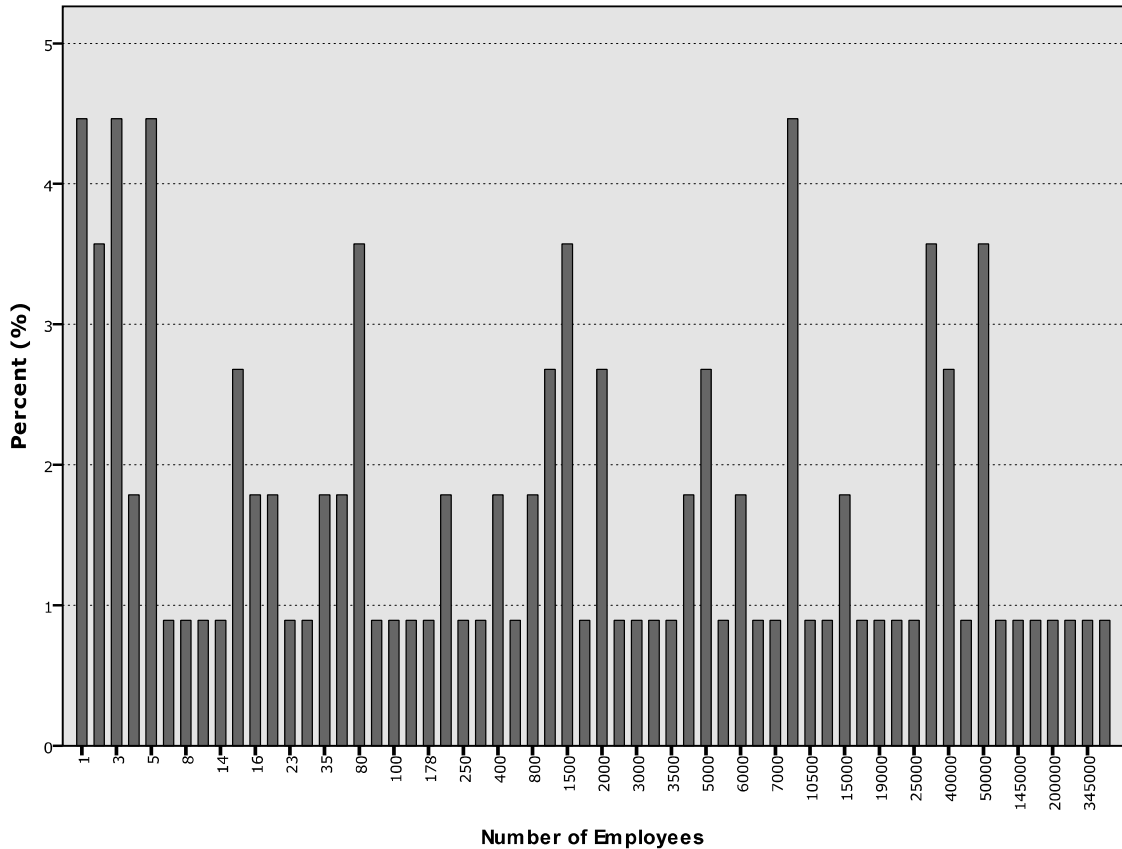


6.2.2.2 Retailer Number of Employees

Figure 6.9 displays the number of employees per retailer. This variable has 25 missing values. The minimum is 1 employee and the maximum is 2,200,000 employees. Again, especially due to one outlier, the median is 1,000, whereas the mean is 37,188 (with a standard deviation of 212,027).

A slight peak is noticeable in the employee number range of 1 to 5. However, a major skew towards smaller employee numbers is not observable. In fact, a wide range of employee numbers per retailer was reported by respondents, which is in line with the heterogeneity identified during the examination of retailers' annual sales figures (Figure 6.8).

Figure 6.9: Distribution of Retailers' Number of Employees

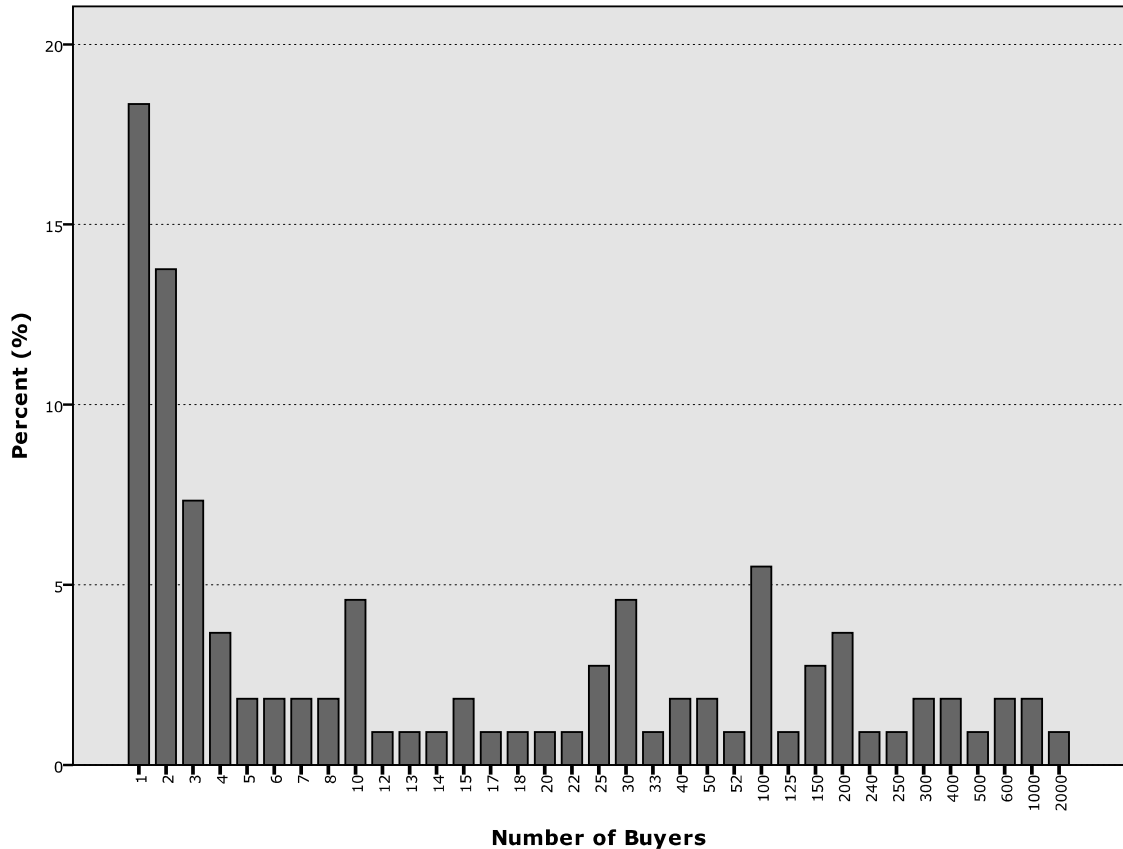


6.2.2.3 Retailer Number of Buyers

Data on the number of buyers per retail firm were also collected from respondents. The results are presented in Figure 6.10. There were 28 missing values for this variable. The minimum is 1 buyer and the maximum is 2,000 buyers. The median is 8, whereas the mean is 95 with a standard deviation of 253.

In a similar vein as the figures reported for 'annual sales' and 'number of employees', especially two outliers contributed to this high mean and standard deviation. Besides this, there seems to be a skew towards smaller numbers of buyers per retailer in the range of 1 to 3. Certainly, smaller retailers can be expected to employ fewer buyers. An examination of cross-tabulations of 'number of buyers' and 'annual sales', as well as 'number of buyers' and 'number of employees', however, revealed that a few suspiciously low values for 'number of buyers' have been reported for some fairly large retail firms. Hence, this skew may be interpreted with caution as some respondents may have had limited information about this variable or perceived the question as difficult to estimate. Nevertheless, as depicted by Figure 6.10, a wide range of different buyer numbers per retailer is captured by the present data sample.

Figure 6.10: Distribution of Retailers' Number of Buyers



6.2.3 Profile of the Evaluated Salespeople

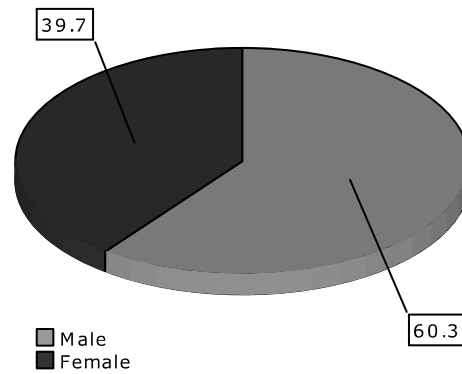
Since respondents could only evaluate each new product, supplier firm, and salesperson a maximum of one time (during the entire data collection process), a total of 192 salespeople were assessed by the participating retail buyers. These salespeople are profiled hereafter. Specifically, respondents reported on salesperson gender as well as type of salesperson (employment status).

6.2.3.1 Salesperson Gender

Figure 6.11 displays the distribution of salesperson gender. There were 13 missing values for this demographic variable. As shown by the pie chart, 60.3% of the salespeople were male, whereas 39.7% were female.

In light of the current state of many sales occupations, this slightly unequal split between male and female salespeople is representative of the sales profession (cf. McQuiston & Morris, 2009). In addition, the sizable amount of female sales reps in the present data sample is also consistent with the more recent trend of increasing numbers of women in the sales profession (e.g., Moncrief, et al., 2000).

Figure 6.11: Salesperson Gender

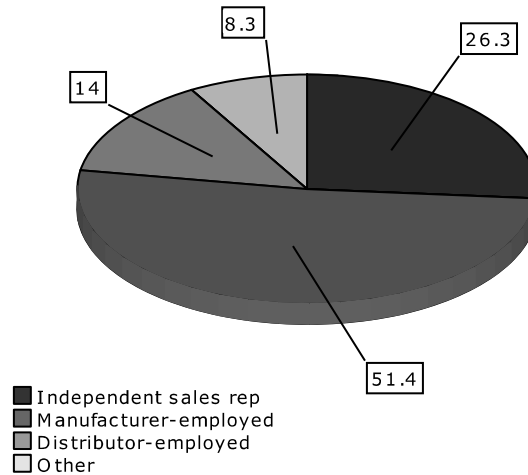


6.2.3.2 Salesperson Type (Employment Status)

Additional information was collected from respondents on the type of salesperson evaluated. These results are shown in Figure 6.12. There were 13 missing values for this variable. As depicted, 51.4% of the assessed salespeople are manufacturer-employed, 26.3% are independent sales reps (working on commission basis, often for multiple supplier firms), 14% are distributor-employed salespeople, and 8.3% represented the group 'other' (e.g., company owner involved in selling activities, etc).

Unfortunately, a meaningful comparison of these results to previous research examining retail buyers' new product acceptance decisions is virtually impossible because of the absence of this information in past studies (of course, the relative role of specific salesperson activities as compared to product-focused variables in retail buyers' new product acceptance decisions has not been investigated previously, and hence, the inclusion of the salesperson in past scholarly work is widely absent). However, during the exploratory study (Chapter 3) it had been observed that retail buyers may interact and buy from a 'mix' of different types of salespeople. Hence, for the purpose of 'completeness', the present results indeed show a 'healthy mix' of salespeople represented in the data sample.

Figure 6.12: Salesperson Type (Employment Status)



6.2.4 Relationship Durations

Additional data was collected on the length of relationships with the salesperson and supplier firm, that is, (a) buyer-salesperson relationship duration and (b) buyer-supplier firm relationship duration (i.e. retail buyer's business dealings with the supplier firm throughout her/his career). Both (a) and (b) were measured in years and months. There were 12 and 8 missing values respectively.

The average (mean) duration of buyer-salesperson relationships was 3.9 years (with a standard deviation of 5.3 years). The minimum length was 1 month, and the maximum length was 35 years. The median was 2 years. Of all the reported buyer-salesperson relationship durations, 53.9% of the respondents indicated a relationship length with their salesperson that was equal to or greater than 2 years.

The average (mean) length of buyer-supplier firm relationships was 4.5 years (with a standard deviation of 5.4 years), and thus, slightly higher than for the reported buyer-salesperson relations. 'Brand new' business dealings with supplier firms were reported by 11 respondents, that is, the length of the buyer-supplier firm relationship was 0 months. Besides these 'brand new' relations, the minimum length was 1 month, and the maximum duration was 25 years. Whereas this range is smaller than for the buyer-salesperson relationships, the median length of 2.1 years for buyer's business dealings with the supplier firm was about the same as the median for the buyer-salesperson

durations. Out of all the buyer-supplier firm relationship duration estimates, 58.7% of the respondents reported that the length of their business dealings with the supplier firm was equal to or greater than 2 years.

6.3 Analysis of Existing Multi-Item Reflective Measures

As mentioned in the introduction to this Chapter, a number of existing multi-item reflective measures were utilized for the purposes of the present work. The response formats for these measures were 7-point *Likert*-type scales, anchored “Strongly Disagree (1) - Strongly Agree (7)”, except for one 7-point semantic differential scale (product importance, see control variables Chapter 5, Table 5.1). The subsequent sections present the analysis of these reflective measures. In particular, first the underlying foundations of this analysis are detailed, followed by a discussion of the employed statistical methods and a report of their results. Essentially, the central aim of analyzing the used multi-item reflective measures prior to any hypothesis-testing was the examination of their (psychometric) properties. Since all of the investigated measurement scales had been successfully utilized in prior research and published in academic journals of good standing, the key focus was on verifying the scales’ properties, rather than exploring the properties of new measures. Nevertheless, the actual analysis process was conducted in two steps. First, the coefficient alphas (Cronbach’s alphas) were assessed as well as exploratory factor analysis routines conducted (cf. Churchill, 1979). Subsequently, a confirmatory factor analysis procedure was performed (cf. Gerbing & Anderson, 1988). The viability of utilizing exploratory and confirmatory factor analysis as progressive steps when exploring measurement scales has been highlighted and demonstrated in prior research (e.g., Anderson & Gerbing, 1988; Gerbing & Hamilton, 1996).³

6.3.1 Unidimensionality and Validity of Multi-Item Scales

The central tenet of reflective measurement theory is that a *single* construct underlies any set of scale items that is aimed at measuring that construct (Churchill, 1979; Gerbing & Anderson, 1988).⁴ Importantly, it is assumed that the construct affects its measurement items. In other words, any change in the construct is presumed to bring about a change in the scale items. Hence, under reflective specifications, a multi-item

³ It is noted at this point that the technique of confirmatory factor analysis can be applied to the same sample - previously used for the exploratory factor analysis - in order to further explore and purify (if necessary) the scales (Gerbing & Anderson, 1988). This approach is employed here. However, it is acknowledged that a confirmatory factor analysis is commonly utilized with separate samples in order to ‘confirm’ prior findings attained from an exploratory factor analysis.

⁴ Multi-item scales can be described as “[T]he combining of several indicators that measure the same (generally latent) construct into a single variable in order to reap the benefits (e.g. increased reliability) of multivariate measurement” (Lee & Hooley, 2005, p.384; drawing from Hair et al., 1998).

measure only renders meaning if it (sufficiently) reflects its underlying construct.⁵ For example, a multi-item reflective measure of 'product quality' should only measure 'product quality', and no other latent variable to any great extent. Furthermore, a change in the scores of individual 'product quality' scale items should be caused by the change of the true score of the 'product quality' construct (notwithstanding random/unsystematic error). Other latent variables, or systematic errors, should not have any significant impact. If the latter is not the case, then this multi-item measure is also referred to as (acceptably) unidimensional (Gerbing & Anderson, 1988).

Although the unidimensionality of a measure is a necessary condition for validity (Churchill, 1979), it is also an insufficient prerequisite for a comprehensive assessment of a measure's validity (Gerbing & Anderson, 1988; Peter, 1981). Effectively, the unidimensionality of a multi-item measure only provides *negative* evidence of validity. If a measure is not unidimensional (i.e. it is multidimensional), it is not valid, because it also captures a (or several) construct(s) it is not intended to measure. Also, the reliability of a multi-item measure represents one specific indication of unidimensionality, and hence, also only provides *negative* evidence of validity (Iacobucci & Churchill, 2010). That is, if a measure is not reliable (internally consistent), then it cannot be valid.

"Validity is synonymous with accuracy and correctness" (Churchill, 1999, p.452). In essence then, a multi-item measure of a construct is regarded valid if it correctly or accurately measures its underlying construct (cf. Churchill, 1999; Lee & Lings, 2008). In general, it can be stated that "[T]he more accurately the measure tracks variation in the construct, the more valid it is" (Lee & Lings, 2008, p.170).

Different forms of validity exist and may be examined. The types of validity discussed herein are content ('face') validity, convergent validity, discriminant validity, criterion-related ('predictive') validity, and nomological validity (cf. Iacobucci & Churchill, 2010; Lee & Lings, 2008). *Content validity*, also referred to as face validity, basically relates to how well an employed measure represents the content of the construct it intends to measure (Lee & Lings, 2008). The content validity of a measure is therefore highly related to the construct's definition. *Criterion-related validity*, also known as predictive validity, refers to a measure's behavior in relation to a specified criterion (Churchill, 1979). If the utilized measure highly correlates with the measure of the criterion, it can be stated that the utilized measure possesses criterion-related (or predictive) validity

⁵ It is emphasized that reflective (also called effect) items are fundamentally different from formative (also referred to as cause or causal) items under formative measurement theory (for more information, e.g., see Diamantopoulos & Winklhofer, 2001).

(Iacobucci & Churchill, 2010). An underlying theory for this correlation is *not* necessarily required. Slightly different from criterion-related validity is *nomological validity* in that it refers to a measure's relation to other measures of constructs based on a *theoretical foundation* (Iacobucci & Churchill, 2010). However, from a pure practical perspective, the latter (theory-based) correlations can provide evidence of nomological and criterion-related validity at the same time (DeVellis, 2003).

With regard to the present study, content, criterion-related, and nomological validity were assumed to be sufficient for the employed multi-item reflective measures because (a) they all represent existing scales in the literature which have been exposed to adequate and rigorous development/testing in previous academic works, and (b) they have generally been utilized repeatedly in other marketing research.⁶ Hence, the central focus in the present work was directed towards the assessment of the within-method convergent validity and discriminant validity of the employed multi-item measurement scales.⁷ These are discussed subsequently.

Convergent validity is given if a measure of a construct highly correlates with other measures designed to capture that *same* construct (Churchill, 1979). *Discriminant validity* is present if a measure does *not* significantly correlate with measures of *different* constructs (Iacobucci & Churchill, 2010). Both, within-method convergent validity and discriminant validity were assessed in the present work primarily by evaluating information obtained from the confirmatory factor analysis procedure (described in Section 6.3.3 below). However, since valuable information on unidimensionality and validity of the utilized measures can also be attained from exploratory factor analysis as well as an investigation of internal consistency (Cronbach's alpha) prior to the conduction of a confirmatory factor analysis, the assessment of the multi-item scales followed a two-step procedure. First, the scales were examined (and purified if necessary) by investigating internal consistency and exploratory factor analysis results, then confirmatory factor analyses were conducted.

⁶ Of course, the appropriateness of measures and their underlying constructs (e.g., measure content, construct definition, etc) for the purposes of the present study has been assessed during different literature review stages. Hence, it could be argued that content validity and nomological validity has been re-assessed/checked at least to a certain degree through the intensive literature review phases, which ultimately led to the selection of the employed measures.

⁷ Across-method convergent validity is not directly evaluated in the present study (e.g., see Steenkamp & van Trijp, 1991, for more information on the concept of across-method convergent validity). However, a brief discussion on across-method convergent validity is presented in Section 6.3.3.6.

6.3.1.1 Employed Methods and Information on Reliability, Dimensionality, and Validity of Multi-Item Scales

As mentioned above, a number of different methods were employed in order to assess the reliability, dimensionality, and validity of the pertinent multi-item measures. The evaluation started with an examination of reliability (internal consistency) and an exploratory factor analysis (EFA) procedure. A measurement scale is said to have high reliability when “independent but comparable measures of the same trait or construct of a given object agree” (Churchill, 1979, p.65). Importantly, a multi-item scale can be reliable, but may not be valid (Iacobucci & Churchill, 2010). Reliability is essentially about the variation in a given measurement scale, which is ascribable to a common underlying cause (and not random error) - assumedly the measured construct (e.g., DeVellis, 2003). However, one should be aware that ultimately, this is a theoretical concept, and the reliability of a multi-item measure can never be determined in an exact fashion, but only approximated (Lee & Hooley, 2005). The reliability of a multi-item reflective scale is typically assessed by examining its internal consistency - that is, the internal consistency of the scale items (Lee & Lings, 2008). More precisely, an analysis of a scale’s internal consistency builds upon the idea that scale items should exhibit high intercorrelations (e.g., DeVellis, 2003). Based on classic measurement theory, in extant literature it has been argued that if the true score of the latent construct highly influences the scores of the scales items, then the individual scale items should also be highly intercorrelated (e.g., DeVellis, 2003). Hence, highly intercorrelated scale items should provide an indication of their strong relation with the latent construct that they intend to measure (Lee & Hooley, 2005). In order to evaluate a scale’s reliability (internal consistency), the most commonly used measure in the marketing domain (and across several other fields) is Cronbach’s (1951) coefficient alpha (e.g., DeVellis, 2003; Lee & Hooley, 2005).⁸ It is desirable that multi-item measures possess a high level of internal consistency, indicated by a high Cronbach alpha value, because “a low coefficient alpha indicates the sample of items performs poorly in capturing the construct which motivated the measure” (Churchill, 1979, p.68). For the purposes of the present study, Cronbach’s alpha was utilized to examine the reliability (internal consistency) of the employed multi-item scales during the ‘exploration’ stage of the analysis.⁹

This ‘exploration’ stage also entailed an EFA routine, which provides more direct information on a measure’s dimensionality than internal consistency analysis does. In

⁸ For example, see DeVellis (2003) for alternative methods. Also, some concerns have been expressed in the literature regarding the measurement of internal consistency and Cronbach’s alpha (e.g., see Kline, 2000).

⁹ During the second stage of the analysis (confirmatory factor analysis), the more recently and increasingly used *composite reliability* coefficient (Fornell & Larcker, 1981; Gerbing & Anderson, 1988), was also utilized.

essence, the central objective of EFA is to determine the latent construct (factor) which causes the observed correlations between scale items in the dataset (Sharma, 1996). Through the investigation of EFA results, one can gain a *preliminary* image of the dimensionality of the assessed measure (Gerbing & Anderson, 1988). In particular, the analysis allows to obtain first information on whether indeed one single construct (factor) underlies the multi-item scale or multiple constructs (factors), and thus, whether the assessed measure is unidimensional (i.e. one factor is extracted) or multidimensional (i.e. several factors are extracted and therefore, the scale is not valid).¹⁰ Theoretically, EFA is consistent with classic measurement theory (also see Section 6.3.1, first paragraph) because a factor that is extracted during the EFA routine is “by definition responsible for the correlation between the relevant items, and thus does represent an underlying common or latent factor” (Lee & Hooley, 2005, p.374). Overall, EFA and the assessment of internal consistency (by examination of Cronbach’s alpha) are especially useful in the initial stage of multi-item measure analysis because they provide the opportunity to ‘modify’ or ‘purify’, and thus improve, the assessed measures (Churchill, 1979; Gerbing & Anderson, 1988).¹¹

The second stage of the assessment of the relevant multi-item measures involved a confirmatory factor analysis (CFA) routine. A CFA can provide additional information on a measure’s dimensionality, and thus, its validity. In particular, it has been argued that “exploratory factor analysis typically does not provide an explicit test of unidimensionality” (Gerbing & Anderson, 1988, p.189) because EFA only examines the *internal*, but not the *external* consistency of a measure (Gerbing & Anderson, 1988). As Gerbing and Anderson (1988, p.188) stated (and demonstrated in their work) “an item-total analysis may fail to discriminate between sets of indicators that represent different, though, correlated, factors.” Consequently, the factors identified by EFA “do not correspond directly to the constructs represented by each set of indicators” (Gerbing & Anderson, 1988, p.189). Therefore, in order to more rigorously assess the pertinent multi-item measures, a CFA routine was employed to also examine the measures’ external consistency.

¹⁰ EFA is essentially a preliminary analysis technique (Gerbing & Anderson, 1988). “A factor analysis where no structure is pre-specified, and the data are used to help reveal or suggest the structure of the model” (Lee & Hooley, 2005, p.384).

¹¹ EFA also often helps to reduce, and hence, manage large numbers of items of measurement scales (Gerbing & Anderson, 1988).

6.3.1.2 Additional Considerations Regarding Information on Dimensionality and Validity of Multi-Item Scales: A Note on Social Desirability Bias

Another matter worth of discussion with respect to information on a reflective measure's dimensionality and validity, is the topic of socially-desirable (SD) responding and the resulting social desirability bias (SDB) (e.g., see Moorman & Podsakoff, 1992; Spector, 1992). In general, social desirability is considered to represent an individual trait and has been previously defined as "the tendency on the part of individuals to present themselves in a favorable light, regardless of their 'true feelings' about an issue or topic" (Moorman & Podsakoff, 1992, p.132). SDB may or may not cause problems in *self-report* questionnaires (e.g., Moorman & Podsakoff, 1992; Spector, 1992; 1994). For example, if respondents were asked to report on their *own* feelings of commitment towards their organization (organizational commitment measure), it appears reasonable to expect that individual measurement items may be answered in a socially desired or accepted way. In other words, respondents may report that they are 'committed' or 'highly committed' to their organization, even though this does not represent their 'true feeling'.¹² If SDB is present, this has an impact on the dimensionality and validity of the measure capturing the construct of interest; that is, the measure cannot be unidimensional and thus, is invalid.

With regard to the present study, however, potential concomitants of SD responding were not considered to pose a problem due to the following reasons. First, in the current work *the unit of analysis* is the new product acceptance decision (cf. Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000, for example), *not* the retail buyer (the respondent). Furthermore, the relevant independent variables assessed in this study required participating retail buyers to evaluate particular *product-focused characteristics* and *salesperson-specific activities*. Thus, the respondents did *not* report on 'themselves' in this regard. In a similar vein, four of the employed control variables required retail buyers to evaluate additional *product-related criteria* (product importance and product dependence) as well as to report on their *retailer* (customer firm size) and their *relationships* (buyer-salesperson relationship duration). Again, participants did *not* respond to questions about 'themselves'. Finally, the mediator variable of *buyer trust in a salesperson* and the control variable of *buyer relationship orientation* (towards a buyer-salesperson relationship) were examined. In Chapter 4, these two constructs were defined. Specifically, "buyer trust reflects the buyer's confidence in the salesperson's reliability and integrity" (Palmatier et al., 2008, p.178/179; drawing from Crosby, Evans, &

¹² Generally, one would expect that an employer would favor employees who are committed to their organization.

Cowles, 1990) and buyer relationship orientation reflects “the buyer’s need to engage in a relationship with a salesperson to purchase a specific product category” (Palmatier et al., 2008, p.181). Based on these definitions, there does not seem to be any fundamental reason why SD responding should be relevant, that is, a “tendency on the part of individuals to present themselves in a favorable light” (Moorman & Podsakoff, 1992, p.132) in order to ‘look’ better. For example, a retail buyer may trust and/or seek to work closely with a salesperson because the salesperson always presents great new merchandise to the buyer. On the other hand, a retail buyer may not trust and/or seek to work closely with a salesperson because the salesperson rarely presents great new merchandise, and the buyer may prefer to search for alternatives and other deals. The conclusion that buyer trust and buyer relationship orientation do not appear to raise concerns regarding potential SDB is consistent with previously employed measure analysis and validation procedures regarding these (and similar other) constructs, including measure validations in the retail buying literature (for example, cf. Doney & Cannon, 1997; Kaufman, Jayachandran, & Rose, 2006; Morgan & Hunt, 1994; Palmatier et al., 2008).

6.3.2 Internal Consistency and Exploratory Factor Analysis (EFA) Procedure

In order to obtain a preliminary picture of the reliability, dimensionality, and validity of the utilized multi-item reflective measures, in the initial stage an internal consistency and EFA procedure was employed using PASW Statistics 18.0.0 (SPSS Inc., 2009).¹³ However, before the actual analysis processes are detailed, it needs to be noted that two distinct approaches exist in the marketing literature towards the *sequence* of analysis steps to be conducted in order to establish the unidimensionality, and hence, the validity of a measure. First, Churchill (1979) argues that the reliability of a multi-item scale must be established before any assessment of its dimensionality. In contrast to this approach, Gerbing and Anderson (1988) advocate that one needs to examine the dimensionality of a measure before the reliability of a multi-item scale should be evaluated.

The first, and more traditional approach towards reflective measure analysis, rests upon the argument that any dimensionality assessment conducted prior to a reliability evaluation may include unnecessary error of lower-quality indicators as well as lead to the identification of additional factors, which may not have a theoretical grounding (cf. Churchill, 1979). Hence, this viewpoint suggests the elimination of scale items which

¹³ To be sure, before the conduction of any analysis the entire dataset (N = 192) was entered into PASW Statistics 18.0.0 (SPSS Inc., 2009) (.sav file format). Any negatively scored items were positively coded and entered as the respective positive scores. Effectively, this entire process had been completed before the start of the descriptive analysis.

have low intercorrelations with other scale items (to improve the scale's reliability) before assessment of a scale's unidimensionality. The second, and somewhat more recent approach, advocates the conduction of the reliability analysis after an examination of a scale's dimensionality because a researcher should first assess whether the measurement items have indeed captured only the underlying construct they were intended to measure or if more constructs (factors) can be identified (cf. Gerbing & Anderson, 1988).

Ultimately, both approaches have theoretical grounding and the researcher has to decide which of the two to follow. However, in the case of the present study, a couple of considerations led to the decision to first assess the measures' reliability, then to examine their factor loadings in an EFA routine, and ultimately, to assess their external consistency by means of a CFA procedure. First, Gerbing and Anderson (1988) do not fundamentally discard the idea of measure purification in the early stage of a scale analysis and prior to dimensionality examinations. Effectively, the authors suggest that it is useful for a large set of scale items to be reduced to a smaller and more manageable item set before dimensionality assessments. Furthermore, all of the analyzed multi-item scales represent existing scales in the literature, which have been exposed to prior adequate and rigorous testing. Based on such previous analyses, the pertinent scale items of each measure represent one specific construct (factor). Hence, it seemed reasonable to first examine the intercorrelations of the individual scales items (internal consistency), and then to re-assess the measures' unidimensionality (by means of EFA, followed by CFA).

6.3.2.1 Assessment of Internal Consistency

The internal consistency of each multi-item scale was assessed by the use of Cronbach's alpha. In theoretical terms, the alpha coefficient can take a value from as low as 0.0 to as high as 1.0. Extant literature suggests a coefficient of 0.7 as lower bound (or cut-off value) for acceptable levels of internal consistency (cf. Nunnally, 1967; 1978; also see e.g., Lee & Hooley, 2005 for a discussion on this subject).¹⁴ DeVellis (1991, p.85) suggests a general categorization of different levels of coefficient alphas as presented in Table 6.1 below.

¹⁴ In the present study, all multi-item reflective scales represented existing measurement scales. For newly developed measures, a lower coefficient alpha value may be appropriate (cf. Churchill, 1979; Nunnally, 1967; 1978).

Table 6.1: Reference Values for Coefficient Alpha

Reference Value (Range)	Description
Below 0.60	Unacceptable
Between 0.60 and 0.65	Undesirable
Between 0.65 and 0.70	Minimally acceptable
Between 0.70 and 0.80	Respectable
Between 0.80 and 0.90	Very good
Much over 0.90	Consider shortening the scale

Note: Based on DeVellis (1991), p.85.

Overall, it should be noted that Cronbach's alpha is affected by scale length, that is, the higher the number of measurement items in a scale, the higher the coefficient value (Hair et al., 2010). Stated differently, the coefficient alpha is positively biased when longer scales are used (and vice versa). Although a measure with a larger number of items should be more reliable than a scale with fewer items (i.e. a larger number of items should explain a higher portion of variance), it has been noted in extant literature that the interpretation of coefficient alphas should be carried out with caution (cf. Lee & Hooley, 2005).

6.3.2.2 Suitability of Data for EFA

EFA was utilized to analyze each scale further - separately at the outset, then in a two-group routine. In particular, two key statistical measures were utilized in order to assess the suitability of the multi-item scales for an EFA procedure, that is, the Bartlett's test for sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The Bartlett's test measures item homogeneity and allows for conclusions on the correlation between variables (Hair et al., 2010). If this test is significant, that is, items are sufficiently intercorrelated based on a correlation matrix that is *not* orthogonal (not an identity matrix), the underlying data is assumed to be suitable for a factoring (EFA) process (cf. Sharma, 1996). In addition, the KMO measure was examined to further determine homogeneity. Specifically, this indicator can take on values between 0 and 1, with higher values suggesting greater homogeneity of variables (Sharma, 1996). It is generally accepted that a KMO measure greater than 0.5 implies that the underlying data can be considered suitable for factoring (e.g., Hair et al., 2010). The Bartlett's test has been examined in conjunction with the KMO measure because it has been emphasized in extant literature that the former is fairly sensitive with respect to sample size (Hair et al., 2010; Sharma, 1996).

6.3.2.3 Choice of Factor Extraction Method

When selecting the factor extraction method for a factoring process, the researcher is mainly confronted with the two choices of *principal components analysis* (PCA) and *factor analysis* (FA). Before the differences between these two methods are explained, it is emphasized upfront that for the present study's EFA procedure the FA extraction method of *principal axis factoring* (PAF) was used. The PCA extraction method was *not* utilized at any time.

The individual aims of PCA and FA are actually quite distinct (Sharma, 1996). Whereas PCA's objective "is to utilize the observed variance in the data set to create new variables which are composed of the original items", FA's objective "is to identify an underlying or latent factor which is responsible for observed correlations among the original items" (Lee & Hooley, 2005, p.374; drawing from Kline, 2000; Sharma, 1996). Therefore, the FA extraction method is consistent with reflective measurement theory (see Section 6.3.1). The PCA routine, on the other hand, results in factors that do not necessarily have any conceptual meaning (Lee & Hooley, 2005). Furthermore, from a more technical perspective, FA identifies factors based on a common (and unique, i.e. any random error) variance shared amongst items, while PCA forms factors based on linear combinations of different variables that explain the maximum amount of variance in the data (excluding any unique variance). Thus, PCA is not only theoretically, but also technically distinct from FA (Sharma, 1996).¹⁵ Consequently, consistent with the aims of the present EFA procedure, FA (and PAF in particular) was the appropriate choice of factor extraction method.

6.3.2.4 Choice of Factor Rotation Method

Factor rotation can be described as a technique that is aimed at simplifying interpretations of individual measurement items' factor loadings by means of factor axis manipulation (Sharma, 1996). Ultimately, its purpose is to attain simpler, but also theoretically more meaningful factor solutions (Hair et al., 2010; Sharma, 1996).

When conducting a PAF routine, the researcher can generally choose from two different factor rotation methods, that is, oblique and orthogonal (Cattell, 1978). While the orthogonal rotation method constrains factor axes by not allowing factors to correlate (i.e.

¹⁵ It has been noted in the literature that there is often substantial confusion about the differences (theoretical and technical) between PCA and FA (e.g., see Sharma, 1996). Different sources of misunderstanding have been brought forward, including such as the fact that both factor extraction methods are data reduction techniques, as well as that PCA and FA are often positioned within the same sub-menu of widely used statistical software packages, with some using PCA as the default option (cf. Lee & Hooley, 2005). For an example, see PASW Statistics 18.0.0 (SPSS Inc., 2009).

factors are treated as independent, uncorrelated solutions), the oblique rotation method allows factor axes to correlate, and hence, correlations between factors may exist (i.e. solutions are *not* restricted to orthogonality) (Lee & Hooley, 2005).

Despite the availability of both factor rotation methods in popular statistical software programs, researchers in the marketing discipline (as well as other domains) typically employ the orthogonal rotation method (such as *VARIMAX*) (e.g., Sharma 1996; Stewart, 1981; also cf. Lee & Hooley, 2005). This is somewhat surprising because it has been argued that, from a theoretical perspective, the oblique rotation method is superior to the orthogonal technique (Cattell, 1978). In particular, it has been advocated that most constructs are correlated in the 'real' world; and even if not, it is likely that they are in a specific sample due to error (Cattell, 1978). Hence, from a conceptual standpoint, it appears to be favorable to employ an oblique rotation - even if the factors are argued to be theoretically independent because in this case oblique rotation would use an orthogonal solution due to freely rotating factor axes (Kline, 2000). Nevertheless, it appears that many researchers may employ orthogonal rotation due to its statistical advantages, that is, there will be no issues of multicollinearity between factors (cf. Lee & Hooley, 2005). In summary, Lee and Hooley (2005) conclude:

“Thus the rotation decision seems to boil down to a trade-off between theoretical rigour (which would suggest oblique rotation) and statistical simplicity (which would suggest orthogonal rotation). As a result, it seems that researchers would be advised to reverse the standard procedure, and instead beginning with oblique rotations by default, and only using orthogonal rotations when they were appropriate or necessary” (p.379).

With regard to the present work, there did not seem to be a fundamental theoretical reason suggesting that constructs are not correlated, and hence, independent (orthogonal). Therefore, for the purposes of the current study the oblique factor rotation method (*OBLIMIN*) was utilized.

6.3.2.5 Assessment of Factor Loadings

Factor loadings represent the correlations between scale items and the factor(s) extracted during the EFA routine (Hair et al., 2010). In order to support the choice of measurement items for the extracted factor(s)¹⁶, within the marketing literature a loading

¹⁶ It is noted that during the EFA procedure the number of factors (i.e. the number of theoretically relevant constructs) underlying the different item sets was *not* pre-specified (for example, cf. DeVellis, 2003). Although a particular (hypothesized) number of factors can be specified for an EFA routine (e.g., see Hair et

of 0.3 has been widely used (cf. Lee & Hooley, 2005). However, factor loadings are - just as many other statistical techniques - affected by sample size and it has been argued that a loading of 0.3 is appropriate for sample sizes of 350 or greater; smaller samples require a higher loading, that is, a more conservative minimum factor loading (Hair et al., 2010). In particular, it has been suggested that for a sample size of around 200 (which is pertinent to the present study), individual items need to exhibit factor loadings of 0.4 (or higher) (Hair et al., 2010). Other researchers agree with the consideration of sample size when assessing factor loadings. For example, Lee and Hooley (2005, p.377) recommend that “researchers would be advised to take sample size into account when evaluating the factor loadings of individual items.” Consequently, a minimum loading of 0.4 (at 5% significance level) was considered to be appropriate for the purposes of the present research work.

6.3.2.6 EFA - Group Analysis

As outlined before, subsequent to the conduction of the individual EFAs for each measurement scale, the relevant constructs were entered into a group analysis routine using the same process and statistical tests/indicators as described previously. Specifically, the group analysis was performed in order to attain a first understanding of the independence of the underlying constructs based on the employed data. In consideration of the initial number of reflective items (i.e. 42 items, from the pertinent 9 measures as stated in Section 6.1)¹⁷ and the size of the present sample (i.e. 192 observations), it was decided to split this analysis procedure in two groups in order to increase the item-to-observation ratio (and hence, the stability) of the factor loadings. Following Baker and Sinkula’s (1999) procedure, these two groups were chosen based on “sets of theoretically related variables” (p.418). Group one contained the reflective product-related constructs (i.e. product quality, product price, expected customer demand, product dependence, and product importance); group two included the reflective salesperson-related constructs (i.e. salesperson consultation, salesperson helping behavior, buyer trust in salesperson, and buyer relationship orientation - towards a buyer-salesperson relationship). The choice of the specified two groups ensured that (1) first insights on construct independence would be established among “maximally similar sets of variables” and (2) “recommended minimal sample size to parameter estimate ratios” would not be violated (Baker & Sinkula, 1999, p.418). The same two groups were also utilized during the CFA routine described subsequently.

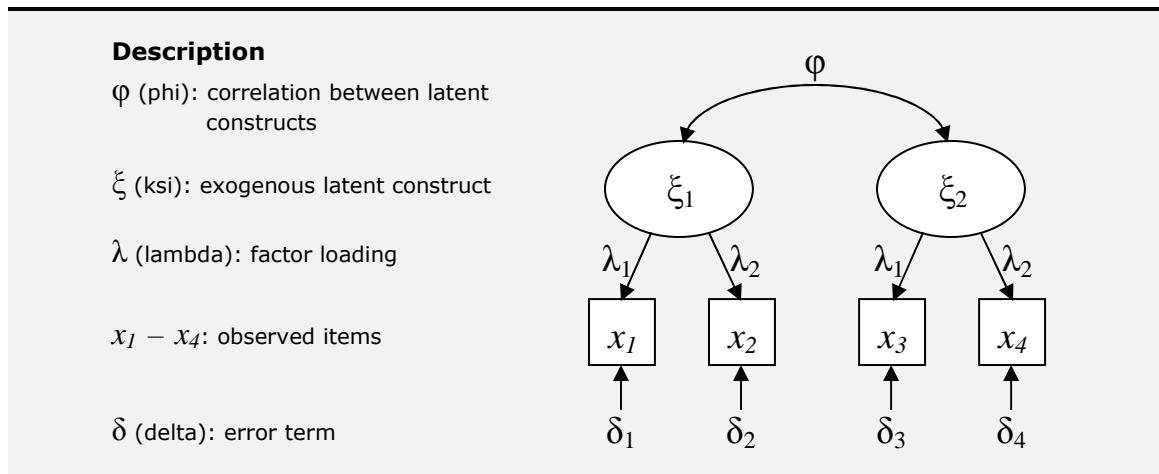
al., 2010), this approach appears to be less rigorous because iterations are stopped before full information on potential other factors is extracted.

¹⁷ None of the initial items was deleted during the individual EFAs conducted for each scale.

6.3.3 Confirmatory Factor Analysis (CFA) Procedure

Following the preliminary stage of the analysis (i.e. internal consistency and EFA procedure), and the thereof resulting purifications of the scales, a confirmatory factor analysis (CFA) process was employed in order to further investigate the multi-item reflective measures. LISREL 8.80 (Jöreskog & Sörbom, 2006; also see Jöreskog & Sörbom, 1999) was utilized to conduct this second stage of the analysis. The central reasons for performing a CFA in addition to an EFA were already outlined in Section 6.3.1.1 and are not reiterated at this point. However, it is important to note here that structural equation modeling (SEM) - used to conduct the CFA - offers two major benefits: (1) measurement error estimates are taken into account and (2) observed as well as latent (unobserved) variables can be modeled (Bollen, 1989a; Fornell & Larcker, 1981). According to classical measurement theory, a scale item's observed score - reflecting one specific latent construct - is caused by its correlation with the latent construct's true score as well as by some unique measurement error, which is assumed to be uncorrelated with error terms of other scale items (DeVellis, 2003). In a CFA, these assumptions can be directly tested/examined. Therefore, a CFA may better represent 'the real world' as it provides improved parameter estimates which are likely to be closer to the actual population values. The following Figure 6.13 presents an example of a basic two-factor measurement (CFA) model.

Figure 6.13: Example of Basic Two-Factor Measurement (CFA) Model



Note: Adapted from Gerbing and Anderson (1988), Figure 1, p.187 and based on LISREL 8.80 (Jöreskog & Sörbom, 2006).

As depicted, this model represents two (exogenous) latent constructs (ξ_1 and ξ_2) and their respective observed measurement items (x_1, x_2 and x_3, x_4). Through the utilization of CFA, one is able to estimate the factor loadings of each observed item on its specific

latent construct (λ_1 to λ_4), the error terms of the individual items (δ_1 to δ_4), and the correlation (φ) between the two latent constructs (ξ_1 and ξ_2).¹⁸

The CFA procedure of the present study focused on a group analysis. As mentioned above, the same two groups of constructs utilized in the EFA group analysis were also used for the specification of two CFA models; that is, group one included the product-related constructs, and group two contained the salesperson-related constructs. As in the case for the EFA group analyses, Baker and Sinkula's (1999) guidelines were followed. With regard to CFA's sensitivity to sample size (i.e. the ratio of sample size to parameter estimates) (e.g., see Kelloway, 1998), a minimum ratio of 5:1 has been suggested for CFA procedures (and SEM in general) (Bentler & Cho, 1988). Since 38 items were left to be entered into the CFA (after the EFA group analyses), and 72 (i.e. $(9 \times 8) = 72$) correlations between the constructs had to be estimated during the CFA procedure, the minimum ratio of 5:1 was not met in a single CFA (sample size = 192). A two-group analysis approach, however, was able to ensure that this requirement was maintained across each of the groups. Group one included 16 items and 20 correlations (i.e. $(5 \times 4) = 20$) had to be estimated between constructs. Hence, in order to conduct a CFA for group 1, one would require at least a minimum sample size of 180 (i.e. $(16 \times 5) + (20 \times 5) = 180$). Group two contained 22 items and 12 correlations (i.e. $(4 \times 3) = 12$) had to be estimated between constructs. Thus, in order to conduct a CFA for group 2, one would require at least a minimum sample size of 170 (i.e. $(22 \times 5) + (12 \times 5) = 170$). Consequently, a two-group analysis approach could be successfully employed with a sample size of 192.

The following presents the steps followed when conducting and examining the CFA models in LISREL 8.80 (Jöreskog & Sörbom, 2006). In particular, these involved (1) data preparation, (2) model specification, (3) model (structure) identification, (4) evaluation of model fit, and (5) model re-specification. Subsequent to the successful re-specification of the two models (group 1 and group 2 respectively), the within-method convergent validity of the scales was examined (a brief discussion on across-method convergent validity is also provided). Then, the composite reliability and average variance extracted (AVE) were calculated for each of the final multi-item scales. Hereafter, the discriminant validity of the final measures was established.

¹⁸ These three parameter estimates (i.e. factor loading, unique error term, and correlation) can be computed from a covariance matrix generated from the observed item scores (also see Section 6.3.3.1). For additional information, see for example Sharma (1996).

6.3.3.1 Step 1: Data Preparation

In order to conduct the CFAs in LISREL 8.80 (Jöreskog & Sörbom, 2006), additional data files had to be created. Several steps were necessary to accomplish this task. First, the data (original data file extension = .sav) was imported from PASW Statistics 18.0.0 (SPSS Inc., 2009) into LISREL 8.80 (Jöreskog & Sörbom, 2006) and saved as a PRELIS data file (data file extension = .psf). Then, all of the variables in the dataset were defined as 'continuous' (and the file saved) in order for the program to compute covariances (and *not* correlations). Finally, a covariance matrix¹⁹ (utilized file extension = .cov) and a means file (utilized file extension = .mn) were created using PRELIS. The last two data files were then used to run the CFAs.

6.3.3.2 Step 2: Model Specification

After the appropriate preparation of the necessary data files, the next step is the specification of the CFA models. In comparison to the EFA group analysis, where no concrete model structure was specified, the model structure of the two CFAs was exactly hypothesized - based on underlying theory (cf. Sharma, 1996). Recalling that in the present study only existing measurement scales were utilized, extant literature suggested precise factor structures (see Kelloway, 1998).²⁰ The SIMPLIS programming syntax was used in order to specify the two CFA models (group one contained product-related constructs, group two salesperson-related constructs).²¹ Subsequent to the programming of the CFAs, the two models were executed in LISREL 8.80 (Jöreskog & Sörbom, 2006).

6.3.3.3 Step 3: Model (Structure) Identification

Directly linked to the model specification outlined above, is the notion of model identification - a concept centering on whether a unique solution is attainable for a particular hypothesized model (see Bollen, 1989a). The estimation of measurement (CFA) models entails the computation of unknown parameters (i.e. the factor loadings, error terms, and correlations) through the utilization of the known covariance matrix (also see Section 6.3.3.1). In this regard, different theoretical model specifications can

¹⁹ It is important to emphasize that a covariance matrix was used and *not* a correlation matrix. As Cudeck (1989, p.317) states, "the only complete statistical theory for structural model analysis has been developed for covariance matrices" and "[...] applying a covariance structure to a correlation matrix will produce some combination of incorrect test statistics, incorrect standard errors, or incorrect parameter estimates and may in fact alter the model being studied [...]."

²⁰ A note is made at this point on the examination of potential alternative factor structures (Kelloway, 1998). Although the possibility of alternative model structures should probably never be out ruled completely prior to analysis, such considerations are especially important if different theoretical explanations exist in the literature. In the present case, however, extant research work suggested a specific structure for each of the two CFA models (i.e. for group one and group two respectively).

²¹ Essentially, each model was programmed by specifying the relevant linear equations, using the two data files described in Section 6.3.3.1 (i.e. covariance matrix and means data files).

represent (a) under-identified, (b) just-identified, or (c) over-identified model structures (Kelloway, 1998). In the case of (a), the number of parameters that are unknown exceeds the number of specified equations, and hence, a unique solution is not obtainable. When (b) is the case, the number of unknown parameters is equal to the number of specified equations for the model, and any resulting solution will exactly reproduce the covariance matrix obtained from the observed item scores.²² In this scenario, there is no alternative solution available for the purpose of comparison, and thus, one cannot be sure whether the obtained solution indeed represents a good fit with the data. Finally, in the case of (c), the number of specified equations for the model exceeds the number of parameters to be estimated (i.e. that are unknown). In this scenario, an array of different unique solutions will exist (Bollen, 1989a; Kelloway, 1998). It has been recommended that over-identified models are preferable (Kelloway, 1998). In general, since over-identified models can generate a number of different solutions, one is able to select the most appropriate solution; that is, the one which best fits the observed data (Bollen, 1989a; Kelloway, 1998).

In the model identification process of any CFA - in fact, any SEM, a central deliberation is the 'causal flow' within the specified model. In other words, one needs to consider the causal coherence of the modeled observed items and latent constructs. For example, referring to Figure 6.13 above, it can be seen that the latent constructs (ζ_1 and ζ_2) are assumed to cause a change in their respective observed items (X_1 , X_2 and X_3 , X_4). Hence, the observed measurement items reflect their respective latent construct. Measurement models such as the one depicted in Figure 6.13 represent a causal flow that is one-way: the latent construct causes an observed item score. Hypothesized models with a one-way causal flow are also referred to as recursive models (cf. Bollen, 1989a). In general, models with a one-way causal flow (recursive models) always represent an over-identified model structure because one half of the parameter estimates do not require any equations (Bollen, 1989a). More precisely, this half of the parameters is constrained to zero, and hence, does not require any equations in order to be estimated (see Kelloway, 1998).²³

In the present case, the two measurement (CFA) models were specified as recursive models (one-way causal flow). In both cases, the latent constructs cause their respective observed items. Hence, the two CFA models represent over-identified factor structures.

²² It is noted that any covariance matrix created from observed data will contain different sources of error (Kelloway, 1998).

²³ Generally, if a structural equation model is specified that does not represent an exclusive one-way causal flow, certain parameters can be fixed to a set value (e.g., zero) in order to estimate the model (see Kelloway, 1998).

As a result, it was possible to select the two solutions that most appropriately fit with the observed data (cf. Bollen, 1989a; Kelloway, 1998).

6.3.3.4 Step 4: Evaluation of Model Fit

The ‘goodness-of-fit’ assessment plays a primary role in the evaluation of any structural equation model (such as a CFA/measurement model) (Hu & Bentler, 1999). In general, the notion of ‘fit’ relates to how precisely the modeled matrix (here, using maximum likelihood estimation) reproduces the covariance matrix obtained from the observed dataset. In other words, a fit assessment examines how well the model fits the data structure. “The two most popular ways of evaluating model fit are those that involve the χ^2 goodness-of-fit statistics and fit indexes” (Hu & Bentler, 1999, p.2). In LISREL 8.80 (Jöreskog & Sörbom, 2006), the commonly reported χ^2 (Chi-square) statistic and fit indices are available (and the results reported in the output file).²⁴

The χ^2 statistic tests the deviation of the covariance matrix produced by the CFA estimation (fitted matrix) from the covariance matrix produced by the observed data (sample matrix) (e.g., see Hu & Bentler, 1999; Kelloway, 1998). Ideally, the χ^2 test result should be non-significant ($p > 0.05$), indicating that the estimated matrix (based on the specified model) is not significantly different from the observed matrix (accepting the null hypothesis, H_0). Consequently, the model would provide a good absolute fit with the observed data. However, in the literature several problems have been pointed out regarding the conventional χ^2 test. Especially sample size issues and distributional misspecification have been highlighted (e.g., Hu & Bentler, 1995; 1999). As the statistical power of the χ^2 test amplifies with increasing sample size, a trivial discrepancy between the fitted and sample matrices may lead to the rejection of the hypothesized model (Hu & Bentler, 1995). Therefore, the χ^2 statistic is typically *not* the sole method employed to assess good model fit, but instead used in conjunction with fit indices “that have been offered to supplement the χ^2 test” (Hu & Bentler, 1999, p.2). Bradford, Crant, and Phillips (2009), for example, describe this analysis strategy as follows:

“To interpret the measurement model, no single statistic is viewed as the best indicator of fit; rather, researchers examine an array of fit indices in order to obtain a broad picture of the distinctiveness of the measures and the extent to which the model fits the data” (p.387).

²⁴ In the LISREL output file, the relevant χ^2 test result (‘Normal Theory Weighted Least Squares Chi-Square’) and the various fit indices are reported under the header ‘Goodness-of-Fit Statistics’.

Consistent with this approach, in the present study model fit is evaluated by both the χ^2 test *and* a number of different fit indices.

Model fit indices can be generally classified into ‘absolute fit’ and ‘incremental fit’ indices (e.g., Bollen, 1989b; Hu & Bentler, 1995; 1999). Hu and Bentler (1999) explain the difference between the two index types as follows:

“An absolute fit index assesses how well an a priori model reproduces the sample data. No reference model is used to assess the amount of increment in model fit, but an implicit or explicit comparison may be made to a saturated model that exactly reproduces the sample covariance matrix. [...] In contrast, an incremental fit index measures the proportionate improvement in fit by comparing a target model with a more restricted, nested baseline model. A null model in which all the observed variables are uncorrelated is the most typically used baseline model (Bentler & Bonett, 1980), although other baseline models have been suggested (e.g., Sobel & Bohrnstedt, 1985)” (p.2).

Although an extensive review of the vast array of available indices in the extant literature goes beyond the scope of the present study (see for example, Hu & Bentler, 1999 for specific information on various important fit indices), the subsequent discussion details the combination of ‘absolute fit’ and ‘incremental fit’ indices utilized in this scholarly work. All of these fit indices are reported in the output file of LISREL 8.80 (Jöreskog & Sörbom, 2006).

Building to a great extent on Hu and Bentler’s (1999) two-index presentation strategy as well as Hu and Bentler’s (1999) empirical tests of various combinations of fit indices and cut-off values in order to reject misspecified models (i.e. misspecified factor covariances, misspecified factor loadings, or both), a combination of fit indices was used to assess appropriate model fit of the two specified CFA models (rather than using fit indices in isolation). Furthermore, although Hu and Bentler’s (1999) two-index presentation strategy seems to be sufficient to assess appropriate model fit, it was deemed important to go beyond this approach and report a wider range of ‘absolute fit’ and ‘incremental fit’ indices to assure and provide greater confidence in the adequate model fit of the two measurement models. In particular, absolute model fit is mainly assessed by (1a) the standardized root mean square residual (SRMR; Bentler, 1995) and (1b) the root mean square error of approximation (RMSEA; Steiger & Lind, 1980). In addition, the often reported (1c) adjusted goodness-of-fit index (AGFI; e.g., Bentler, 1983; Jöreskog & Sörbom, 1984) is also examined. Incremental fit is mainly assessed by (2a) the

incremental fit index (IFI; Bollen, 1989b) and (2b) the comparative fit index (CFI; e.g., see Hu & Bentler, 1995; 1999). Additionally, (2c) the normed fit index (NFI; Bentler & Bonett, 1980) and (2d) the Tucker-Lewis index/ non-normed fit index (TLI/NNFI; Tucker & Lewis, 1973; e.g., also see Hu & Bentler, 1999) are presented. In general, and where appropriate, Hu and Bentler's (1999) recommendations for 'cut-off criteria' derived from their empirical study on fit indices are used. However, viewpoints and suggestions from other researchers are also taken into consideration.

Absolute model fit is assessed by the use of SRMR, RMSEA, and AGFI. SRMR is "the square root of the difference between the residuals of the sample covariance matrix and the hypothesized covariance model" (Hooper, Coughlan, & Mullen, 2008, p.54). SRMR can adapt values in the range of 0 to 1. Based on their study results, Hu and Bentler (1999) suggest a cut-off point of 0.08 as appropriate (i.e. < 0.08 for adequately fitting models). Other researchers have suggested a SRMR of < 0.05 for well fitting models (Byrne, 1998; Diamantopoulos & Siguaw, 2000).

RMSEA provides information on how well the hypothesized model's covariance matrix fits the covariance matrix from the observed data - based on the residual matrix, which shows any discrepancies (e.g., see Byrne, 1998). RMSEA offers the benefits of a confidence interval as well as a statistical test of RMSEA being significantly different from 0.05. Due to these advantages, it is a very informative fit index (Diamantopoulos & Siguaw, 2000). In the past (until the beginning of the nineties), it was generally accepted that RMSEA values below 0.08 represent a good model fit (and a general range of 0.05 to 0.10 was commonly used) (cf. Hooper, Coughlan, & Mullen, 2008). However, more recent recommendations have become more conservative. Steiger (2007) suggests a strict upper limit of 0.07, whereas Hu and Bentler (1999) recommend a cut-off value of 0.06 (i.e. < 0.06 for well fitting models). The confidence interval (and the p -value RMSEA < 0.05) can be reported in conjunction with the RMSEA value. The p -value should be statistically non-significant (i.e. > 0.05), showing that the model fit is 'close'. The confidence interval's lower limit should be close to 0 and its upper limit should be a value below 0.08 (Hooper, Coughlan, & Mullen, 2008).

AGFI is examined in addition to SRMR and RMSEA mainly due to the fact that it has been traditionally reported. AGFI indicates the 'closeness' between the matrix specified by the model and the observed matrix (Diamantopoulos & Siguaw, 2000). More recently, it has been recommended to refrain from using AGFI in order to assess absolute model fit (Hu & Bentler, 1999; Sharma et al., 2005). This is mainly due to the index's sensitivity

(e.g., sample size, complicated models are penalized, etc). Hence, AGFI should not be evaluated alone (Hooper, Coughlan, & Mullen, 2008). Traditionally, a cut-off criterion of 0.80 was acceptable in the more recent past (Sharma, 1996); nowadays researchers tend to employ a cut-off value of 0.90 (Hooper, Coughlan, & Mullen, 2008).

Incremental model fit is assessed by the use of IFI, CFI, and NFI as well as NNFI. Incremental fit indices measure the relative improvement of a hypothesized model's fit to a 'null' model (i.e. a model in which all variables are uncorrelated; without any specified covariances) (Hu & Bentler, 1999). IFI is reported because it is largely unaffected by sample size (see Bollen, 1990). CFI is also used to evaluate incremental model fit since it accounts for sample size and also performs well for smaller sample sizes (cf. Hooper, Coughlan, & Mullen, 2008). In addition, NFI and NNFI are reported. For these two indices it should be noted, however, that they tend to underestimate fit for smaller samples (cf. Hooper, Coughlan, & Mullen, 2008). A traditional cut-off value has been used of 0.90 for all of the above indices. However, it has been shown that these incremental fit indices need to be over 0.90 in order to perform well; that is, values > 0.90 are required in order for one to be confident that misspecified models are rejected (Hu & Bentler, 1999). Presently, a cut-off criterion of 0.95 is generally advocated (Hu & Bentler, 1999; also cf. Hooper, Coughlan, & Mullen, 2008). Table 6.2 provides a summary overview of the cut-off criteria discussed above. These values have been used to guide the decision of adequate fit for the two measurement (CFA) models during the examination of fit indices.

Table 6.2: Cut-Off Criteria for Used Model Fit Indices

Absolute Fit Index	Upper Limit	Preferable Limit (well fitting models)
SRMR	< 0.08	< 0.05
RMSEA ¹	< 0.07	< 0.06
<i>Traditional Lower Limit</i>		<i>Presently Advocated</i>
AGFI	> 0.80	> 0.90
Incremental Fit Index	Conventional Limit	Preferable Limit (well fitting models)
IFI	> 0.90	> 0.95
CFI	> 0.90	> 0.95
NFI	> 0.90	> 0.95
NNFI	> 0.90	> 0.95

Note: ¹p-value should be statistically non-significant (> 0.05). Lower limit of confidence interval: close to 0; upper limit of confidence interval: < 0.08.

6.3.3.5 Step 5: Model Re-specification

Subsequent to the assessment of model fit, model respecification(s) may be necessary in cases of 'poor' model fit. In fact, this is a common procedure and employed to attain unidimensional measurement (see Gerbing & Anderson, 1988). It should be noted at this point that theoretical reasoning is always important when re-specifying a model (e.g., see Kelloway, 1998). However, in contrast to the development of new measures (not performed, nor required in this study), the two measurement models examined in the present work contained existing measures, utilizing different theoretical explanations from extant literature. Hence, present theory suggested precise factor structures for both of the CFA models.

In LISREL 8.80 (Jöreskog & Sörbom, 2006), different sources of information are available that aid in the model re-specification decision. In particular, the residual matrix and modification indices are of central interest. Any large values identifiable in the residual matrix indicate that the fitted covariance matrix does not appropriately represent the sample covariance matrix, and hence, provide suggestions for model fit improvements (Kelloway, 1998; Sharma, 1996). The respective parameters should be considered for deletion.²⁵ Further, any large values depicted by the modification indices also indicate that an improvement in model fit is possible; that is, the existing discrepancies between fitted and sample matrix can be reduced (Kelloway, 1998; Sharma, 1996). Again, the respective scale items are candidates for deletion.

In general, model misspecifications, that is, large values in the residual matrix and of modification indices, are due to violations of the unidimensionality assumption (e.g., see Gerbing & Anderson, 1988) through (a) correlating error terms, (b) misspecified factor loadings (i.e. items load on factors that they are not hypothesized to reflect),²⁶ or both. In LISREL 8.80 (Jöreskog & Sörbom, 2006), these misspecifications can be identified and represent candidates for deletion in order to improve model fit.

6.3.3.6 Within-Method Convergent Validity and a Note on Across-Method Convergent Validity

After the two measurement models exhibited adequate fit with the data, the within-method convergent validity of the scales was assessed. In the extant literature, it has been specifically recommended that within-research convergent validity needs to be assured *before* a scale's reliability is approximated (Steenkamp & van Trijp, 1991). This

²⁵ The respective parameters may also be 'freed', however, this would violate the unidimensionality assumption.

²⁶ This is similar to what is referred to as 'cross-loadings' in EFA.

view builds on Gerbing and Anderson's (1988) empirical results that a set of items can be highly reliable, but does not have to exhibit sufficient within-method convergent validity. Following Steenkamp and van Trijp's (1991) guidelines, three conditions need to be met in order for a measurement scale to show adequate within-method convergent validity: (1) the factor coefficients are statistically significant (weak condition), (2) the factor loadings on the respective latent construct exceed 0.50 (stronger condition), and (3) these two conditions are assessed given that the overall model fit is acceptable. Hence, after the two measurement models exhibited an adequate fit with the data, the factor coefficients and loadings were examined to assure acceptable within-method convergent validity of the items.

Across-method convergent validity can be established if a "construct is measured by two or more (maximally) different methods" (Steenkamp & van Trijp, 1991, p.292). This procedure is also referred to as the multitrait-multimethod (MTMM) technique and can be used to assess convergent, as well as explore discriminant validity (cf. Bollen, 1989a). Across-method convergent validity was not explicitly investigated in the current study as it entails two major drawbacks: it requires additional data to be collected and can suffer from interpretation problems (Bollen, 1989a). Firstly, within the scope of the present dissertation it was not feasible to collect further data (also due to monetary as well as time constraints). Secondly, consistent interpretation of the results has been noted to be rather difficult in the case of MTMM (Bollen, 1989a). Finally, it should be noted again that in the present work existing measurement scales were utilized. Thus, although the MTMM technique was not explicitly used, previous studies certainly informed the current work regarding the validity of the scales; that is, results from previous measure validation procedures provided an even greater confidence in the results obtained from the two measurement models in the present study.

6.3.3.7 Composite Reliability (CR) and Average Variance Extracted (AVE)

Subsequent to the within-method convergent validity assessment of the measurement scales, the reliability and validity of the measures was assessed. In particular, Gerbing and Anderson (1988) argue that adequate unidimensionality of scales is important, yet, not sufficient to conclude that measurement scales are indeed useful. They propose to also investigate the reliability of each scale after appropriate unidimensionality has been established. In the present study, the composite reliability (CR) of each scale was computed and evaluated - as advocated by Gerbing and Anderson (1988; also cf. Fornell

& Larcker, 1981).²⁷ The CR equation, which was provided by Jöreskog (1971), is presented in Equation 6.1 below. With regard to structural equation modeling techniques, the CR formula is presently quite frequently used.

Equation 6.1: Composite Reliability (CR)

$$CR = \frac{\left(\sum_{i=1}^p \lambda_{yi}\right)^2}{\left(\sum_{i=1}^p \lambda_{yi}\right)^2 + \sum_{i=1}^p Var(\epsilon_i)}$$

Note: Adapted from Fornell and Larcker (1981), Equation (10), p.45.

As shown, the term on the top line as well as the left term on the bottom line is the squared sum of all item loadings on the respective factors (i.e. the respective latent constructs); the right term on the bottom line is the sum of all item error variances. A widely accepted threshold for CR is 0.60, that is, the composite reliability of a measure should be > 0.60 (e.g., see Bagozzi & Yi, 1988).

Furthermore, it has been recommended to additionally examine the average variance extracted (AVE) by each construct (Fornell & Larcker, 1981). The AVE examines “the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error” (Fornell & Larcker, 1981, p.45). In other words, “[T]he AVE estimate is the average amount of variation that a latent construct is able to explain in the observed variables to which it is theoretically related” (Farrell, 2010, p.324) - while accounting for measurement error. Equation 6.2 presents the formula for AVE suggested by Fornell and Larcker (1981). Again, in relation to structural equation modeling techniques, the AVE formula is currently quite commonly used.

²⁷ Cronbach’s coefficient alpha was not employed to measure reliability here because it assumes equal reliabilities across items (which composite reliability does not) and will underestimate the reliability of composite scores if scale items have unequal reliabilities (cf. Gerbing & Anderson, 1988). For more information on the concept of reliability, see Section 6.3.1.1.

Equation 6.2: Average Variance Extracted (AVE)

$$AVE = \frac{\sum_{i=1}^p \lambda_{yi}^2}{\sum_{i=1}^p \lambda_{yi}^2 + \sum_{i=1}^p Var(\epsilon_i)}$$

Note: Adapted from Fornell and Larcker (1981), Equation (11), p.46.

As depicted, the term on the top line as well as the left term on the bottom line is the sum of all squared item loadings on the respective factors (i.e. the respective latent constructs); the right term on the bottom line is the sum of all item error variances. A generally accepted threshold for AVE is 0.50, that is, the average variance extracted by a construct should be at least 0.50 (preferably > 0.50) (Bagozzi & Yi, 1988; Fornell & Larcker, 1981). From a theoretical perspective, the validity of a construct (as well as its respective items) is questionable if the variance attributable to measurement error exceeds 50% (> 0.50), and hence, the variance explained by the construct is below 50% (< 0.50) (Fornell & Larcker, 1981). In such a case, the variance due to error surpasses the variance explained by the relevant construct.

6.3.3.8 Discriminant Validity

Another important step in the measure validation procedure was the examination of the discriminant validity of the reflective measures. The concept of discriminant validity can be described as “the degree to which measures of different concepts are distinct” (Bagozzi, Yi, & Phillips, 1991, p.425). When discriminant validity is established, then “a latent variable is able to account for more variance in the observed variables associated with it than a) measurement error or similar, unmeasured influences; or b) other constructs within the conceptual framework” (Farrell, 2010, p.324).

The discriminant validity of the latent variables was assessed using Fornell and Larcker’s (1981) criterion - a method commonly employed in the marketing research domain to establish the discriminant validity of latent constructs (e.g., Cadogan, Kuivalainen, & Sundqvist, 2009; Homburg, Wieseke, & Bornemann, 2009; Lee et al., 2011; Sichtmann, von Selasinsky, & Diamantopoulos, 2011). In particular, this assessment involves the comparison of the AVE of each latent variable with the squared correlations (i.e. the shared variance) between constructs (Fornell & Larcker, 1981; also cf. Farrell, 2010). Discriminant validity of the measurement scales is supported if *each* construct’s AVE

exceeds its shared variance with all other latent variables. Importantly, in order to correctly perform this evaluation all necessary information was used from the CFA results (i.e. output files) obtained from a series of paired CFAs. As depicted by Equation 6.2 (Section 6.3.3.7), the calculation of the AVE incorporates measurement error. Hence, it is critical that the computation of the shared variances also takes measurement error into account by using the correlations from the correlation matrix in the CFA output (Farrell, 2010).

In addition, it is noteworthy that the 'AVE versus shared variance' test also provides an important indication of potential problems of multicollinearity among, and hence, predictive validity of, the here investigated independent latent variables.²⁸ Specifically, Grewal, Cote, and Baumgartner's (2004) empirical findings demonstrate that "if the Fornell and Larcker criterion is satisfied, an inference error is unlikely" (p.528). This conclusion is of great relevance to researchers, or as Grewal, Cote, and Baumgartner (2004) state:

"As theory testing usually involves ascertaining the direction (positive or negative) and significance of a parameter estimate, researchers are generally concerned about inference errors, specifically, Type II errors (i.e., failures to detect a significant effect" (pp.523-524).

6.3.3.9 Assessment of Common Method Bias

Finally, the CFA procedure involved an assessment of common method bias (e.g., see Bagozzi, Yi, & Phillips, 1991; Podsakoff et al., 2003). It is noted at this point, that previous studies in the research array of retail buyers' new product acceptance decisions appear to not have performed such an investigation (for example, cf. Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000).

Common method variance can be described as the "variance that is attributable to the measurement method rather than to the constructs the measures represent" (Podsakoff et al., 2003, p.879). A wide variety of different techniques have been suggested in extant literature for the examination of common method bias, each bearing advantages and disadvantages. An extensive review of all of these approaches, however, goes beyond the scope of this dissertation and is available in existing scholarly work (e.g., see Podsakoff et al., 2003, for a detailed review).

²⁸ This is the case because "average variance extracted is a measure of reliability, and since multicollinearity and reliability are the two major influences on estimation accuracy and inference errors" (Grewal, Cote, & Baumgartner, 2004, p.528).

In the present study, common method bias was investigated by specifying a method bias model, in which all scale items loaded on a single (bias) factor - Harman's single-factor technique (cf. Podsakoff et al., 2003). This test has been successfully employed in previous academic research work to assess common method variance effects (e.g., Cadogan et al., 2005; Menon, Bharadwaj, & Howell, 1996). In the terminology of Menon, Bharadwaj, and Howell (1996):

“[I]f common method bias accounts for the relations between two or more variables, then a factor analysis should yield a single method factor when all the variables are analyzed together” (p.307).

If the bias model results in poor fit, this would reduce concerns regarding common method bias.

6.3.4 Treatment of Missing Data

As previously mentioned, the utilized sample size in the present study was 192 (i.e. N = 192). Although there was only a small portion of missing data within the generated dataset, which did not seem to impose major concerns for the present work, an appropriate treatment of this missing data was still necessary prior to the conduction of the measure validation procedures (and the later performed theory-testing stage). In particular, there was some missing data for the indicators of the mediator variable 'buyer trust' (13 missing values), as well as three of the control variables, that is, the indicators of 'buyer relationship orientation' (13 missing values), the measure of 'buyer-salesperson relationship duration' (12 missing values), and the measure of 'customer firm size' (number of employees; 27 missing values). No missing values were present for any of the direct (main) effect variables or the dependent variable.

Presently, two approaches for appropriate treatment of missing data appear to be most often advocated in the extant literature: (1) expectation maximization (EM) and (2) multiple imputation (MI) (e.g., Graham, 2009; Olinsky, Chen, & Harlow, 2003; Schafer & Graham, 2002). Although several other methods exist and/or have been employed in past research, it is beyond the scope of the present study to discuss all of them (for a review, see e.g., Olinsky, Chen, & Harlow, 2003). In the current work, EM has been utilized in order to deal with the missing data points, a method widely accepted in the extant literature (e.g., Schafer & Graham, 2002).

In essence, EM is a maximum likelihood-based estimation procedure performed to calculate the missing data values within a dataset, and - using the potentially simplest description - can be understood to represent a 'best guess' approximation of missing data points (Graham, 2009; Olinsky, Chen, & Harlow, 2003). Once generated, the estimated data values can be used to substitute missing values. However, in order to be able to adequately utilize the EM method, it is desirable that the missing data are *missing completely at random* (MCAR) within the employed dataset (Graham, 2009; Schafer & Graham, 2002). The MCAR concept can be explained as follows:

“If the cases for which the data are missing can be thought of as a random sample of all the cases, then the missingness is MCAR. This means that everything one might want to know about the data set as a whole can be estimated from any missing data patterns, including the pattern in which data exist for all variables, that is, for complete cases” (Graham, 2009, p.552).

Consequently, the assumption that the missing data points are MCAR needs to be tested before any estimated values are used to replace missing data points. In the present work, Little's MCAR test in PASW Statistics 18.0.0 (SPSS Inc., 2009) was employed to examine whether the data was indeed MCAR. In particular, Little's MCAR test is a Chi-Square (χ^2) assessment, testing the null hypothesis (H_0) which states that the data are missing completely at random. Hence, the χ^2 test should be non-significant ($p > 0.05$), leading to the acceptance of H_0 , and the rejection of the alternative hypothesis (H_a) which states that the respective data are not missing completely at random.

The result of the χ^2 test was non-significant ($\chi^2_{(637)} = 638.569, p = 0.475$), in support of H_0 . Thus, the missing data met the MCAR assumption and the EM estimates were used to substitute the missing data points. For all of the subsequently presented analyses (including the theory-testing stage discussed in Chapter 7), the 'complete' dataset (i.e. without any missing values) was used.

6.4 Internal Consistency and EFA Results for Individual Multi-Item Reflective Measures

The first step in the analysis and development of the multi-item reflective measures was the individual examination of each scale's internal consistency and EFA. Hence, this part of the assessment discusses each scale in isolation. The following sections present the specific results for the reflective measures used in this study. The origins of each scale

have already been discussed at length in Chapter 5 and will not be reiterated at this point.

6.4.1 Product-Related Constructs

6.4.1.1 Product Quality

Product quality was measured by a three-item scale. Cronbach's alpha was 0.947, and thus, clearly above the suggested threshold of 0.7 (Nunnally, 1978). Both, the Bartlett's test and the KMO measure indicated suitability of the data for EFA. The results are presented in Table 6.3

Table 6.3: EFA Results – Product Quality

Scale Item	Factor Loading
The quality of this product meets my expectations	0.933
I am satisfied with the quality of this product	0.967
The quality of this product is appropriate for its purpose	0.877
Bartlett's Test: Approx. Chi-Square = 569.086, df = 3, p = 0.000	
KMO: 0.754	

Notes: 1 factor extracted after 8 iterations. Rotation was not required.

In particular, one factor was extracted during the EFA routine, explaining 85.8% of the common variance in the measure. Furthermore, all factor loadings were very high and much higher than the minimum cut-off level of 0.4 (Hair et al., 2010). Therefore, all three scale items were retained for later analyses.

6.4.1.2 Product Price

Product price was also measured on a three-item scale. The Cronbach's alpha was 0.909 and above the 0.7 threshold (Nunnally, 1978). Based on the Bartlett's test and KMO measure, the data was suitable for an EFA. One factor was extracted during this process, explaining 77.2% of the common variance. Again, factor loadings were sufficiently high (Hair et al., 2010). All items were retained for subsequent analyses. The results are shown in Table 6.4.

Table 6.4: EFA Results – Product Price

Scale Item	Factor Loading
This product can be considered as favorably priced	0.934
The price of this product is acceptable	0.846
The price of this product can be regarded as competitive	0.852
Bartlett's Test: Approx. Chi-Square = 387.584, df = 3, p = 0.000	
KMO: 0.744	

Notes: 1 factor extracted after 10 iterations. Rotation was not required.

6.4.1.3 Expected Customer Demand

Three scale items were utilized to measure expected customer demand. The Cronbach's alpha was 0.932, well above the recommended threshold of 0.7 (Nunnally, 1978). No problems were identified by the Bartlett's test or KMO measure. Thus, the data was suitable for an EFA procedure. Table 6.5 presents the results. As depicted, during the EFA routine one factor was extracted accounting for 82.7% of the common variance. All items loaded highly on the factor (> 0.4) (Hair et al., 2010) and were retained for further analyses.

Table 6.5: EFA Results – Expected Customer Demand

Scale Item	Factor Loading
I believe the potential customer demand for this product is strong	0.976
I see a market for this product	0.827
For this product I see high customer demand	0.919
Bartlett's Test: Approx. Chi-Square = 513.085, df = 3, p = 0.000	
KMO: 0.728	

Notes: 1 factor extracted after 10 iterations. Rotation was not required.

6.4.1.4 Product Dependence

Product dependence was also measured by three items. This measure had a Cronbach's alpha of 0.877, which was sufficiently higher than the cut-off value of 0.7 (Nunnally, 1978). The Bartlett's test and the KMO measure indicated the suitability of the data for an EFA routine during which one factor was extracted, explaining 71.1% of the common variance. All three factor loadings were well above the recommended threshold of 0.4

(Hair et al., 2010) and retained for additional investigations. The results are depicted in Table 6.6.

Table 6.6: EFA Results – Product Dependence

Scale Item	Factor Loading
There are many other suppliers who could provide me with a similar product (r)	0.848
It would be expensive in time and costs to switch to a different supplier for this product	0.748
It would be difficult for me to buy this product from a different supplier	0.925
Bartlett's Test: Approx. Chi-Square = 312.284, df = 3, p = 0.000	
KMO: 0.717	

Notes: 1 factor extracted after 11 iterations. Rotation was not required. (r) = reverse coded item.

6.4.1.5 Product Importance

Four items were employed to measure product importance. The scale had a Cronbach's alpha of 0.912, and hence, was also highly reliable and above the cut-off of 0.7 (Nunnally, 1978). No problems were indicated by the Bartlett's test or KMO measure, and thus, the items were entered into an EFA routine. The results are shown in Table 6.7.

Table 6.7: EFA Results – Product Importance

Scale Item	Factor Loading
Important ----- Unimportant (r)	0.957
Nonessential ----- Essential	0.865
High priority ----- Low priority (r)	0.813
Insignificant ----- Significant	0.764
Bartlett's Test: Approx. Chi-Square = 592.464, df = 6, p = 0.000	
KMO: 0.767	

Notes: 1 factor extracted after 8 iterations. Rotation was not required. (r) = reverse coded items.

One factor was extracted, explaining 72.7% of common variance in the measure. Since all the factor loadings were sufficiently high (cf. Hair et al., 2010), all items were retained for future analyses at this point.

6.4.2 Salesperson-Related Constructs

6.4.2.1 Salesperson Consultation

Salesperson consultation was initially measured by a six-item scale, exhibiting a Cronbach's alpha of 0.912, which was above the recommended threshold of 0.7 (Nunnally, 1978). Both, the Bartlett's test as well as the KMO measure indicated the suitability of the data for an EFA routine. One factor was extracted, explaining 63.3% of the common variance. All factor loadings were sufficiently high (cf. Hair et al., 2010), resulting in the retention of all items for additional analyses at this point. Table 6.8 presents the results for this EFA.

Table 6.8: EFA Results – Salesperson Consultation

Scale Item	Factor Loading
This particular salesperson frequently provides me with new and useful information	0.836
This particular salesperson tailors her/his product presentations to fit my needs	0.805
This particular salesperson always presents information to me in a clear and concise manner	0.762
When selling to me, this particular salesperson frequently makes objective comparisons between products	0.801
When selling to me, this particular salesperson acknowledges both the strengths and weaknesses of her/his products	0.804
When selling to me, this particular salesperson frequently uses market-related information to support her/his claims	0.766
Bartlett's Test: Approx. Chi-Square = 715.074, df = 15, p = 0.000	
KMO: 0.900	

Notes: 1 factor extracted after 5 iterations. Rotation was not required.

6.4.2.2 Salesperson Helping Behavior

An eight-item scale was originally used to measure salesperson helping behavior. It returned a Cronbach's alpha of 0.951, clearly above the 0.7 threshold (Nunnally, 1978). Based on the Bartlett's test as well as KMO measure, no problems existed regarding the data's suitability for an EFA process. One factor was extracted during the EFA routine, explaining 71.0% of the common variance. As all items returned adequate factor loadings (Hair et al., 2010), all of the items were retained for future analyses. Table 6.9 shows the results for the salesperson helping behavior scale.

Table 6.9: EFA Results – Salesperson Helping Behavior

Scale Item	Factor Loading
This particular salesperson does things voluntarily for my company	0.820
This particular salesperson assists others in my company with their work for the benefit of my company	0.824
This particular salesperson gets involved in extra work tasks to benefit my company	0.902
This particular salesperson volunteers to attend functions that help my company	0.832
This particular salesperson helps me and others in my company with our work responsibilities	0.849
This particular salesperson helps me and colleagues with heavy workloads	0.762
This particular salesperson willingly gives of her/his time to help me and colleagues around me	0.891
This particular salesperson is always willing to lend a helping hand to me and colleagues	0.853
Bartlett's Test: Approx. Chi-Square = 1471.666, df = 28, p = 0.000	
KMO: 0.908	

Notes: 1 factor extracted after 4 iterations. Rotation was not required.

6.4.2.3 Buyer Trust in the Salesperson

Buyer trust in the salesperson was measured on a three-item scale, returning a Cronbach's alpha of 0.970, which met the 0.7 cut-off recommendation (Nunnally, 1978). As neither the Bartlett's test, nor the KMO measure suggested any problems of suitability of the data for an EFA routine, the scale was entered into an EFA process. One factor was extracted, explaining 91.7% of the common variance. Each of the three factor loadings were very high (Hair et al., 2010), leading to retention of all items for future analyses. The results are depicted in Table 6.10.

Table 6.10: EFA Results – Buyer Trust

Scale Item	Factor Loading
I have trust in this salesperson	0.943
I have confidence in this salesperson's integrity and reliability	0.956
This salesperson is trustworthy	0.972
Bartlett's Test: Approx. Chi-Square = 750.050, df = 3, p = 0.000	
KMO: 0.779	

Notes: 1 factor extracted after 6 iterations. Rotation was not required.

6.4.2.4 Buyer Relationship Orientation (towards Buyer-Salesperson Relationship)

A five-item scale was utilized to measure buyer relationship orientation. Its Cronbach's alpha was 0.922, and thus, above the 0.7 cut-off recommendation (Nunnally, 1978). The Bartlett's test and the KMO measure returned appropriate values for the data's suitability for an EFA routine. One factor was extracted during this process, explaining a common variance of 70.7%. All of the factor loadings were adequately high (cf. Hair et al., 2010). Thus, all scale items were retained for further analyses. Table 6.11 shows the EFA results for this scale.

Table 6.11: EFA Results – Buyer Relationship Orientation

Scale Item	Factor Loading
Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success	0.844
A close relationship with this salesperson is important to my success	0.847
A strong relationship with this salesperson would be very helpful in buying her/his products	0.806
I don't need a close relationship with this salesperson to successfully buy her/his products (r)	0.849
I believe that a strong relationship with this salesperson is needed to successfully buy her/his products	0.855
Bartlett's Test: Approx. Chi-Square = 703.831, df = 10, p = 0.000	
KMO: 0.874	

Notes: 1 factor extracted after 4 iterations. Rotation was not required. (r) = reverse coded item.

6.5 Results of EFA Group Analysis

Following the isolated investigation of each scale, all items were further explored employing an EFA group analysis strategy, as previously detailed in earlier sections of this Chapter. The theoretical reasoning behind this approach was already discussed at length and is not reiterated here. The subsequent sections present the results for the analyses of the two EFA groups.

6.5.1 Group 1: Product-Related Constructs

The EFA for group one contained the five product-related reflective measures, that is, product quality, product price, expected customer demand, product dependence, and product importance. The Bartlett's test as well as the KMO measure suggested that the data were suitable for this EFA procedure. Five factors were extracted during this routine, explaining a total of 78.4% of the variance. Importantly, each of the item sets loaded on only one factor respectively. Cross-loadings did not exist. Furthermore, all

loadings were well above the recommended cut-off value of 0.4 (Hair et al., 2010). Thus, at this point all of the scale items entered into the EFA procedure for group one were retained for further analysis. Table 6.12 shows the results for group one.

Table 6.12: EFA Results – Group 1: Product-Related Constructs

Scale Item	Factor Loading				
	Product Quality	Product Price	Expected Customer Demand	Product Dependence	Product Importance
The quality of this product meets my expectations	0.896				
I am satisfied with the quality of this product	0.928				
The quality of this product is appropriate for its purpose	0.870				
This product can be considered as favorably priced		0.933			
The price of this product is acceptable		0.803			
The price of this product can be regarded as competitive		0.862			
I believe the potential customer demand for this product is strong			-0.966		
I see a market for this product			-0.721		
For this product I see high customer demand			-0.923		
There are many other suppliers who could provide me with a similar product (r)				0.841	
It would be expensive in time and costs to switch to a different supplier for this product				0.735	
It would be difficult for me to buy this product from a different supplier				0.938	
Important ----- Unimportant (r)					1.006 ¹
Nonessential ----- Essential					0.892
High priority ----- Low priority (r)					0.738
Insignificant ----- Significant					0.681
Bartlett's Test: Approx. Chi-Square = 2698.133, df = 120, p = 0.000					
KMO: 0.847					

Notes: 5 factors extracted. Rotation converged in 7 iterations. (r) = reverse coded items.

¹ “[i]f the factors are *correlated (oblique)*, the factor loadings are *regression coefficients and not correlations* and as such they can be larger than one in magnitude” (Jöreskog, 1999, p.1, emphases in original).

6.5.2 Group 2: Salesperson-Related Constructs

The EFA routine for group two consisted of the four salesperson-related measures, that is, salesperson consultation, salesperson helping behavior, buyer trust (in salesperson), and buyer relationship orientation (towards buyer-salesperson relationship). Both, the Bartlett's test and the KMO measure indicated that the data were suitable for this EFA process. Four factors were extracted, explaining 73.3% of the total variance. Table 6.13 presents the EFA results for group two.

Table 6.13: EFA Results – Group 2: Salesperson-Related Constructs

Scale Item	Factor Loading			
	Salesperson Consultation	Salesperson Helping Behavior	Buyer Trust (in Salesperson)	Buyer RO (towards Buyer-Salesperson Relationship)
This particular salesperson frequently provides me with new and useful information	-0.647			
This particular salesperson tailors her/his product presentations to fit my needs	-0.705			
This particular salesperson always presents information to me in a clear and concise manner	-0.661			
When selling to me, this particular salesperson frequently makes objective comparisons between products	-0.777			
When selling to me, this particular salesperson acknowledges both the strengths and weaknesses of her/his products	-0.771			
When selling to me, this particular salesperson frequently uses market-related information to support her/his claims	-0.810			
This particular salesperson does things voluntarily for my company		0.703		
This particular salesperson assists others in my company with their work for the benefit of my company		0.705		
This particular salesperson gets involved in extra work tasks to benefit my company		0.840		
This particular salesperson volunteers to attend functions that help my company		0.830		
This particular salesperson helps me and others in my company with our work responsibilities		0.847		
This particular salesperson helps me and colleagues with heavy workloads		0.883		
This particular salesperson willingly gives of her/his time to help me and colleagues around me		0.832		
This particular salesperson is always willing to lend a helping hand to me and colleagues		0.712		
I have trust in this salesperson			0.904	
I have confidence in this salesperson's integrity and reliability			0.986	
This salesperson is trustworthy			0.954	
Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success				0.749
A close relationship with this salesperson is important to my success				0.764
A strong relationship with this salesperson would be very helpful in buying her/his products				0.701
I don't need a close relationship with this salesperson to successfully buy her/his products (r)				0.902
I believe that a strong relationship with this salesperson is needed to successfully buy her/his products				0.886
Bartlett's Test: Approx. Chi-Square = 4098.661, df = 231, p = 0.000				
KMO: 0.914				

Notes: 4 factors extracted. Rotation converged in 8 iterations. (r) = reverse coded item.

In a similar vein as for group one, all items in group two loaded adequately on one respective factor (all loadings > 0.4; Hair et al., 2010). Cross-loadings were again absent. Hence, all of the group two scale items were retained for additional analysis.

6.6 Results of CFA Group Analysis

Subsequent to the EFA group analysis process, the same two groups were used in order to perform a CFA analysis, which allows for a more stringent assessment of the measures due to its ability to (1) take measurement error estimates into account and (2) model observed as well as latent (unobserved) variables (Bollen, 1989a; Fornell & Larcker, 1981). Since all of the specifics of this analysis procedure were already detailed in depth earlier in this Chapter, the following sections focus on the discussion and presentation of the CFA results. First the results for group one are discussed, then the results for group two are explicated.

6.6.1 Group 1: Product-Related Constructs

During the EFA routines (i.e. individual and group analyses) for the product-related constructs, none of the scale items had to be removed. Hence, in the first step of the CFA analysis the exact same number of items was retained for the group one measurement model. In this initial model, no concerns existed regarding any cross-loadings or (high) correlations between the latent variables, however, some problems were identified with respect to highly correlated error terms between two of the product importance items and other scale items in the model. Specifically, items two and three of this scale (i.e. product importance 02 and product importance 03) had high values in the residual matrix and high modification indices. Consequently, these two items were removed from the model and the CFA re-run.²⁹ As displayed in Table 6.14, after this first re-specification the measurement model returned adequate goodness-of-fit statistics. In particular, the measurement fit statistics/indices were $\chi^2_{(67)} = 111.90$ ($p = 0.00$), $\chi^2/df = 1.67$, SRMR = 0.037, RMSEA = 0.059, AGFI = 0.879, IFI = 0.987, CFI = 0.987, NFI = 0.968, and NNFI = 0.983. Collectively, these results indicate that the group one measurement model adequately fits the data (e.g., Byrne, 1998). Importantly, the fit indices SRMR (< 0.05), RMSEA (< 0.06), IFI (> 0.95), CFI (> 0.95), NFI (> 0.95), and NNFI (> 0.95) all meet the more stringent recommended cut-off values for well fitting models (as discussed in Section 6.3.3.4). In addition, although the χ^2 test is significant, it should be recalled that this statistic is depended on sample size (among other issues). In order to account for sample size effects and model complexity, it has been suggested to also examine the χ^2 to degrees of freedom ratio (χ^2/df) (Baumgartner & Homburg, 1996; Byrne, 1989; Carmines & McIver, 1981). Generally, it has been recommended that this ratio should be below 3.0 (however, preferably below 2.0), with the model improving in fit

²⁹ It is noted that 'product importance' is a control variable in the hypothesized theoretical model (see Chapter 4). Hence, it did not seem to be of any major concern that the final measure contained two scale items (rather than three, which may be seen as preferable).

as the ratio gets closer to 1.0 (Baumgartner & Homburg, 1996; Byrne, 1989; Carmines & McIver, 1981). Hence, the model's value of 1.67 (χ^2/df) also supports the model's acceptable fit to the data.

For the purpose of completeness, a further model was run (denoted as final model in Table 6.14) including the single indicant measure 'estimated gross margin' - another product-related variable. Before this step was performed, however, this measure was investigated in an individual CFA. In order to be able to do this, the error variance had to be calculated beforehand as at least two 'pieces' of information were required to perform the estimation (Bollen, 1989a).

Table 6.14: Goodness-of-Fit Statistics – Measurement Model Group 1

Goodness-of-Fit Statistic	Initial Model	Model after 1 st Re-specification	Final Model (including Margin)
Chi-Square (χ^2)	193.743	111.900	117.018
Degrees of Freedom (<i>df</i>)	94	67	76
Sample Size (N)	192	192	192
Chi-Square (χ^2) Significance	0.00	0.00048	0.00176
χ^2/df	2.06	1.67	1.54
Standardized Root Mean Square Residual (SRMR)	0.046	0.037	0.036
Root Mean Square Error of Approximation (RMSEA)	0.075	0.059	0.053
Adjusted Goodness-of-Fit Index (AGFI)	0.837	0.879	0.881
Incremental Fit Index (IFI)	0.978	0.987	0.988
Comparative Fit Index (CFI)	0.978	0.987	0.988
Normed Fit Index (NFI)	0.957	0.968	0.966
Non-Normed Fit Index (NNFI)	0.972	0.983	0.984

Assuming a reliability of 0.7 and using the item's variance of 3.005 from the respective PASW Statistics output, the error variance of 'estimated gross margin' was 0.9015 (i.e. $(1 - 0.7) \times 3.005 = 0.9015$) (cf. Cadogan, et al., 2005; Jöreskog & Sörbom, 1993). The single indicant measure was then examined in a CFA (setting its error variance to 0.9015). The results showed that the item adequately loaded on its construct (factor loading = 0.839). Subsequently, the final model (including the single item measure 'estimated gross margin') was assessed using CFA. The goodness-of-fit statistics of the final model are also reported in Table 6.14. As shown, the final model showed an even slightly better fit with the data. Specifically, the measurement fit statistics/indices were $\chi^2_{(76)} = 117.02$ ($p = 0.00$), $\chi^2/df = 1.54$, SRMR = 0.036, RMSEA = 0.053, AGFI = 0.881, IFI = 0.988, CFI = 0.988, NFI = 0.966, and NNFI = 0.984. Collectively, these results

indicate that the final group one measurement model adequately fits the data (e.g., Byrne, 1998). Again, the fit indices SRMR (< 0.05), RMSEA (< 0.06), IFI (> 0.95), CFI (> 0.95), NFI (> 0.95), and NNFI (> 0.95) all meet the more stringent recommended cut-off values for well fitting models. In addition, the model's χ^2 to degrees of freedom ratio (χ^2/df) of 1.54 is closer to 1.0 (Baumgartner & Homburg, 1996; Byrne, 1989; Carmines & McIver, 1981).

The individual scale results for the final model are depicted in Table 6.15. Except for product importance (two items) and the single indicant measure 'estimated gross margin', three items were retained for all of the other measures.

Table 6.15: CFA Results – Final Measurement Model Group 1

Scale Item	Factor Loading ¹ (t-value)					Margin
	Product Quality	Product Price	Expected Customer Demand	Product Dependence	Product Importance	
The quality of this product meets my expectations	0.933 (fixed) ²					
I am satisfied with the quality of this product	0.968 (26.548)					
The quality of this product is appropriate for its purpose	0.876 (19.921)					
This product can be considered as favorably priced		0.926 (fixed)				
The price of this product is acceptable		0.855 (16.497)				
The price of this product can be regarded as competitive		0.854 (16.473)				
I believe the potential customer demand for this product is strong			0.971 (fixed)			
I see a market for this product			0.834 (18.398)			
For this product I see high customer demand			0.922 (24.840)			
There are many other suppliers who could provide me with a similar product (r)				0.849 (fixed)		
It would be expensive in time and costs to switch to a different supplier for this product				0.752 (11.881)		
It would be difficult for me to buy this product from a different supplier				0.922 (14.152)		
Important ----- Unimportant (r)					0.837 (fixed)	
Insignificant ----- Significant					0.817 (9.586)	
This product [...] has a high estimated gross margin (for your organization)						0.857 (fixed)
Composite Reliability (CR)	0.948	0.910	0.936	0.881	0.813	0.735³
Average Variance Extracted (AVE)	0.858	0.772	0.829	0.712	0.684	0.735³

Notes: ¹Completely Standardized Solution (LAMBDA-X).

²T-values are not returned for fixed items.

³Technically, these can be computed (as shown). However, for a single indicant measure they do not really carry the meaning of CR and AVE respectively.

(r) = reverse coded item.

As shown, all of the scale items load highly on their respective construct and all of the factor loadings were significant (all t-values > 3.42; $p < 0.001$). Since the factor loadings are (1) statistically significant, (2) exceed a 0.50 factor loading, and (3) the overall model fit was concluded to be acceptable, all of the scales depict adequate within-method convergent validity (Steenkamp & van Trijp's, 1991). Additionally, great results were also obtained for the CR and AVE of each item. In particular, all CR and AVE values were clearly higher than the recommended threshold levels of 0.6 and 0.5 respectively (Bagozzi & Yi, 1988; Fornell & Larcker, 1981), further attesting to the within-method convergent validity of the measures.

6.6.2 Group 2: Salesperson-Related Constructs

Since none of the scale items of the salesperson-related group had to be removed as a result of the EFA procedures, all items were entered into the CFA group analysis for the initial measurement model. Again, during the CFA routine concerns resulted mainly from inter-correlated error terms of specific items, rather than any cross-loadings or (high) correlations between constructs. However, as compared to the re-specification procedure for group one's model, the iterative re-specification process for group two's model proved to be a little more difficult. The final model was derived after the fourth re-specification and the deletion of a total of seven scale items. Particularly, two items of the salesperson consultation measure (i.e. salesperson consultation 03 and salesperson consultation 05), four items of the salesperson helping behavior measure (i.e. salesperson helping behavior 05 to salesperson helping behavior 08), and one item of the buyer relationship orientation measure (i.e. buyer relationship orientation 04) were removed from the model. Table 6.16 presents the fit statistics of the initial and the final model.

Particularly, the measurement fit statistics/indices of the final model were $\chi^2_{(84)} = 135.59$ ($p = 0.00$), $\chi^2/df = 1.61$, SRMR = 0.040, RMSEA = 0.057, AGFI = 0.876, IFI = 0.988, CFI = 0.988, NFI = 0.971, and NNFI = 0.985. Collectively, these results indicate that the final group two measurement model adequately fits the data (e.g., Byrne, 1998). Importantly, the fit indices SRMR (< 0.05), RMSEA (< 0.06), IFI (> 0.95), CFI (> 0.95), NFI (> 0.95), and NNFI (> 0.95) all meet the more stringent recommended cut-off values for well fitting models. Additionally, the model's χ^2 to degrees of freedom ratio (χ^2/df) is 1.61, and hence, below the preferable cut-off value of 2.0 (Baumgartner & Homburg, 1996; Byrne, 1989; Carmines & McIver, 1981), further supporting the model's acceptable fit to the data.

Table 6.16: Goodness-of-Fit Statistics – Measurement Model Group 2

Goodness-of-Fit Statistic	Initial Model	Final Model (After 4th Re-specification)
Chi-Square (χ^2)	549.732	135.593
Degrees of Freedom (<i>df</i>)	203	84
Sample Size (N)	192	192
Chi-Square (χ^2) Significance	0.00	0.000312
χ^2/df	2.71	1.61
Standardized Root Mean Square Residual (SRMR)	0.064	0.040
Root Mean Square Error of Approximation (RMSEA)	0.095	0.057
Adjusted Goodness-of-Fit Index (AGFI)	0.742	0.876
Incremental Fit Index (IFI)	0.966	0.988
Comparative Fit Index (CFI)	0.966	0.988
Normed Fit Index (NFI)	0.947	0.971
Non-Normed Fit Index (NNFI)	0.961	0.985

The individual results for the final scales are shown in Table 6.17. All measures retain four items, except for buyer trust, which retains its original three scale items.

All of the items depict a satisfactory loading on their respective construct and all loadings are significant (all t-values > 3.42; $p < 0.001$). Since all of these loadings also exceed the 0.50 level (and the model fit is acceptable), all scale items possess an adequate within-method convergent validity (Steenkamp & van Trijp's, 1991). Furthermore, respectable results were also obtained for each item's CR and AVE, with all values being above the recommended threshold levels of 0.6 and 0.5 respectively (Bagozzi & Yi, 1988; Fornell & Larcker, 1981), further affirming the within-method convergent validity of the scales.

Table 6.17: CFA Results – Final Measurement Model Group 2

Scale Item	Factor Loading ¹ (t-value)			
	Salesperson Consultation	Salesperson Helping Behavior	Buyer Trust (in Salesperson)	Buyer RO (towards Buyer-Salesperson Relationship)
This particular salesperson frequently provides me with new and useful information	0.881 (fixed) ²			
This particular salesperson tailors her/his product presentations to fit my needs	0.796 (13.424)			
When selling to me, this particular salesperson frequently makes objective comparisons between products	0.776 (12.894)			
When selling to me, this particular salesperson frequently uses market-related information to support her/his claims	0.730 (11.766)			
This particular salesperson does things voluntarily for my company		0.857 (fixed)		
This particular salesperson assists others in my company with their work for the benefit of my company		0.871 (15.701)		
This particular salesperson gets involved in extra work tasks to benefit my company		0.906 (16.802)		
This particular salesperson volunteers to attend functions that help my company		0.792 (13.398)		
I have trust in this salesperson			0.945 (fixed)	
I have confidence in this salesperson's integrity and reliability			0.956 (29.054)	
This salesperson is trustworthy			0.972 (31.303)	
Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success				0.866 (fixed)
A close relationship with this salesperson is important to my success				0.880 (15.725)
A strong relationship with this salesperson would be very helpful in buying her/his products				0.807 (13.724)
I believe that a strong relationship with this salesperson is needed to successfully buy her/his products				0.799 (13.499)
Composite Reliability (CR)	0.874	0.917	0.971	0.905
Average Variance Extracted (AVE)	0.636	0.735	0.917	0.704

Notes: ¹Completely Standardized Solution (LAMBDA-X).
²T-values are not returned for fixed items.

6.7 Results of Discriminant Validity Assessment

It was also important to establish the discriminant validity of the latent variables. As previously discussed (see Section 6.3.3.8), discriminant validity was assessed using Fornell and Larcker's (1981) criterion - a method commonly used in marketing research studies to establish the discriminant validity of latent constructs (e.g., Cadogan, Kuivalainen, & Sundqvist, 2009; Homburg, Wieseke, & Bornemann, 2009; Lee et al., 2011; Sichtmann, von Selasinsky, & Diamantopoulos, 2011).

The results of the discriminant validity assessment are depicted in Table 6.18. As can be seen, the correlations between all of the employed reflective measures are significantly below 1, with the highest correlation being 0.71 between salesperson consultation and salesperson helping behavior. The AVEs of the constructs range from 0.64 to as high as 0.92. The highest shared variance is 0.51, between the latent variables of salesperson consultation and salesperson helping behavior. Importantly, each construct's AVE exceeds each of its shared variance with any of the other latent constructs (Fornell & Larcker, 1981), providing support for sufficient discriminant validity of the measures.

Table 6.18: Average Variance Extracted (AVE) versus Shared Variance Test

Construct	No. of items	1	2	3	4	5	6	7	8	9	10
1 Quality	3	0.86	0.23	0.33	0.06	0.27	0.04	0.00	0.13	0.00	0.11
2 Price	3	0.48	0.77	0.22	0.08	0.20	0.03	0.00	0.06	0.00	0.14
3 Demand	3	0.58	0.47	0.83	0.08	0.39	0.05	0.03	0.08	0.01	0.38
4 Dependence	3	0.24	0.28	0.27	0.71	0.08	0.00	0.00	0.01	0.00	0.04
5 Importance	2	0.52	0.45	0.62	0.28	0.68	0.12	0.03	0.08	0.03	0.13
6 Consultation	4	0.20	0.18	0.22	0.02	0.34	0.64	0.51	0.38	0.29	0.11
7 Helping	4	0.01	0.06	0.17	0.00	0.17	0.71	0.74	0.16	0.33	0.04
8 Trust	3	0.37	0.25	0.29	0.09	0.28	0.62	0.40	0.92	0.19	0.19
9 RO	4	-0.02	-0.02	0.11	-0.02	0.18	0.54	0.58	0.43	0.70	0.03
10 Margin	1	0.34	0.38	0.61	0.20	0.36	0.33	0.19	0.43	0.16	0.74

Notes: AVE estimates are shown across the diagonal (*in bold*), correlations are displayed *below* the diagonal, and shared variances (squared correlations) are shown *above* the diagonal. Table setup based on Farrell (2010), Table 1, p.325.

It is noted that the 'estimated gross margin' construct is also included in this analysis. As its AVE was calculated in the same way as for the other measures (and this may only make limited theoretical sense; also see Section 6.6.1), one may prefer to set a threshold level of 0.5 (the lower bound for an acceptable AVE) for this measure, and compare this to its shared variance with any of the other latent variables. In this case, the 'estimated gross margin' construct still exhibits sufficient discriminant validity because all of its shared variances with other constructs are smaller than 0.5.

Furthermore, since all constructs pass the Fornell and Larcker (1981) AVE versus shared variance test and none of the correlations seem to be excessive, multicollinearity issues as well as inference errors are unlikely (see Grewal, Cote, & Baumgartner, 2004).

6.8 Results of Common Method Bias Assessment

Finally, a common method bias model was specified and run for each of the two CFA groups, following the guidelines outlined in Section 6.3.3.9. In particular, in each case

common method variance effects were examined by specifying a model in which all scale items loaded on a single (bias) factor (e.g., see Cadogan et al., 2005). The bias model for group one resulted in poor fit ($\chi^2_{(91)} = 1979.10$ ($p = 0.00$), $\chi^2/df = 21.75$, SRMR = 0.270, RMSEA = 0.330, AGFI = 0.335, IFI = 0.583, CFI = 0.581, NFI = 0.567, and NNFI = 0.517), which reduces concerns regarding common method bias. In a similar vein, the bias model for group two also resulted in poor fit ($\chi^2_{(90)} = 1275.23$ ($p = 0.00$), $\chi^2/df = 14.17$, SRMR = 0.145, RMSEA = 0.263, AGFI = 0.372, IFI = 0.664, CFI = 0.662, NFI = 0.646, and NNFI = 0.606), again reducing concerns regarding common method bias. Overall, it can thus be concluded that common method effects do not explain a large amount of variance in the data.

6.9 Results of Descriptive Analysis of Final Reflective Measures

Subsequent to the measure validation procedures of the utilized scales, it was also deemed important to examine the distributional characteristics of the final measures resulting from these procedures. Specifically, this part of the analysis was conducted using mainly three sources of information: (1) graphical representation (i.e. histograms), (2) the Kolmogorov-Smirnov (KS) test statistic, and (3) descriptive statistics (e.g., skewness and kurtosis). First, each final measure was investigated with the help of histograms. Then, the KS test was performed. Essentially, a non-significant KS statistic provides support that an observed distribution approximates a normal distribution (Hair et al., 2010). Finally, in cases where a significant KS test was returned, the measures' descriptive statistics were further examined (especially skewness and kurtosis) (cf. Sharma, 1996). This was done because it has been reasoned that the KS statistic is very sensitive to slight deviations from normality (Sharma, 1996), and distributions with a skewness and kurtosis of ≤ 2.0 and ≤ 7.0 respectively are not severely non-normal (see Curran, West, & Finch, 1996, for a discussion on non-normality).

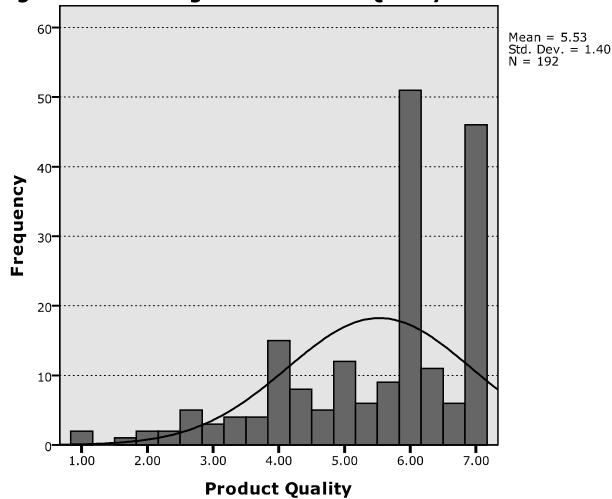
However, it is emphasized at this point that this descriptive analysis was conducted in order to gain an overall picture of the final measures' distributional characteristics. In more detail, compared to other analysis techniques (e.g., linear discriminant function analysis, linear regression, or structural equation modeling), the analysis method employed in the present study for the purposes of theory-testing - *logistic regression* - is a non-parametric statistical analysis technique (Siegel & Castellan, 1988) and "does not assume that predictor variables are distributed as a multivariate normal distribution with equal covariance matrix" (Peng, Lee, & Ingersoll, 2002, p.9; also see, for example, Green et al., 1998; Peng et al., 2002). The logistic regression analysis technique is discussed at length in Chapter 7.

6.9.1 Final Product-Related Measures

6.9.1.1 Product Quality

Figure 6.14 shows the distribution of the product quality measure. As can be seen, there is a skew towards higher values (including two peaks), also resulting in a significant KS test ($z = 3.13$, $p = 0.00$). However, its skewness (-1.03) and kurtosis (0.49) were not severely non-normal (Curran, West, & Finch, 1996).

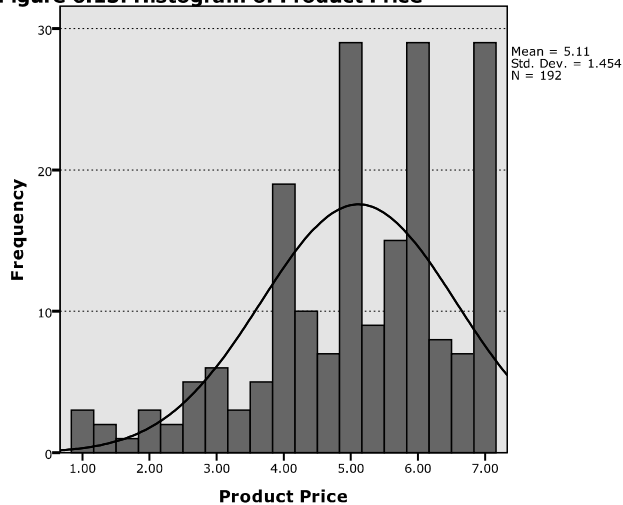
Figure 6.14: Histogram of Product Quality



6.9.1.2 Product Price

Figure 6.15 depicts the histogram for product price. A skew towards higher values is observable and a significant KS statistic was returned ($z = 1.73$, $p = 0.01$). Yet, its skewness of -0.74 and kurtosis of 0.15 do not indicate a severely non-normal distribution (Curran, West, & Finch, 1996).

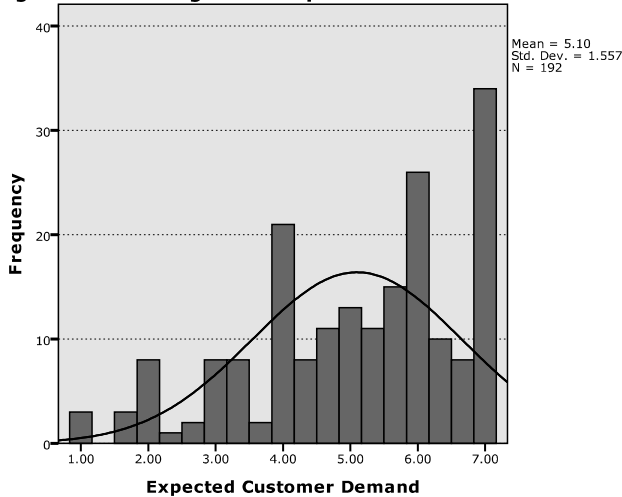
Figure 6.15: Histogram of Product Price



6.9.1.3 Expected Customer Demand

Figure 6.16 depicts the measure for expected customer demand. Again, somewhat of a skew towards higher values is apparent. The KS test was significant ($z = 1.76$, $p = 0.00$), however, skewness (-0.66) and kurtosis (-0.34) did not indicate a particularly non-normal distribution (Curran, West, & Finch, 1996).

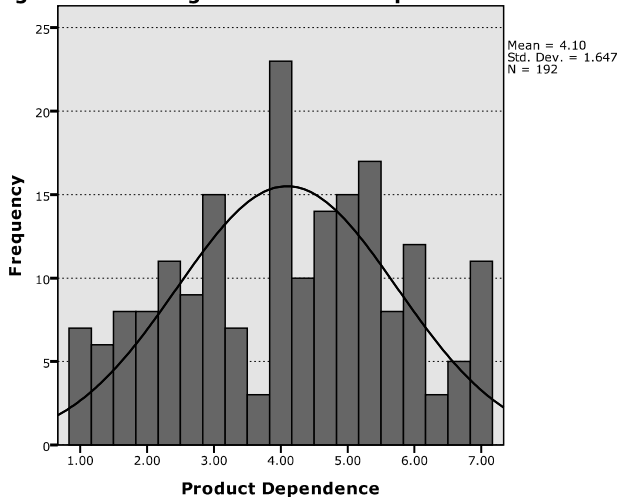
Figure 6.16: Histogram of Expected Customer Demand



6.9.1.4 Product Dependence

As displayed by Figure 6.17, the distribution for the product dependence variable looked fairly normal. Indeed, a non-significant KS test result was returned ($z = 1.27$, $p = 0.08$). Thus, no further investigation was conducted.

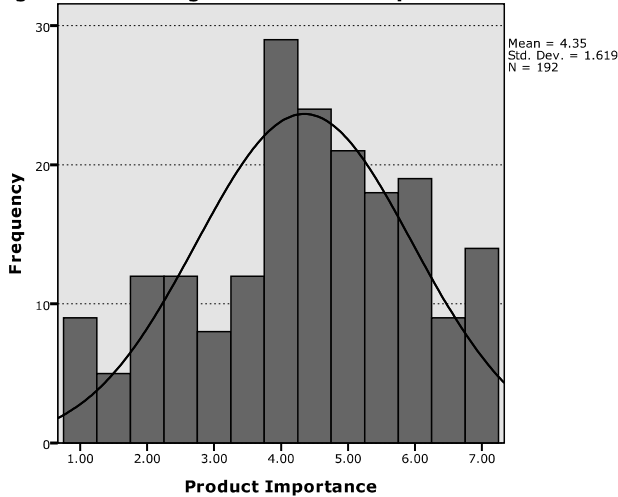
Figure 6.17: Histogram of Product Dependence



6.9.1.5 Product Importance

Figure 6.18 shows the product importance measure. Although the distribution looks mainly normal with a slight skew towards higher values, the KS test was still significant ($z = 1.56$, $p = 0.02$). Yet, its skewness (-0.30) and kurtosis (-0.64) statistics were considerably below the values of severely non-normal distributions (Curran, West, & Finch, 1996).

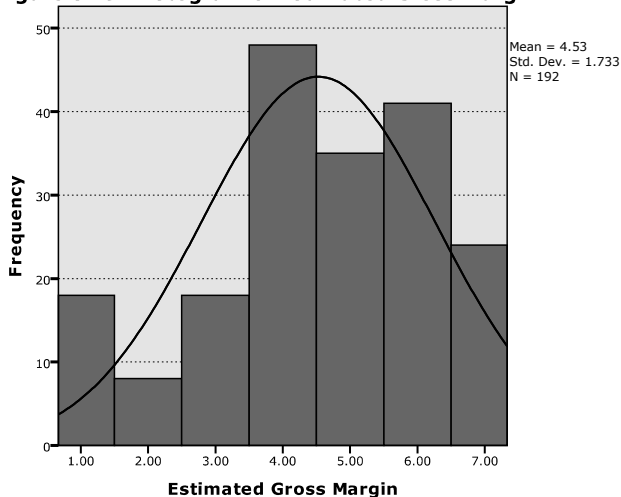
Figure 6.18: Histogram of Product Importance



6.9.1.6 Estimated Gross Margin

Figure 6.19 displays the estimated gross margin variable. It looks fairly normally distributed, yet, a skew towards higher values is observable. A significant KS statistic was obtained ($z = 2.10$, $p = 0.00$). The investigation of its skewness (-0.50) and kurtosis (-0.47), however, did not suggest a particularly non-normal distribution (Curran, West, & Finch, 1996).

Figure 6.19: Histogram of Estimated Gross Margin

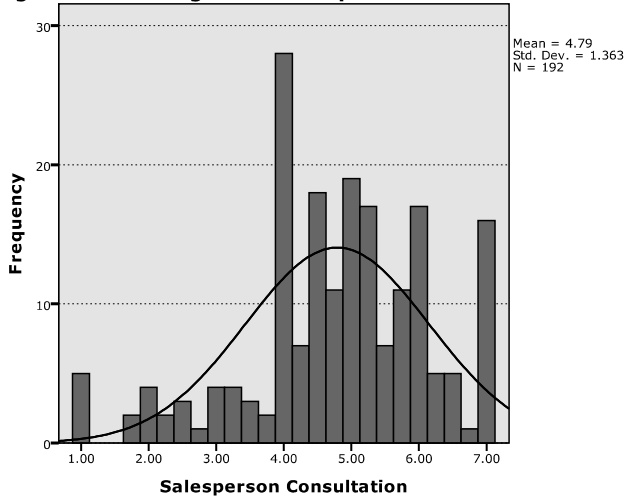


6.9.2 Final Salesperson-Related Measures

6.9.2.1 Salesperson Consultation

As shown in Figure 6.20, the salesperson consultation variable looks skewed towards higher values, returning a significant KS test ($z = 1.73$, $p = 0.01$). Yet, its skewness (-0.61) and kurtosis (0.43) are clearly below the values of severely non-normal distributions (Curran, West, & Finch, 1996).

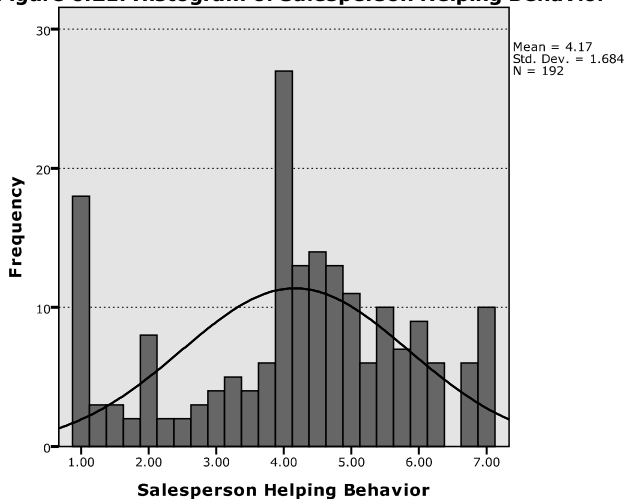
Figure 6.20: Histogram of Salesperson Consultation



6.9.2.2 Salesperson Helping Behavior

Figure 6.21 displays the histogram for salesperson helping behavior, looking somewhat non-normal. The KS test returned a significant result ($z = 2.05$, $p = 0.00$), however, the variable's skewness of -0.39 and kurtosis of -0.56 were well below those for particularly non-normal distributions (Curran, West, & Finch, 1996).

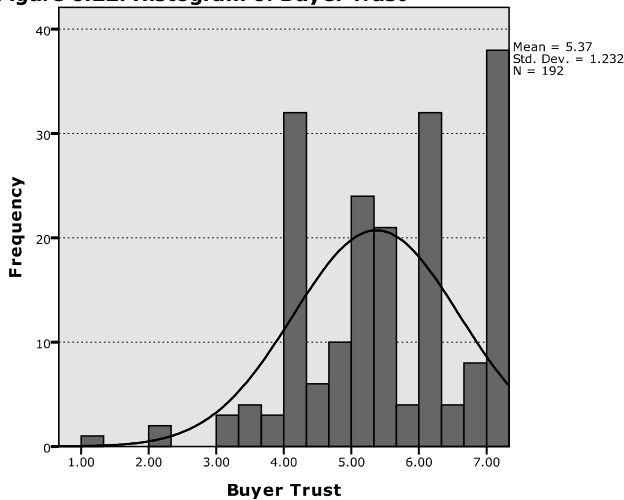
Figure 6.21: Histogram of Salesperson Helping Behavior



6.9.2.3 Buyer Trust in the Salesperson

Figure 6.22 depicts the distribution for buyer trust in the salesperson, which looks skewed towards higher values.

Figure 6.22: Histogram of Buyer Trust

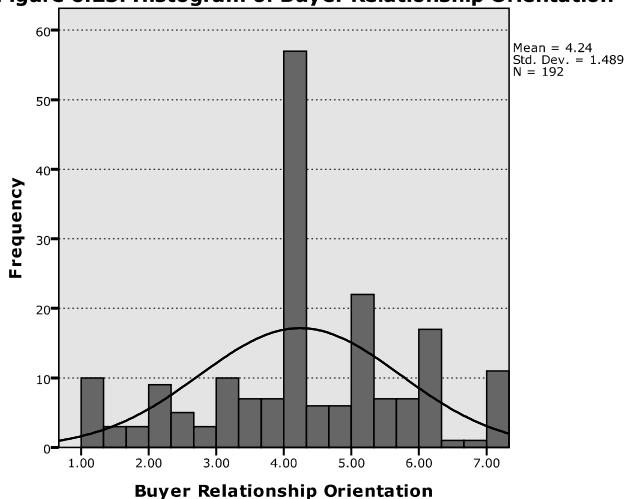


A significant KS statistic was obtained ($z = 1.70$, $p = 0.01$), however, skewness (-0.42) and kurtosis (-0.12) did not indicate a severely non-normal distribution (Curran, West, & Finch, 1996).

6.9.2.4 Buyer Relationship Orientation (towards Buyer-Salesperson Relationship)

As shown by Figure 6.23, the distribution of the buyer relationship orientation variable does look somewhat non-normal. Even though a significant KS test was obtained ($z = 1.93$, $p = 0.00$), the measure's skewness (-0.26) and kurtosis (-0.28) did not indicate a severely non-normal distribution (Curran, West, & Finch, 1996).

Figure 6.23: Histogram of Buyer Relationship Orientation



6.10 Index Construction: Formative ‘Marketing Support’ Measure

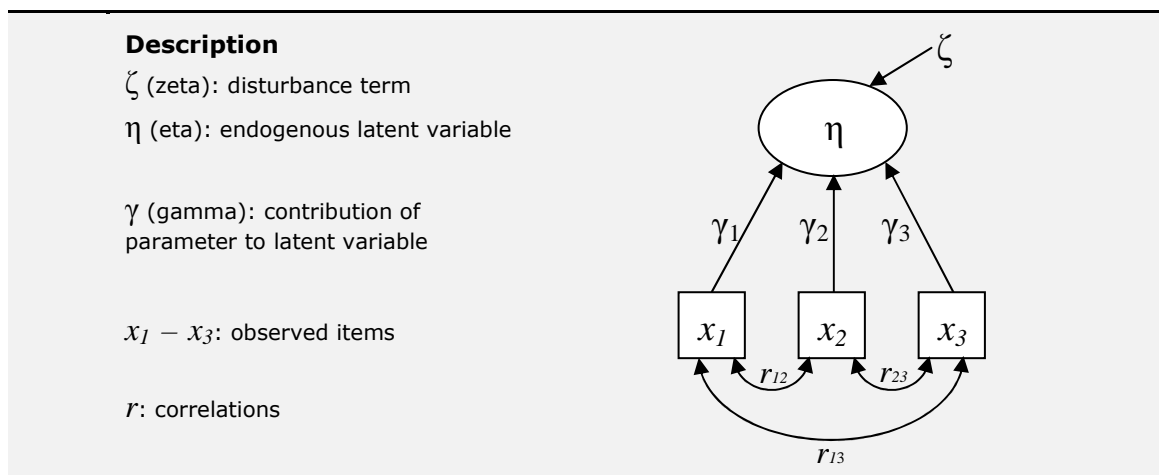
In addition to the previously discussed theoretical assumptions, exploration, development, and validity assessments of the employed reflective measures, this section now focuses on the index construction process of the formative *marketing support* measure (e.g., also see conceptual framework in Chapter 4). The following discussion is organized in three parts. First, the theoretical underpinnings of formative measurement theory are explicated. Next, the choice to employ a composite marketing support measure is discussed. Finally, the index construction process of the measure is detailed.

6.10.1 Theoretical Perspective in Formative Measurement

Formative measurement theory is fundamentally different from ‘classical’ reflective measurement theory. Whereas the central theoretical tenet of the latter is that a single latent construct *underlies* any set of observed scale items that is purposed to measure that construct (Churchill, 1979; Gerbing & Anderson, 1988), under the formative measurement perspective observed items *form* an index (i.e. a composite latent variable) (Diamantopoulos & Winklhofer, 2001; Diamantopoulos, Riefler, & Roth, 2008; Jarvis, MacKenzie, & Podsakoff, 2003). More specifically, in a reflective model, the observed scale items are viewed as reflective (also referred to as effect) indicators of a latent construct; that is, it is assumed that the latent construct causes its observed items (Churchill, 1979; Diamantopoulos & Winklhofer, 2001; Gerbing & Anderson, 1988). This implies that any change in the latent variable is perceived to cause a change in the observed items. On the contrary, in a formative measurement model the observed variables are formative (also referred to as cause or causal) indicators that are presumed to induce its latent construct (Diamantopoulos & Winklhofer, 2001; Edwards & Bagozzi, 2000; Jarvis, MacKenzie, & Podsakoff, 2003). Since under this perspective indicators are assumed to form the latent construct, in formative specifications the observed items do not have to be positively inter-correlated (Jarvis, MacKenzie, & Podsakoff, 2003), which can be contrasted to reflective specifications and its underlying notion of internal consistency (Churchill, 1979; Gerbing & Anderson, 1988). In fact, under formative measurement theory, different indicators are supposed to capture different specific aspects of the latent construct, and information redundancy between items should be avoided (Diamantopoulos & Winklhofer, 2001; Diamantopoulos, Riefler, & Roth, 2008). Hence, while under reflective specifications individual items can be deleted from a measurement model (typically during the measure purification process), eliminating indicators from a formative measurement model is problematic as it “may omit a unique part of the composite latent construct and change the meaning of the variable” (Jarvis, MacKenzie, & Podsakoff, 2003, p.202).

The subsequent Figure 6.24 depicts an example of a basic formative measurement model (a reflective measurement model was already presented at an earlier point in this Chapter, Section 6.3.3, Figure 6.13). As shown, this model depicts the (endogenous) latent construct (η) which is induced by three observed variables (x_1 to x_3). γ_1 to γ_3 represent the distinct contributions of each of the observed parameters, which collectively form the construct. Furthermore, the correlations between the observed variables are denoted by r_{12} , r_{23} , and r_{13} respectively, and the construct's disturbance term is denoted by ζ . It is noted that under a formative specification, error is taken into consideration at the construct level (represented by the disturbance term ζ), rather than at the level of the individual indicators (Diamantopoulos & Winklhofer, 2001; Jarvis, MacKenzie, & Podsakoff, 2003), and “the correlations among formative indicators are not explained by the measurement model” (Diamantopoulos & Winklhofer, 2001, p.271).

Figure 6.24: Example of Basic Formative Measurement Model



Note: Adapted from Diamantopoulos and Winklhofer (2001), Figure 1, p.270.

From the above discussion it can be inferred that reflective and formative measurement represent two very distinct theoretical viewpoints, and a researcher's choice of either perspective should be primarily driven by theoretical considerations (Edwards & Bagozzi, 2000; Diamantopoulos & Winklhofer, 2001). With regard to the formative viewpoint, an example that is often cited is that of socioeconomic status (SES), which is usually defined as a function of a number of different variables (e.g., education, occupational prestige, income, etc.) (for example, cf. Edwards & Bagozzi, 2000); that is, these variables are viewed to *form* one's SES and a change in one of them (e.g., occupational prestige) necessitates a change in SES, even if the other indicators (e.g. education or income) remain the same.

6.10.2 Choice of Employment of Composite Marketing Support Measure

In the present study, a number of different marketing support indicators were collapsed into one marketing support measure (i.e. one overall marketing support index). The choice to use a composite marketing support measure was based on two main criteria: (1) practical and (2) theoretical considerations. First practical issues are discussed, followed by deliberations regarding the formative perspective employed for this measure.

There were a number of practical implications and advantages in favor of collapsing the different marketing support items (i.e. media support, couponing, product sampling/demonstrations, introductory allowances, cooperative advertising funds, and slotting fees) into a single composite measure. Specifically, whereas previous studies in the research array of retail buyers' new product acceptance have typically examined the individual impact of each marketing support item on buyers' purchase decisions (e.g., Gerlich, Walters, & Heil, 1994; White, Troy, & Gerlich, 2000), many of them included *fewer* predictors (i.e. independent variables) in their theoretical models than the present study does. For example, Gerlich, Walters, and Heil (1994) examined 11 different product-focused predictors in their work. Since the present theoretical model included product-focused, salesperson-specific, as well as a number of previously not incorporated control variables (also, not to forget the examination of the hypothesized interaction effects), the high number of variables was of concern - especially with regard to the statistical stability of the model during the theory-testing stage. However, collapsing the different marketing support items into one marketing support measure was able to solve this issue, and erase any concerns. In particular, the minimum observation-to-predictor ratio recommended for logistic regression analysis in the extant literature (discussed at length in Chapter 7), was then met (and even exceeded) (see for example, Peng, Lee, & Ingersoll, 2002; Peng et al., 2002). As a result, the confidence in the results from the theory-testing phase would also be increased.

It is important to emphasize that the creation of an overall marketing support measure did *not* conflict with the central objectives and contributions of this study; that is, the relative role of product-focused variables and salesperson-specific activities in retail buyers' new product acceptance decisions. That said, it is acknowledged that a certain trade-off had to be made with respect to the examination of an overall marketing support measure and the investigation of individual marketing support items. However, the benefits of employing a composite measure (i.e. greater confidence in the findings and greater chance of avoiding potential inference errors) clearly outweighed the costs.

As previously discussed, theoretical considerations should be the primary driver for the choice of a construct's measurement model (Edwards & Bagozzi, 2000; Diamantopoulos & Winklhofer, 2001). Following Jarvis, MacKenzie, and Podsakoff's (2003) distinguishing criteria, it made theoretical sense to collapse the different marketing support items into one formative measure; that is, a marketing support index. First, the observed items *form* the marketing support measure. In addition, even though all of the respective items represent components of a supplier firm's marketing support strategy for a new retail product (for example, cf. Kaufman, Jayachandran, & Rose, 2006), they capture distinct information about the latent marketing support construct. For example, a new product may score high on media support, but low on introductory allowances. Hence, the marketing support indicators do not need to show certain correlation patterns and the elimination of any of the items from the measurement model would likely alter the construct's meaning. Consequently, the creation of an overall formative marketing support index had a solid theoretical foundation.

6.10.3 Index Construction Process

For the purpose of successful index construction, the relevant existing literature suggests the consideration of four decisive issues: (1) content specification, (2) indicator specification, (3) indicator collinearity, and (4) external validity (Diamantopoulos & Winklhofer, 2001; also cf. Foedermayr, Diamantopoulos, & Sichtmann, 2009). Although in the present case the construction of the composite measure was relatively unproblematic due to the ability to rely on previously published measurement items (among other deliberations), it is important to show how each issue was addressed and applied to the marketing support index. Largely building on Foedermayr, Diamantopoulos, and Sichtmann's (2009) guidelines, Table 6.19 provides an overview of the steps followed during the index construction process.

6.10.3.1 Content Specification

The first important step was to specify the content of the index in order to clearly delineate the scope of the marketing support construct (Diamantopoulos & Winklhofer, 2001; Foedermayr, Diamantopoulos, & Sichtmann, 2009). Based on a comprehensive literature review (see Chapter 2), the pertinent retail buying research stream suggested a number of concrete indicators that characterize a supplier firm's marketing support strategy for a new retail product (e.g., Kaufman, Jayachandran, & Rose, 2006; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, and Gerlich, 2000). With this in mind, marketing support was specified as a composite of six different

indicators: media support, couponing, product sampling/demonstrations, introductory allowances, cooperative advertising funds, and slotting fees.

Table 6.19: Index Construction Process

(1) Content Specification	
Specifying domain of content/scope of marketing support	<ul style="list-style-type: none"> ✓ Comprehensive literature review conducted ✓ Specification of marketing support as a composite of 6 indicators, i.e. media support, couponing, product sampling/demonstrations, introductory allowances, cooperative advertising funds, and slotting fees
⤵	
(2) Indicator Specification	
Developing set of items	<ul style="list-style-type: none"> ✓ 6 indicators from published scale: <ul style="list-style-type: none"> → Kaufman, Jayachandran, and Rose (2006): media support (x_1), couponing (x_2), product sampling/demonstrations (x_3), introductory allowances (x_4), cooperative advertising funds (x_5), slotting fees (x_6) → Also see for example, Rao and McLaughlin (1989); White, Troy, and Gerlich (2000) ✓ Scoring format: 7-point Likert-type format
Expert screening	<ul style="list-style-type: none"> ✓ 2 faculty members, 3 MBA students, 2 retail buying experts in a U.S. retailer (also see Chapter 5, Sections 5.7.1 and 5.7.2)
⤵	
(3) Indicator collinearity assessment	
Inspection of variance inflation factors (VIFs)	<ul style="list-style-type: none"> ✓ $VIF < 10$ for all 6 indicators ✓ No indicators eliminated
⤵	
(4) External validity assessment	
Individual indicator validity/nomological validity	<ul style="list-style-type: none"> ✓ Correlation of indicators with external and theoretically relevant outcome variable established by previous research, see for example, Gerlich, Walters, and Heil (1994); Rao and McLaughlin (1989); White, Troy, and Gerlich (2000)

Note: Adapted from Foedermayr, Diamantopoulos, and Sichtmann (2009), Table 1, p.59.

6.10.3.2 Indicator Specification

In order to adequately represent the six indicators of the marketing support index, a set of previously published items was utilized (Kaufman, Jayachandran, & Rose, 2006).

Furthermore, as discussed in Sections 5.7.1 and 5.7.2 (Chapter 5), all measurement items were also peer-reviewed by two marketing faculty members, then further inspected by three MBA students (who each possessed a considerable level of work experience in organizational buying - including retail buying), and finally scrutinized by two U.S. retail buying professionals for relevance (further attesting to the content validity of the marketing support index).

6.10.3.3 Indicator Collinearity Assessment

As discussed at an earlier point, under formative measurement theory observed indicators do not have to inter-correlate (i.e. internal consistency is not a requirement) (e.g., Jarvis, MacKenzie, & Podsakoff, 2003) and each indicator is supposed to capture a different specific aspect of the latent construct (e.g., Diamantopoulos, Riefler, & Roth, 2008). In effect, “excessive collinearity among indicators needs to be ruled out to ensure the distinct influence of each individual indicator on the latent variable” (Foedermayr, Diamantopoulos, & Sichtmann, 2009, p.61; drawing from Bollen, 1989a and Diamantopoulos & Winklhofer, 2001). Hence, it has been suggested to examine indicator collinearity (Diamantopoulos & Winklhofer, 2001). Table 6.20 presents the results of this assessment. Since each variance inflation factor (VIF) for the six indicators (x_1 to x_6) was clearly below the recommended threshold of 10 (Kleinbaum et al., 1998), multicollinearity was not of any concern (range of VIF values: 1.339 to 1.790).³⁰ Consequently, none of the indicators had to be considered for deletion.

Table 6.20: Indicator Collinearity Assessment

Indicators of the Marketing Support Index	Indicator Variable	VIF
Media support	x_1	1.598
Couponing	x_2	1.655
Product sampling/demonstrations	x_3	1.339
Introductory allowances	x_4	1.790
Cooperative advertising funds	x_5	1.757
Slotting fees	x_6	1.495

Note: Based on Foedermayr, Diamantopoulos, and Sichtmann (2009), Table 2, p.61.

6.10.3.4 External Validity Assessment

Extant literature on formative measurement also suggests to establish the external (nomological) validity of the individual indicators (e.g., Diamantopoulos & Winklhofer,

³⁰ The marketing support indicators were regressed on an external variable (i.e. a satisfaction variable that was external to the theoretical model).

2001; Jarvis, MacKenzie, & Podsakoff, 2003). This implies that each of the six marketing support indicators should show a positive correlation with an external and theoretically relevant outcome variable. The external and nomological validity of each of the six indicators has been established in various prior studies, and hence, is not repeated here (e.g., see Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000).

6.10.3.5 Index Description

Some descriptive statistics on the marketing support index and its six indicators are presented in Table 6.21. It can be seen that the theoretical range of each of the marketing support indicators spans from one to seven; the index was calibrated on the same scale. Comparing the indicators' theoretical ranges with their respective actual ranges, it can be concluded that none of the individual indicators is exposed to any range restriction problems (cf. Foedermayr, Diamantopoulos, & Sichtmann, 2009). In a similar vein, the marketing support index does not exhibit any major range restrictions either. Consequently, the individual indicators as well as the index allowed for appropriate differentiation between supplier firms' marketing support efforts for new retail products (also cf. Foedermayr, Diamantopoulos, & Sichtmann, 2009). Finally, the means (and standard deviations) of all indicators and the index are also displayed. Investigation of the mean values shows that the scores ranged from 2.30 to 3.04, pointing towards the heterogeneity of marketing support strategies for the evaluated new retail products (i.e. the actual range of each indicator is 1-7 and, on average, marketing support assessments for each indicator have to some degree balanced out, resulting in considerably low mean scores per indicator and index).

Table 6.21: Descriptive Statistics of the Marketing Support Index (N=192)

	Indicators						Marketing Support Index
	Media Support	Couponsing	Product Sampling/ Demonstrations	Introductory Allowances	Cooperative Advertising Funds	Slotting Fees	
Variable	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	Composite (X ₁ -X ₆)
Theoretical range	1-7	1-7	1-7	1-7	1-7	1-7	1-7
Actual range	1-7	1-7	1-7	1-7	1-7	1-7	1-6
Mean	2.89	2.30	3.04	2.91	2.70	2.78	2.77
Standard deviation	1.83	1.51	1.88	1.82	1.79	1.66	1.27

Note: Based on Foedermayr, Diamantopoulos, and Sichtmann (2009), Table 5, p.66.

6.11 Summary

This Chapter presented the two-part analysis conducted on the collected quantitative data preceding to the theory-testing stage. First, the characteristics of the dataset were examined by profiling the retail buyers, retailers, as well as the evaluated salespeople. Second, the employed multi-item reflective measures were explored, developed, and validated, followed by a discussion on the index construction process of the formative marketing support measure.

The profiling of the respondents (retail buyers) revealed that a wide range of different individuals is included in the sample, representing various age groups as well as levels of education and work experience. Both males and females were adequately represented, in line with the current state of the U.S. buying profession (cf. McQuiston & Morris, 2009). Based on the organizational characteristics, it could be concluded that a wide variety of retailers were comprised in the sample, which was especially obvious from the investigation of the reported annual sales figures and the number of employees. In addition, the profiling of the evaluated salespeople revealed that the gender-split was in line with insights obtained from previous gender-oriented sales research (McQuiston & Morris, 2009; Moncrief, et al., 2000) and that the sample contained a 'healthy mix' of different types of salespeople. Finally, a wide range of relationship durations were reported by retail buyers regarding both, buyer-salesperson relationships as well as retail buyers' business dealings with supplier firms. As a consequence of the above findings, no sincere concerns existed regarding potential sample biases or the generalizability of the study's findings.

Subsequent to the examination of the responses, an assessment of the employed multi-item reflective scales was conducted. In the first step internal consistency and EFA analyses were performed in order to explore the measures, followed by a more stringent assessment using CFA procedures. As a result of this entire process, adequate levels of within-method convergent validity, CR and AVE, as well as discriminant validity could be established for each of the measures. In addition, a test of common method bias reduced concerns regarding common method variance effects. Lastly, the distributional characteristics of the final measures were examined and detailed. All measures were deemed to be appropriate for use in the theory-testing stage.

In the final step, the composite marketing support measure was discussed. Information was provided on formative measurement theory, the choice to utilize a marketing support index, as well as the index construction process. Building on suggested guidelines in the

relevant literature (Diamantopoulos & Winklhofer, 2001; Foedermayr, Diamantopoulos, & Sichtmann, 2009), a composite marketing support measure was successfully constructed, which was also deemed to be adequate for employment in the theory-testing stage.

The subsequent Chapter focuses and reports on the results from the hypothesis-testing phase using logistic regression analysis.

Chapter 7

Results

The previous Chapter discussed the first part of the quantitative data analysis (i.e. the descriptive analysis and measure validation process). Now, the focus is directed towards the reporting of the results of the theory-testing stage.

Chapter 7 is organized as follows. After a short introduction to the Chapter, the employed analysis method (i.e. logistic regression) is detailed, followed by a discussion on the operationalization of the model variables. Subsequently, a detailed report of the results is provided. Finally, a summary concludes the Chapter.

7.1 Introduction to the Theory-Testing Phase

In order to examine the theory-based hypotheses (Chapter 4, conceptual framework), logistic regression analysis was employed. The central aims of the current Chapter are to provide details on this analytical technique, discuss the operationalization of the model variables, and report on the results obtained from the conducted analyses (including a brief discussion of each individual hypothesis test). Specifically, Section 7.2 introduces the method of logistic regression, providing details on its advantages as well as underlying assumption and requirements. Section 7.3 addresses the operationalization of the variables by specifying the use of single observed indicators in the logistic regression models. An overview of the psychometric properties of the measures is provided. Hereafter, the analysis results concerning the verification of the logistic regression requirements are reported (Section 7.4). Sections 7.5 to 7.7 then explicate the actual testing of the logistic regression models, including the employed analysis strategy, the evaluation of the models, and a brief discussion of individual hypothesis results. Finally, a Chapter summary concludes the theory-testing phase (Section 7.8).

7.2 Logistic Regression Analysis

Many research hypotheses in the field of marketing require the analysis of dichotomous (also referred to as binary or categorical) outcome variables (Akinci et al., 2007). In this regard, logistic regression has often been recommended as an appropriate analysis technique for the prediction of dichotomous outcomes (e.g., Akinci et al., 2007; Menard, 2001; Peng, Lee, & Ingersoll, 2002) - such as retail buyers' new product purchase decisions (yes/no) (also cf. Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000, for example). Based on these suggestions in extant literature, PASW Statistics 18.0.0 LOGISTIC REGRESSION (SPSS Inc., 2009), using maximum likelihood estimation (MLE), was employed in order to examine the present study's hypotheses.

Logistic regression - one specific application of regression analysis - exhibits some unique features when compared to linear regression techniques. As a point of departure, Equation 7.1 below depicts the form of a general logistic model, which includes a number of predictors.

Equation 7.1: Logistic Model

$$\text{logit}(Y) = \ln\left(\frac{\pi}{1-\pi}\right) = \alpha + \beta_1X_1 + \beta_2X_2 + \dots + \beta_kX_k$$

Note: Adapted from Peng, Lee, and Ingersoll (2002), Equation (3), p.5.

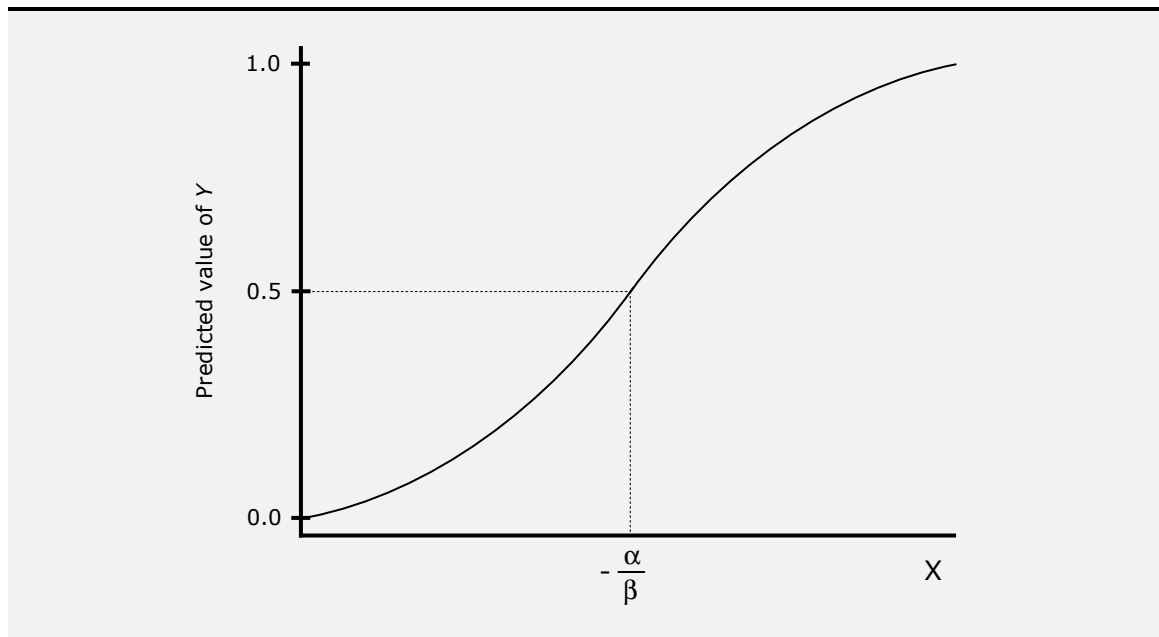
In this given model, " π is [...] the probability of the event, α is the Y intercept, β s are regression coefficients, and X s are a set of predictors" (Peng, Lee, & Ingersoll, 2002, p.5, *italics* in original). Further, Y represents the dependent variable (i.e. the binary outcome of interest), and $\text{logit}(Y)$ "is the natural logarithm (\ln) of odds of Y , and odds are ratios of probabilities (π) of Y happening [...] to probabilities ($1 - \pi$) of Y not happening" (Peng, Lee, & Ingersoll, 2002, p.4, *italics* in original).

Essentially, in any logistic regression model, the logit of Y is predicted from X or several X s (i.e. a predictor or set of predictors) (e.g., Menard, 2001; Peng et al., 2002). Due to the non-linear nature of the relationship between a dichotomous Y and its respective X s, "the natural log transformation of the odds [...] is necessary to make the relationship between a categorical outcome variable and its predictor(s) linear" (Peng, Lee, & Ingersoll, 2002, p.4). Moreover, for any given logistic model the null hypothesis (H_0) states that the regression coefficients (β s) are equal to zero (e.g., Peng et al., 2002). H_0 is rejected if at least one regression coefficient (i.e. one of the β s) is significantly different from zero, implying that a relation exists between the predictor variable X and the outcome variable Y (e.g., Menard, 2001; Peng et al., 2002). In PASW Statistics 18.0.0 LOGISTIC REGRESSION (SPSS Inc., 2009), both α and β s are approximated by MLE - an estimation method "designed to maximize the likelihood of reproducing the data given the parameter estimates" (Peng, Lee, & Ingersoll, 2002, p.5).

Figure 7.1 below presents an exemplary logistic regression model (curve model) for a binary outcome Y , predicted from a single predictor X . As can be seen, the predicted values for Y (given certain values for X) result in a pattern of a sigmoidal (or S-shaped) curve (e.g., see Menard, 2001), difficult to be described by a linear equation (Peng, Lee, & Ingersoll, 2002).

A logistic model, such as the one represented by Figure 7.1, has three unique features (Peng et al., 2002): (1) the predicted values for Y will be mapped onto the interval ranging from 0 to 1, which corresponds to the range of plausible probabilities; (2) the logistic function ensures a 50% probability at (and is symmetric to) its inflection point ($-\alpha/\beta, 0.5$); and (3) the β s (or regression coefficients or slope parameters) in the logistic model have the equivalent meaning as the β s in linear ordinary least squares (OLS) regression models.

Figure 7.1: Example of Logistic Regression Model (Curve Model)



Note: Adapted from Menard (2001), Figure 1.3, p.10 and Peng et al. (2002), Figure 1, p.263.

7.2.1 Advantages of Logistic Regression

Next to the logistic regression method, past research has also utilized some alternative analysis techniques available to researchers in order to examine models containing dichotomous dependent variables, including discriminant function analysis, linear probability models, and log-linear models (e.g., see Peng et al., 2002). However, several authors have highlighted the advantages of logistic regression analysis as compared to the other afore-mentioned methods (e.g., Akinci et al., 2007; Dawes, Patterson, & Midgley, 1997; Green et al., 1998; Peng, Lee, & Ingersoll, 2002; Peng et al., 2002; Sharma, 1996), providing reasons as to why this technique may be viewed as superior. In particular, many of the benefits of logistic regression stem from the fact that it does *not* have the stringent underlying assumptions of other methods, which can be summarized as follows: (a) multivariate normality (normal distribution assumption), (b) equality (equal variance and covariance assumption for residuals), (c) linearity (assumption of linearity between independent and dependent variables), and (d) continuity (continuity assumption for dependent variables). In addition, it seems important to call attention to two results-related issues concerning logistic regression; that is (1) accuracy of classification/prediction and (2) interpretation of diagnostic statistics. First, it has been demonstrated in previous work that logistic regression performs well in the analysis of binary outcome variables by returning fairly accurate classification and prediction results (see Fan & Wang, 1999). Second, the diagnostic statistics in logistic regression are

similar to linear regression, and hence, more straightforward to interpret (Akinci et al., 2007; Dawes, Patterson, & Midgley, 1997).

Previous studies examining retail buyers' new product purchase decisions have to a great extent employed logistic regression as analysis method (e.g., Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000; also cf. Akinci et al., 2007) - perhaps due to the specific advantages and characteristics outlined above. Nevertheless, it can be concluded that logistic regression is a well-suited technique for the conduction of analyses involving dichotomous outcome variables (e.g., yes/no), and thus, appropriate for testing the present study's research hypotheses.

7.2.2 Assumption and Requirements of Logistic Regression

In order to ensure an adequate application of the logistic regression method, its underlying assumption and data-/ variable-specific requirements should be understood and examined. Although this specific analysis technique does not make any stringent statistical assumptions regarding multivariate normality, linearity, and continuity (e.g., Green et al., 1998; Peng et al., 2002), logistic regression has a *binominal assumption* (e.g., Peng, Lee, & Ingersoll, 2002) and, as is the case for most multivariate data analysis methods, requires a certain minimum *observation-to-predictor ratio* (e.g., Peng et al., 2002) as well as an acceptably *low level of multicollinearity* among the predictor (i.e. independent) variables (e.g., Menard, 2001) in order for one to attain a statistically stable model with sound regression coefficient estimates. In consideration of these analysis issues, the binomial assumption, minimum observation-to-predictor ratio, and multicollinearity topic are discussed subsequently. It is deemed important to note that, at this stage, the focus is directed towards explicating these three subject matters. At a later point in this Chapter (Section 7.4), the relevant assessments performed to verify the logistic regression requirements (i.e. the evaluation of observation-to-predictor ratio and multicollinearity) for the employed dataset are presented.¹

7.2.2.1 Binomial Assumption

As stated by Peng, Lee, and Ingersoll (2002, p.11), "logistic regression has only one assumption: [T]he binomial distribution is the assumed distribution for the conditional mean of the dichotomous outcome." This entails that a constant probability is assumed

¹ Since some specific information relevant to these two assessments is detailed in Section 7.3 ('Operationalization of Model Variables'), it was regarded as more appropriate to discuss their respective results in a separate section (Section 7.4).

across all observed predictor values (Peng, Lee, & Ingersoll, 2002; Siegel & Castellan, 1988).

Let p denote the probability of an outcome to be classified into group one, and an outcome's probability to be classified into group two shall be represented by $q = 1 - p$ (Menard, 2001; Siegel & Castellan, 1988). Typically, the conditional mean (also referred to as cut-off value) of a binary outcome distribution is assumed to be 0.5 (for example, cf. Peng et al., 2002). In this case $p = 0.5$ and hence, $q = 1 - 0.5$; that is $p = q = 0.5$. In other words, the probability of an outcome to either belong to group one or group two is each 50%. Importantly, each of these probabilities is assumed to be maintained across all observed predictor values (as mentioned above). *Only* if it makes theoretical sense, and one expects different probabilities for p and q in the population, may the conditional mean be specified to adopt a value different from 0.5. Again, each of the probabilities is assumed to be constant for all observed predictor values.

It has been suggested that the binomial assumption can be taken as robust as long as observations in a sample are independent of each other (Peng, Lee, & Ingersoll, 2002). Stated differently, each probability can be assumed to be constant across all predictor values in a certain sample given that observations are independent.

A critical review of previous studies, which have examined retail buyers' new product acceptance decisions and employed the logistic regression technique (e.g., Gerlich, Walters, & Heil, 1994; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000), shows that none of these works discusses the binominal assumption underlying logistic regression analysis. However, since *the unit of analysis* in the reviewed studies was the new product acceptance decision for various different new retail products from different suppliers and salespeople, each individual observation (i.e. each new product assessment) appeared to be independent of other observations in the utilized data sample. Hence, for these works the binomial assumption can be assumed to be robust (cf. Peng, Lee, & Ingersoll, 2002).

In the same vein as in previous research regarding retail buyers' new product acceptance decisions, *the unit of analysis* in the present work is retail buyers' new product purchase decision (accept/reject). Furthermore, the theoretical probability for a new product to be either accepted or rejected by a retail buyer is 0.5; that is, there was a 50% chance for a new retail product to be accepted and a 50% chance for a new retail product to be rejected. *Ceteris paribus*, there were no theoretical reasons to assume

otherwise. In addition, since each new product (and the corresponding supplier firm) as well as salesperson were only evaluated once during the entire data collection process ($N = 192$), each observation was independent from other observations. Therefore, for the present study the binomial assumption can also be assumed to be robust (cf. Peng, Lee, & Ingersoll, 2002).

Finally, an additional note is made with regard to the assumed probability for an outcome to be classified into either group one or group two (i.e. $p = q = 0.5$) and the actual outcome occurrences (i.e. the observed classifications of outcomes into group one and group two). Although the probabilities p and q represent the assumed (or sometimes known) probabilities of the investigated population, one cannot expect that a sample of independent observations drawn from that population will comprise precisely the percentages specified by p and q , that is, 50% for each of the two groups (Siegel & Castellan, 1988). With regard to the present study this implies that, it is likely that a sample will not contain equal proportions of accepted and rejected new retail products.

7.2.2.2 Observation-to-Predictor Ratio

In light of the aim of attaining a statistically stable logistic model with good regression coefficient estimates, considerations regarding an appropriate sample size and observation-to-predictor ratio are important (e.g., Peng, Lee, & Ingersoll, 2002). Concerning these matters, in the pertinent research stream on logistic regression analysis it has been noted that “the literature has not offered specific rules applicable to logistic regression” (Peng et al., 2002, p.266). However, it has been suggested to follow guidelines provided in the general multivariate statistics literature, which recommends minimum requirements for analysis techniques that estimate parameters based on maximum likelihood estimation (MLE) - the parameter estimation method also used in logistic regression (Peng, Lee, & Ingersoll, 2002; Peng et al., 2002). For example, a number of authors on multivariate data analysis, such as Lawley and Maxwell (1971), Long (1997), as well as Tabachnick and Fidell (2001), have made recommendations regarding adequate sample sizes and minimum observation-to-predictor ratios in terms of the ML method. In Peng et al.’s (2002) work, the authors review an array of ML-based suggestions, which led them to draw the following conclusions:

“Although the minimum observation/predictor ratio to achieve stability of coefficients varies across authors [...], several authors recommended a minimum ratio of 10 to 1 with a minimum sample size of 100 or 50” (p.267).

Building on the above findings (and recommendations), a minimum sample size of 100 and a minimum observation-to-predictor ratio of 10:1 were used as guidelines for the present study in order to attain stable coefficient estimates.

A critical examination of prior works, which have focused on retail buyers' new product purchase decisions and employed logistic regression analysis (e.g., Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000), showed that neither minimum sample size, nor minimum observation-to-predictor ratio considerations are addressed in these studies. Although this is not an issue *per se*, especially for studies employing large samples (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989), it appears that based on recommendations in extant literature (see above), in some cases the stability of regression coefficients appears to be at least somewhat questionable (e.g., see Gerlich, Walters, & Heil, 1994; White, Troy, & Gerlich, 2000). In Section 7.4.1, the verification of the recommended minimum observation-to-predictor ratio (and minimum sample size) is presented for the present study.

7.2.2.3 Multicollinearity

In the application of most multivariate data analysis techniques, including logistic regression, considerations concerning multicollinearity (also labeled collinearity or colinearity) are critical (Kleinbaum et al., 1998; Menard, 2001). The notion of multicollinearity refers to significantly high correlations among a model's independent variables (Kleinbaum et al., 1998; Menard, 2001). The existence of collinearity among independent variables (also referred to as predictors in the context of logistic regression) leads to poor coefficient estimates and unstable results (e.g., Menard, 2001). More precisely, when multicollinearity is present, it becomes difficult to distinguish the individual effects of each predictor on the dependent variable (cf. Kleinbaum et al., 1998). In models that contain interaction terms, high correlations between independent variables may be especially problematic because of the underlying multiplications of the respective predictor variables in order to induce such interactions (Aiken & West, 1991; Kam & Franzese, 2007).

Previous studies of retail buyers' new product acceptance decisions have rarely reported on the issue of multicollinearity (for example, cf. Gerlich, Walters, & Heil, 1994; Rao & McLaughlin, 1989; for a notable exception, see White, Troy, & Gerlich, 2000). Even so, based on the above outlined problems that are caused by highly correlated predictors as well as the accompanying logistic regression-specific recommendations in the literature

(e.g., Menard, 1995), it was deemed important to ensure that multicollinearity is not of any concern in the present study.

In Chapter 6 (Section 6.7), the correlations between the investigated latent variables already provided a first indication that multicollinearity *may* not be a problem in the current work. However, an additional collinearity assessment is required due to mainly two reasons: (1) whereas structural equation modeling uses latent variables and takes measurement error into account (Bollen, 1989a; Kelloway, 1998), logistic regression analysis employs observed variables (cf. Menard, 2001); (2) all predictor variables (including the interaction terms) examined in the present study need to be considered in the assessment (cf. Aiken & West, 1991; Kam & Franzese, 2007; Menard, 2001). In light of these points, it is important to evaluate the collinearity among all predictor variables based on their operationalization, that is, single indicators computed from their observed item scores. The operationalization of all model variables is discussed subsequently. In Section 7.4.2, the multicollinearity assessment is presented, employing regression analysis collinearity diagnostics.

7.3 Operationalization of Model Variables

In Chapter 6, the study's multi-item reflective (and formative) measures were assessed and further developed by the use of several different analysis methods - such as confirmatory factor analysis, for example. This measure validation process resulted in a set of purified scales appropriate for utilization in the theory-testing stage. Now, the focus is directed towards the actual operationalization of (a) all the predictor variables and (b) the dependent variable, employed in the logistic regression model to test the study's hypotheses. The section is organized into two main parts. First, the operationalization of the dependent variable is outlined. Second, the operationalization and psychometric properties of the predictor variables are presented, followed by a brief discussion on the issues of mean-centering and the creation of interaction terms.

7.3.1 Operationalization of Dependent Variable

The dependent variable investigated in the current work is the new product purchase decision, a dichotomous yes/no outcome. Consistent with suggestions in the logistic regression literature (e.g., Peng, Lee, & Ingersoll, 2002) and previous operationalizations of this variable in past retail buying studies (e.g., Rao & McLaughlin, 1989), this binary decision variable was operationalized through a '0' and '1' coding system; that is, '0' representing 'no' (reject) and '1' denoting 'yes' (accept) decisions. The application of this coding structure has the advantage that it directly corresponds to the range of logical

probabilities on the sigmoidal curve (e.g., see Figure 7.1) as well as that it makes interpretations of results more intuitive (e.g., see Menard, 2001; Peng et al., 2002).

Furthermore, there is a theoretical probability of 50% for a new product to be either rejected ('no') or accepted ('yes') by a retail buyer (also see Section 7.2.2.1). As stated at an earlier point, no theoretical reasons existed that would have suggested otherwise. This implies that the conditional mean (or cut-off value) for the logistic regression analysis had to be set to 0.5.

Table 7.1 provides a summary overview of the operationalization and actual occurrence of the dichotomous outcome variable. As displayed, the acceptance rate for the 192 evaluated retail products was 66.15%. As noted in Section 7.2.2.1, obtaining a precise split of 50% for each of the two categories in a sample representing the population values is rather unlikely (cf. Siegel & Castellan, 1988). Furthermore, the acceptance rate attained in the present study also compares to results in prior work employing a similar sample size. In particular, Kaufman, Jayachandran, and Rose (2006) report an acceptance rate of 63% based on a sample comprised of 205 observations.

Table 7.1: Operationalization and Actual Occurrence of Dependent Variable (N=192)

New Product Purchase Decision	Category Code	Theoretical Probability of Occurrence	Actual Occurrence (Count)	Actual Occurrence (%)
Yes	1	0.5 (50%)	127	66.15
No	0	0.5 (50%)	65	33.85
<i>Overall</i>	<i>n/a</i>	<i>1.0 (100%)</i>	<i>192</i>	<i>100.00</i>

7.3.2 Operationalization of Predictor Variables

Logistic regression uses *observed* variables to predict a dichotomous outcome based on a (or a set of) predictor(s). In order to examine the hypothesized relationships between the relevant predictor variables and the new product purchase decision, *single* indicators were created for all multi-item (reflective and formative) measures by averaging the pertinent item scores across scales. For example, the final product quality measure resulting from the validation procedure presented in Chapter 6 contained three items. These items were added together and divided by three in order to obtain the mean of this scale - the single predictor variable for product quality. All other single predictors were constructed in the same way (based on their respective final multi-item measures).

Table 7.2 presents the computed single predictors together with their psychometric properties - mean (M), standard deviation (SD), and reliability (α). In addition, Table 7.3 depicts the correlations between the model variables. As can be seen, correlations among predictor variables are not excessive (highest correlation is equal to 0.62), indicating little concern regarding multicollinearity (cf. Sharma, 1996).² An examination of collinearity diagnostics (i.e. variance inflation factors) is discussed in Section 7.4.2 (Kleinbaum et al., 1998).

Table 7.2: Psychometric Properties of Single Predictors

Single Predictors	M	SD	α
<i>Product features</i>			
Product quality	5.53	1.40	0.95
Product price	5.11	1.45	0.91
<i>Market demand</i>			
Expected customer demand	5.10	1.56	0.93
<i>Marketing strategy characteristics</i>			
Estimated gross margin (financial)	4.53	1.73	n/a
Marketing support (index)	2.77	1.27	n/a
<i>Salesperson relationship-building activities</i>			
Salesperson consultation	4.79	1.36	0.88
Salesperson helping behavior	4.17	1.68	0.92
<i>Buyer mediator</i>			
Buyer trust	5.37	1.23	0.97
<i>Controls</i>			
Product dependence	4.10	1.65	0.88
Product importance	4.35	1.62	0.81
Customer firm size (# of employees)	54,675	274,867	n/a
Buyer-salesperson relationship duration (in years)	3.90	5.10	n/a
Buyer relationship orientation	4.24	1.49	0.90

Note: n/a = α values not available (three single-item predictors and one formative predictor).

² In particular, as a general guideline it has been proposed that correlations around 0.9 are likely to be problematic (Sharma, 1996).

Table 7.3: Correlations of Model Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Purch. decision	1.00													
2 Quality	.49**	1.00												
3 Price	.42**	.45**	1.00											
4 Demand	.59**	.58**	.44**	1.00										
5 Margin	.36**	.28**	.32**	.50**	1.00									
6 Mkt. support	.06	-.05	.05	.21**	.29**	1.00								
7 Consultation	.18*	.19**	.20**	.22**	.28**	.14	1.00							
8 Helping	.05	.01	.06	.14	.15*	.31**	.62**	1.00						
9 Trust	.23**	.34**	.23**	.29**	.35**	.11	.57**	.38**	1.00					
10 Dependence	.22**	.23**	.26**	.27**	.17*	.11	.04	.01	.07	1.00				
11 Importance	.53**	.46**	.39**	.56**	.27**	.16*	.29**	.14	.26**	.26**	1.00			
12 Customer size	-.01	.00	-.11	-.01	-.03	-.09	.06	.02	-.06	.03	-.03	1.00		
13 Rel. duration	.01	.04	.04	-.01	.05	-.07	.09	.11	.29**	.11	.01	-.05	1.00	
14 RO	.07	-.02	-.01	.09	.15*	.28**	.48**	.52**	.42**	-.02	.16*	.00	-.06	1.00

Note: *Significant at 0.05 (two-tailed). **Significant at 0.01 (two-tailed).

7.3.2.1 Further Issues Regarding the Operationalization of Predictor Variables: Mean-Centering and the Creation of Interaction Terms

In order to test the hypothesized interaction effects between the relevant product-focused predictors (i.e. product quality, product price, expected customer demand, estimated gross margin, and marketing support) and salesperson-related predictors (i.e. salesperson consultation and salesperson helping behavior) on the new product acceptance decision, two additional steps were performed during the operationalization phase: (1) all pertinent predictors were mean-centered (on grand means) (e.g., Aiken & West, 1991); and then, (2) the creation of interaction terms was achieved by multiplying the respective mean-centered predictor variables (e.g., Aiken & West, 1991; Hayes, Glynn, & Huges, 2012; Kam & Franzese, 2007).

Mean-centering can be defined as “subtracting the mean (a constant) from each score, X, yielding a centered score” (Robinson & Schumacker, 2009, p.6; also cf. Hayes, Glynn, & Huges, 2012). This process was applied to all of the single predictors utilized to create interaction terms; that is the single predictors of (a) product quality, product price, expected customer demand, estimated gross margin, and marketing support; and (b) salesperson consultation and salesperson helping behavior.

Although an excessive discussion on mean-centering goes beyond the aims of the present study, a review of this topic in extant literature revealed a number of important points that are worth mentioning. First, one of the main advantages of the mean-centering procedure that has been advocated by a number of authors is the reduction of

multicollinearity in interaction models (e.g., see Aiken & West, 1991; Robinson & Schumacker, 2009). In the terminology of logistic regression, this would refer to a reduction in collinearity between interaction terms and their underlying predictor variables. However, several other researchers disagree with this specific claim (e.g., Irwin & McClelland, 2001; Kam & Franzese, 2007). Second, whether one agrees or disagrees with the benefit of reducing multicollinearity in interaction models due to mean-centering, there seems to be a general consent though that this procedure does *not* 'harm' or 'change' the empirical estimation of any *substantive effects* obtained from testing an interaction model based on centered variables (e.g., Hayes, Glynn, & Huye, 2012; Kam & Franzese, 2007).³ Third, another advantage of mean-centering that has been brought forward is related to the interpretation of the estimated coefficients for the centered variables used to create an interaction term. In particular, it has been argued that such coefficients are interpretable "within the range of the data (i.e., at the sample mean), unlike when mean centering is not done" (Hayes, Glynn, & Huye, 2012, p.10). Fourth, and perhaps due to the potential advantages that it can achieve, mean-centering is often applied in marketing research that examines interaction models (e.g., see Cadogan et al., 2005; Homburg, Wieseke, & Bornemann, 2009). Finally, and concluding in the terminology of Hayes, Glynn, and Huye (2012, p.10), it appears that "mean centering [...] is a choice one can make, to do or not to do, rather than a requirement."⁴

As stated at an earlier point, all single predictors used to create interaction terms were mean-centered. Subsequent to this process, interaction terms were obtained by multiplying the relevant mean-centered predictor variables (Aiken & West, 1991; Hayes, Glynn, & Huye, 2012; Kam & Franzese, 2007). The creation of interactions by means of multiplication of the respective predictors has also been suggested in the logistic regression literature (e.g., Peng et al., 2002), and has been applied in previous work on retail buyers' new product purchase decisions (White, Troy, & Gerlich, 2000).

7.4 Verification of Logistic Regression Requirements

As discussed in Section 7.2.2, the issue of stable and accurate regression coefficients is an important topic to researchers - not least due to potential inference errors, which can result from unstable estimates. For most multivariate analysis methods, including logistic

³ To be sure, although substantive effects (and their statistical significance) are exactly the same in mean-centered and uncentered models (Kam & Franzese, 2007), "[C]oefficients, standard errors, and *t*-statistics differ in the centered and the noncentered models because they refer to different substantive quantities, not because either model produces different, much less any better, estimates of effects than does the other" (Kam & Franzese, 2007, p.98, *italic* in original).

⁴ As discussed at a later point, mean-centering the pertinent predictors in the present work was important for an appropriate analysis and interpretation of the simple effects due to the employed measurement scales (cf. Hayes, Glynn, & Huye, 2012).

regression, recommendations can be derived from the extant literature on how to achieve an enhanced confidence in the accuracy of coefficient estimations. In this section, two important requirements are verified for the present study: (1) the minimum observation-to-predictor ratio (and sample size); (2) an acceptable level of multicollinearity among predictor variables. The subsequent discussion is organized in the same order.

7.4.1 Observation-to-Predictor Ratio

In order to verify the minimum observation-to-predictor ratio recommendations previously identified in the relevant literature, a number of ratios were computed for each of the different types of models examined in the current work.⁵ Table 7.4 presents the study's sample size, the number of predictors, and the results of the calculations - which can be directly compared to the suggestions in the literature. As shown, the present study meets (and exceeds) the minimum recommendations; that is, sample size is > 100 and all observation-to-predictor ratios exceed the suggested minimum of 10:1 (e.g., Peng et al., 2002).

Table 7.4: Sample Size and Observation-to-Predictor Ratio

Criteria	Minimum Recommendations in Extant Literature		
Sample size	100		
Observation-to-predictor ratio	10:1		

Model Types	Sample Size	Number of Predictors	Ratio
Direct effects (including controls)	192	11	17.45
Simple ¹ and interaction effects (including controls)	192	16	12
Simple ¹ , interaction, and mediating effects ² (including controls)	192	17	11.29

Notes: ¹A model variable involved in interactions has multiple effects (Kam & Franzese, 2007). In order to specifically refer to a variable's effect when the other variable involved in the interaction is *equal to zero*, it has been suggested to label these effects *simple* effects (Hayes, Glynn, & Huges, 2012).

²The estimation of the simple effects of salesperson relationship-building activities (i.e. salesperson consultation and salesperson helping behavior) on the mediator variable 'trust' included all 16 predictors (i.e. the total of 16 simple and interaction effects). For more details on how the mediation of salesperson consultation/helping behavior → buyer trust → purchase decision was tested within the full model, see Section 7.5.3.

In addition, it is noteworthy that these results compare favorably to some observation-to-predictor ratios identifiable in prior work on retail buyers' new product acceptance

⁵ The analysis and modeling strategy employed in the present study, including the comparison of different models, is detailed in Section 7.5.

decisions. For example, in White, Troy, and Gerlich's (2000) study - although neither discussed, nor computed by the authors - the ratios for two separate models (i.e. an introductory-allowances model and a slotting-fees model) were 8.43 and 8.13 respectively (calculated from information presented by the authors in Table 3, p.295, and Table 4, p.296).

7.4.2 Multicollinearity

Multicollinearity among predictor variables was assessed by the inspection of their variance inflation factors (VIFs).⁶ Importantly, the interaction terms were included in this examination. Tables 7.5 and 7.6 show the results yielded by this evaluation for the two 'full' models assessed in the present study.⁷ As depicted, the VIFs of the model variables range from 1.056 to 2.387 (Table 7.5) and from 1.049 to 2.407 (Table 7.6) respectively. Given that all VIFs were evidently below the suggested threshold level of 10 (Kleinbaum et al., 1998), multicollinearity was not considered to be a problem.

Table 7.5: Multicollinearity Assessment I – Full 'Consultation' Model

Single Predictors	Predictor Variable	VIF
<i>Product features</i>		
Product quality*	X ₁	1.939
Product price*	X ₂	1.496
<i>Market demand</i>		
Expected customer demand*	X ₃	2.302
<i>Marketing strategy characteristics</i>		
Estimated gross margin (financial)*	X ₄	1.591
Marketing support (index)*	X ₅	1.309
<i>Salesperson relationship-building activity</i>		
Salesperson consultation*	X ₆	1.846
<i>Interaction terms**</i>		
Product quality x salesperson consultation	X ₁₆	2.387
Product price x salesperson consultation	X ₂₆	1.936
Expected customer demand x salesperson consultation	X ₃₆	2.290
Estimated gross margin x salesperson consultation	X ₄₆	2.053
Marketing support x salesperson consultation	X ₅₆	1.366
<i>Buyer mediator</i>		
Buyer trust	X ₇	2.148
<i>Controls</i>		
Product dependence	X ₈	1.197
Product importance	X ₉	1.690
Customer firm size (# of employees)	X ₁₀	1.056
Buyer-salesperson relationship duration	X ₁₁	1.220
Buyer relationship orientation	X ₁₂	1.621

Note: *Mean-centered variables. **Interaction terms created after mean-centering of the respective variables.

⁶ All predictor variables were regressed on an external variable (i.e. a satisfaction variable that was external to the model).

⁷ Again, the employed analysis and modeling strategy for the present study is discussed in Section 7.5.

Table 7.6: Multicollinearity Assessment II – Full ‘Helping Behavior’ Model

Single Predictors	Predictor Variable	VIF
<i>Product features</i>		
Product quality*	X ₁	1.930
Product price*	X ₂	1.487
<i>Market demand</i>		
Expected customer demand*	X ₃	2.407
<i>Marketing strategy characteristics</i>		
Estimated gross margin (financial)*	X ₄	1.621
Marketing support (index)*	X ₅	1.356
<i>Salesperson relationship-building activity</i>		
Salesperson helping behavior*	X ₆	1.600
<i>Interaction terms**</i>		
Product quality x salesperson helping behavior	X ₁₆	1.762
Product price x salesperson helping behavior	X ₂₆	1.659
Expected customer demand x salesperson helping behavior	X ₃₆	2.069
Estimated gross margin x salesperson helping behavior	X ₄₆	1.603
Marketing support x salesperson helping behavior	X ₅₆	1.274
<i>Buyer mediator</i>		
Buyer trust	X ₇	1.895
<i>Controls</i>		
Product dependence	X ₈	1.207
Product importance	X ₉	1.693
Customer firm size (# of employees)	X ₁₀	1.049
Buyer-salesperson relationship duration	X ₁₁	1.236
Buyer relationship orientation	X ₁₂	1.732

Note: *Mean-centered variables. **Interaction terms created after mean-centering of the respective variables.

7.5 Testing the Logistic Regression Models: Analysis Strategy, Model Specifications, Mediation Testing Process, and Hypotheses

7.5.1 Analysis Strategy

Turning to the actual test of the study’s hypotheses, the following outlines the employed analysis strategy. In particular, due to the complex nature of the logistic regression model, which included simple⁸, interaction, and mediating effects, the analysis followed specific modeling guidelines established in the extant literature (e.g., Aiken & West, 1991; Menard, 2001; White, Troy, & Gerlich, 2000). First, because of the number of predictors (i.e. 7 independent variables, 10 interaction terms, 1 mediator, and 5 control variables, resulting in a total of 23 predictors), it was not feasible to run a single logistic regression model with the current study’s sample size (N = 192).⁹ Thus, two separate

⁸ See Hayes, Glynn, and Huges (2012) for the correct use of this terminology in interaction models.

⁹ A single model would have not met the minimum observation-to-predictor ratio (10:1) recommendations provided in the extant literature, and hence, could have resulted in potentially unstable coefficient estimates (e.g., Peng et al., 2002).

models were examined: a *consultation model* and a *helping behavior model* (cf. White, Troy, & Gerlich, 2000). The former excluded the salesperson helping behavior variable and its five hypothesized interactions with product-related variables; the latter excluded the consultation variable and its five hypothesized interactions with product-related variables. Consequently, both the full consultation model and the full helping behavior model contained each 17 variables (i.e. $23 - 6 = 17$). Second, in order to be able to assess if the inclusion of (a) the interaction terms and (b) the mediating effects significantly contributed to the models' prediction, two *reduced models* were also examined for each of the two full models (i.e. the consultation model and the helping behavior model) (cf. Aiken & West, 1991; Menard, 2001; White, Troy, & Gerlich, 2000). One of the reduced models excluded the mediating variable, the other the mediating variable and the interaction terms. Overall, this resulted in a total of six different logistic models to be run - one full and two reduced consultation models as well as one full and two reduced helping behavior models. This specific analysis strategy allowed for the conduction of a model comparison routine, used to identify whether the hypothesized interaction and mediating effects significantly add to the models' prediction accuracy (cf. Aiken & West, 1991; Menard, 2001). In addition, this procedure also provided a justification basis for determining the logistic models that are most appropriate for subsequent analyses (cf. Aiken & West, 1991; Menard, 2001; White, Troy, & Gerlich, 2000).

An overview of the examined logistic regression models is presented by Table 7.7. As displayed, three model types (one full and two reduced models) were run for both 'consultation' and 'helping behavior', leading to a total of six investigated models (signified by *1A/B* to *3A/B*). It is noted that the three model types as well as their respective number of predictors corresponds to the information provided in Table 7.4 (observation-to-predictor ratio calculations). In addition, the logistic models *3A* and *3B* represent the full consultation model and the full helping behavior model in the multicollinearity assessments I and II (Tables 7.5 and 7.6) respectively.

Table 7.7: Examined Logistic Models

Model Types	Number of Predictors	Consultation Model (A)	Helping Behavior Model (B)
1 Direct effects (including controls)	11	<i>1A</i>	<i>1B</i>
2 Simple and interaction effects (including controls)	16	<i>2A</i>	<i>2B</i>
3 Simple, interaction, and mediating effects (including controls)	17	<i>3A</i>	<i>3B</i>

7.5.2 Model Specifications

The previously described six logistic regression models (i.e. models 1A,B to 3A,B) were specified and run separately using PASW Statistics 18.0.0 (SPSS Inc., 2009). Table 7.8 displays an overview of the logistic regression equations predicting the *logit of (purchase decision)*. In coherence with Section 7.5.1, 1A and 1B denote the direct effects models (including controls), 2A and 2B refer to the interaction effects models (including simple effects and controls), and 3A and 3B relate to the full models (simple, interaction, and mediating effects; including controls).

Table 7.8: Logistic Regression Equations of Models 1A/B to 3A/B

Model Equations for logit(purchase decision)	
<u>Consultation Model (1A)/Helping Behavior Model (1B):</u>	
logit(purchase decision) =	
α	Intercept
$+ \beta_{\text{quality}} * X_{\text{quality}} + \beta_{\text{price}} * X_{\text{price}} + \beta_{\text{demand}} * X_{\text{demand}} + \beta_{\text{margin}} * X_{\text{margin}} + \beta_{\text{mkt. support}} * X_{\text{mkt. support}}$	Product-focused predictors with regression coefficients
$+ \beta_{\text{consultation}} * X_{\text{consultation}}$	Salesperson-focused predictor with regression coefficient
$\left[\text{OR} + \beta_{\text{helping behavior}} * X_{\text{helping behavior}} \right]$	
$+ \beta_{\text{dependence}} * X_{\text{dependence}} + \beta_{\text{importance}} * X_{\text{importance}} + \beta_{\text{customer size}} * X_{\text{customer size}}$	Controls with regression coefficients
$+ \beta_{\text{relationship duration}} * X_{\text{relationship duration}} + \beta_{\text{relationship orientation}} * X_{\text{relationship orientation}}$	
<u>Consultation Model (2A)/Helping Behavior Model (2B):</u>	
logit(purchase decision) =	
α	Intercept
$+ \beta_{\text{quality}} * X_{\text{quality}} + \beta_{\text{price}} * X_{\text{price}} + \beta_{\text{demand}} * X_{\text{demand}} + \beta_{\text{margin}} * X_{\text{margin}} + \beta_{\text{mkt. support}} * X_{\text{mkt. support}}$	Product-focused predictors with regression coefficients
$+ \beta_{\text{consultation}} * X_{\text{consultation}}$	Salesperson-focused predictor with regression coefficient
$\left[\text{OR} + \beta_{\text{helping behavior}} * X_{\text{helping behavior}} \right]$	
$+ \beta_{\text{quality}} \times \text{consultation} * X_{\text{quality}} \times \text{consultation} + \beta_{\text{price}} \times \text{consultation} * X_{\text{price}} \times \text{consultation}$	Interactions with regression coefficients
$+ \beta_{\text{demand}} \times \text{consultation} * X_{\text{demand}} \times \text{consultation} + \beta_{\text{margin}} \times \text{consultation} * X_{\text{margin}} \times \text{consultation}$	
$+ \beta_{\text{mkt. support}} \times \text{consultation} * X_{\text{mkt. support}} \times \text{consultation}$	
OR	
$\left[+ \beta_{\text{quality}} \times \text{helping behavior} * X_{\text{quality}} \times \text{helping behavior} + \beta_{\text{price}} \times \text{helping behavior} * X_{\text{price}} \times \text{helping behavior} \right.$	Interactions with regression coefficients
$\left. + \beta_{\text{demand}} \times \text{helping behavior} * X_{\text{demand}} \times \text{helping behavior} + \beta_{\text{margin}} \times \text{helping behavior} * X_{\text{margin}} \times \text{helping behavior} \right.$	
$+ \beta_{\text{mkt. support}} \times \text{helping behavior} * X_{\text{mkt. support}} \times \text{helping behavior}$	
$+ \beta_{\text{dependence}} * X_{\text{dependence}} + \beta_{\text{importance}} * X_{\text{importance}} + \beta_{\text{customer size}} * X_{\text{customer size}} + \beta_{\text{relationship duration}} * X_{\text{relationship duration}} + \beta_{\text{relationship orientation}} * X_{\text{relationship orientation}}$	Controls with regression coefficients

Table 7.8 continued:

Model Equations for logit(purchase decision)	
<i>Consultation Model (3A)/Helping Behavior Model (3B):</i>	
logit(purchase decision) =	
$\alpha + \beta_{\text{quality}} * X_{\text{quality}} + \beta_{\text{price}} * X_{\text{price}} + \beta_{\text{demand}} * X_{\text{demand}} + \beta_{\text{margin}} * X_{\text{margin}} + \beta_{\text{mkt. support}} * X_{\text{mkt. support}}$	Product-focused predictors with regression coefficients
Intercept	
$+ \beta_{\text{consultation}} * X_{\text{consultation}}$	Salesperson-focused predictor with regression coefficient
$\left(\text{OR} + \beta_{\text{helping behavior}} * X_{\text{helping behavior}} \right)$	OR + Helping behavior predictor with regression coefficient
$+ \beta_{\text{trust (mediating consultation)}} * X_{\text{trust (mediating consultation)}}$	Mediation (mediator with regression coefficient) ¹
$\text{OR} \left(+ \beta_{\text{trust (mediating helping behavior)}} * X_{\text{trust (mediating helping behavior)}} \right)$	OR + Mediation (mediator with regression coefficient) ¹
$+ \beta_{\text{quality x consultation}} * X_{\text{quality x consultation}} + \beta_{\text{price x consultation}} * X_{\text{price x consultation}}$	
$+ \beta_{\text{demand x consultation}} * X_{\text{demand x consultation}} + \beta_{\text{margin x consultation}} * X_{\text{margin x consultation}}$	
$+ \beta_{\text{mkt. support x consultation}} * X_{\text{mkt. support x consultation}}$	Interactions with regression coefficients
$\text{OR} \left(+ \beta_{\text{quality x helping behavior}} * X_{\text{quality x helping behavior}} + \beta_{\text{price x helping behavior}} * X_{\text{price x helping behavior}} \right)$	
$+ \beta_{\text{demand x helping behavior}} * X_{\text{demand x helping behavior}} + \beta_{\text{margin x helping behavior}} * X_{\text{margin x helping behavior}}$	
$+ \beta_{\text{mkt. support x helping behavior}} * X_{\text{mkt. support x helping behavior}}$	Interactions with regression coefficients
$+ \beta_{\text{dependence}} * X_{\text{dependence}} + \beta_{\text{importance}} * X_{\text{importance}} + \beta_{\text{customer size}} * X_{\text{customer size}} + \beta_{\text{relationship duration}} * X_{\text{relationship duration}}$	
$+ \beta_{\text{relationship orientation}} * X_{\text{relationship orientation}}$	Controls with regression coefficients

Note: ¹To be sure, equations predicting the logit of (purchase decision) are displayed only. Thus, the effects of salesperson consultation/salesperson helping behavior on trust are not shown.

7.5.3 Details on the Mediation Testing Process

In order to test the indirect effects of salesperson consultation and salesperson helping behavior, mediated through buyer trust, on retail buyers' purchase decision in the two full models (i.e. models 3A and 3B), the PROCESS modeling tool was utilized (Hayes, 2012).¹⁰ Importantly, the PROCESS command (syntax) allows one to simultaneously model direct and indirect effects on binary outcome variables, using PASW Statistics 18.0.0 (SPSS Inc., 2009).

Without going into too much technical detail, it suffices here to say that the PROCESS syntax (Hayes, 2012) was first downloaded, and then used to specify the relevant direct and indirect effects on the binary purchase decision variable for the full consultation model (3A) and the full helping behavior model (3B). The PROCESS documentation was utilized during this entire procedure (also available online, see Footnote 10).

With regard to the mediation effects under investigation, the PROCESS output file provides information on the statistical significance of direct and indirect effects; in the present case, this corresponds to the direct influence of salesperson consultation and salesperson helping behavior on the purchase decision as well as the indirect influence of salesperson consultation and salesperson helping behavior, mediated through buyer trust, on the purchase decision. In addition, information on the statistical significance of the effects of salesperson consultation and salesperson helping behavior on buyer trust is provided.

7.5.4 Hypotheses

Finally, and before the evaluation of the examined logistic models, the hypotheses are restated (also see Chapter 4). Table 7.9 depicts the hypothesized influences of the model variables on the dichotomous purchase decision (yes/no) and relates them to the examined logistic models. For the ease of presentation, the investigated indirect (mediating) effects are shown at the end of the table.

¹⁰ Hayes, A.F., 2012. PROCESS: a versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from: http://www.afhayes.com/public/process_2012.pdf [Last accessed 30 May 2012]. The PROCESS syntax file (here, PROCESS Procedure for SPSS Beta Release 120212 was used) and download instructions are available from: <http://www.afhayes.com/spss-sas-and-mplus-macros-and-code.html> [Last accessed 30 May 2012]. The PROCESS syntax file can be downloaded by clicking the respective download link. The PROCESS documentation is available from: <http://www.afhayes.com/public/process.pdf> [Last accessed 30 May 2012].

Table 7.9: Model Variables, Hypothesized Influences on Purchase Decision, and Tested Hypotheses

Category	Model Variable	Hypothesized Influence on Purchase Decision	Hypothesis	Model Testing Hypothesis	
Product features	Product quality (1)	Positive (+)	H ₁	1A,B to 3A,B	
	Product price (2) <i>(favorable)</i>	Positive (+)	H ₂	1A,B to 3A,B	
Market demand	Expected customer demand (3)	Positive (+)	H ₃	1A,B to 3A,B	
Marketing strategy characteristics	<i>Financial</i>	Estimated gross margin (4)	Positive (+)	H ₄	1A,B to 3A,B
	<i>Marketing support</i>	Marketing support (index) (5)	Positive (+)	H ₅	1A,B to 3A,B
Salesperson relationship-building activities	Salesperson consultation (6)	Positive (+)	H ₆	1A, 2A, 3A	
	Salesperson helping behavior (7)	Positive (+)	H ₇	1B, 2B, 3B	
Interactions	<i>Salesperson consultation</i>	(2) x (6), (1) x (6), (3) x (6), (4) x (6), (5) x (6)	Positive (+)	H _{8a} – H _{8e}	2A, 3A
	<i>Salesperson helping behavior</i>	(2) x (7), (1) x (7), (3) x (7), (4) x (7), (5) x (7)	Positive (+)	H _{9a} – H _{9e}	2B, 3B
Controls	Product dependence	Positive (+)	C ₁	1A,B to 3A,B	
	Product importance	Positive (+)	C ₂	1A,B to 3A,B	
	Customer firm size (# of employees)	Positive (+)	C ₃	1A,B to 3A,B	
	Buyer-salesperson relationship duration	Positive (+)	C ₄	1A,B to 3A,B	
	Buyer relationship orientation	Positive (+)	C ₅	1A,B to 3A,B	
Salesperson Relationship-Building Activities					
Mediator Variable					
Salesperson consultation	→ ⁺ →	Buyer trust	Positive (+)	H _{10a,b}	3A
Salesperson helping behavior	→ ⁺ →	Buyer trust	Positive (+)	H _{11a,b}	3B

7.6 Evaluation of the Logistic Regression Models

7.6.1 Model Comparison Routine and Justification for Subsequent Analyses

One of the aims of the present study is to investigate whether the influences of product-focused variables on retail buyers' new product purchase decisions are moderated by salesperson relationship-building activities. In view of this, it was important to conduct a model comparison routine in order to determine if the logistic models containing these hypothesized interactions (2A and 2B) significantly improve the models' prediction accuracy when compared with their corresponding direct-effects only models (1A and 1B) (cf. Aiken & West, 1991; Menard, 2001). In a similar vein, it was also necessary to examine whether the models that included the mediating effects (3A and 3B) were superior to their respective interaction models (2A and 2B). As stated at an earlier point, this comparison procedure provided a justification for the focus of subsequent analyses (cf. Aiken & West, 1991; Menard, 2001; White, Troy, & Gerlich, 2000); that is, the detailed analysis of the most appropriate models.

Table 7.10 presents some key statistics regarding overall model evaluation and goodness-of-fit for the six examined models. As suggested by multiple regression textbooks (e.g., Aiken & West, 1991), specifically proposed in the logistic regression literature (e.g., Menard, 2001), as well as previously applied in research work on retail buyers' new product acceptance decisions utilizing logistic regression analysis (White, Troy, & Gerlich, 2000), the significance of the change in the models' R^2 (1A to 2A; 2A to 3A; and 1B to 2B; 2B to 3B) was used as a decision basis to determine the most appropriate consultation and helping behavior models for subsequent analyses. In the context of logistic regression, a number of different R^2 indices (also referred to as pseudo R^2 s) analog to the R^2 measure in linear regression have been suggested (Menard, 2000). The R_L^2 (also known as McFadden R^2 or likelihood ratio R^2) has been recommended as the preferred measure (Menard, 2000; also cf. Peng et al., 2002) because of "its conceptual similarity to the OLS coefficient of determination, its relative independence from the base rate, and its comparability across models comprised of different predictors yet applied to the same outcome variable and the same data" (Peng et al., 2002, p.268; drawing from Menard, 2000). R_L^2 is defined as $G_M/D_0 = G_M/(G_M + D_M)$, where D_0 is the $-2 \times \log$ likelihood ($-2LL$) of the intercept/initial model, D_M is the $-2LL$ of the model including the predictors, and G_M (also called model χ^2) is derived by subtracting D_M from D_0 (i.e. $D_0 - D_M$) (McFadden, 1973; Menard, 2001). "[T]he *log likelihood* is the criterion for selecting parameters in the logistic regression model. [...] Whereas the log likelihood is negative, the $-2LL$ is positive, and larger values indicate worse prediction of the dependent variable" (Menard, 2001, pp.20-21, *italics* in original).

Table 7.10: Model Comparison – Logistic Models 1A/B to 3A/B

Statistics	Consultation Model (1A)	Consultation Model (2A)	Consultation Model (3A)	Helping Behavior Model (1B)	Helping Behavior Model (2B)	Helping Behavior Model (3B)
Null model -2LL ¹ (D_0)	245.784	245.784	245.784	245.784	245.784	245.784
Model -2LL (D_M)	142.337	130.976	130.699	142.357	130.661	130.660
Model χ^2 (G_M) = ($D_0 - D_M$)	103.447	114.808	115.085	103.427	115.123	115.124
Degrees of freedom (df)	11	16	17	11	16	17
Significance (p-value)	0.000	0.000	0.000	0.000	0.000	0.000
R_L^2 (McFadden R^2)	0.421	0.467	0.468	0.421	0.468	0.468
ΔR_L^2	---	0.046	0.001	---	0.047	0.000
Significance of ΔR_L^2	---	p < 0.02* (significant)	Insignificant	---	p < 0.02** (significant)	Insignificant

Notes: ¹The null model only includes the Y intercept. -2LL = -2 log likelihood.
* $F_{(5, 175)} = 3.02$. ** $F_{(5, 175)} = 3.09$. Critical F-Value for $p = 0.02$ is $F_{(5, 175)} = 2.76$.

Analysis reveals that all of the six tested models predicted the purchase decision significantly better than the null (intercept only) model, as indicated by the respective significant model χ^2 statistics (all p -values = 0.000). The model -2LL statistics (D_M) for models 2A and 2B show a reduction (i.e. an improvement) in comparison to models 1A and 2A respectively. Models 3A and 3B, however, do not further (substantially) improve on the model -2LL statistic. The latter conclusions can also be derived based on examination of the models' R_L^2 measures. In particular, the R_L^2 indices for models 2A and 2B have increased (Δ in R_L^2 0.046 and 0.047 respectively) when compared to their direct-effects only counterparts (models 1A and 1B). Furthermore, the R_L^2 of models 3A and 3B do not show any further (substantial) improvement over the R_L^2 of the corresponding models 2A and 2B (Δ in R_L^2 0.001 and 0.000 respectively).

The significance of the changes in R_L^2 from one model to another were tested by means of a model comparison routine utilizing F -tests (Aiken & West, 1991; also cf. Troy, Szymanski, & Varadarajan, 2001; White, Troy, & Gerlich, 2000). In this procedure, the null hypothesis (H_0) assumes that there is no significant difference between the two compared R_L^2 indices; the alternative hypothesis (H_a) states that a significant difference exists. Equation 7.2 presents the F -test formula employed in the present work, as suggested by Aiken and West (1991).

Equation 7.2: F-Test for Model Comparison Routine

$$F = \frac{(R^2_{in} - R^2_{out})/m}{(1 - R^2_{in})/(n - k - 1)}$$

Notes: Adapted from Aiken and West (1991), Equation (6.5), p.106.
Degrees of freedom (df) = $m, n - k - 1$

Applying this F -test formula to the present context, R^2_{in} refers to the R_L^2 of “the model containing the terms in question” (Aiken & West, 1991, p.106); R^2_{out} refers to the R_L^2 of “the reduced model with the terms in question removed” (Aiken & West, 1991, p.106); “ m is the number of terms in the set of terms being explored; n is the number of cases; and k is the number of predictors in the full regression model, from which R^2_{in} is derived” (Aiken & West, 1991, p.106).

The results of the significance tests (ΔR_L^2) are also presented in Table 7.10. The improvements in R_L^2 by moving from model 1A to 2A and 1B to 2B are significant ($p < 0.02$), whereas the virtually absent changes in R_L^2 by moving from 2A to 3A and 2B to 3B are insignificant/not existing. These results suggest that it is appropriate to focus on models 2A and 2B (i.e. the consultation and helping behavior models including simple effects and interaction terms) during subsequent analyses (cf. Aiken & West, 1991; Menard, 2001; Troy, Szymanski, & Varadarajan, 2001; White, Troy, & Gerlich, 2000). Both, models 2A and 2B, return satisfactory overall model and goodness-of-fit statistics (as shown in Table 7.10 and further depicted in Section 7.6.3). Consequently, these two models will be used to assess the study’s hypotheses. Before moving on to more detailed model investigations, however, a brief discussion and an additional analysis on the mediation results of salesperson consultation and salesperson helping behavior, through buyer trust, on the purchase decision is provided (including an investigation of the effects of salesperson consultation and salesperson helping behavior on buyer trust).

7.6.2 Presentation of and Additional Analysis on Indirect (Mediating) Effects

The results of models 3A and 3B regarding the indirect influences of salesperson consultation and salesperson helping behavior on buyers’ purchase decision are presented in Table 7.11 below. Also included in this overview are the results of an additional analysis, performed to examine the *isolated* indirect influences of salesperson consultation/helping behavior on the purchase decision. As in the case of models 3A/B,

this latter analysis was also conducted by use of the PROCESS modeling tool (Hayes, 2012).

As depicted, in models 3A and 3B, the mediated effects of salesperson consultation and salesperson helping behavior are insignificant, as implied by the respective bootstrap confidence intervals, which is the preferred statistic for the evaluation of indirect effects (e.g., Preacher & Hayes, 2004). Specifically, both bootstrap confidence intervals are *not* significantly different from zero; that is [-0.210; 0.271] for the indirect effect of salesperson consultation and [-0.084; 0.116] for the indirect effect of salesperson helping behavior (H_{10b} and H_{11b} are not supported). This conclusion is also supported by the respective insignificant coefficients of buyer trust on the purchase decision ($\beta = 0.136$ [$p = 0.598$] and $\beta = 0.008$ [$p = 0.973$]). Furthermore, whereas the simple effects of salesperson consultation/helping behavior on the purchase decision in models 3A/3B were also insignificant ($\beta = -0.176$ [$p = 0.494$] and $\beta = 0.037$ [$p = 0.855$]), their effects on buyer trust were significant ($\beta = 0.296$ [$p = 0.000$] and $\beta = 0.126$ [$p = 0.013$] respectively; H_{10a} and H_{11a} are supported).

The non-significant indirect influence of salesperson consultation/helping behavior on the purchase decision, mediated through buyer trust (models 3A and 3B), is very interesting because several prior works have found a significant indirect impact of salespersons' relational behaviors (mediated through buyer trust) on performance outcomes, such as share of customer (Ahearne, Jelinek, & Jones, 2007) or word of mouth (Hansen & Riggle, 2009), for example. Importantly, however, these studies have examined salespeople's relational behaviors in isolation, and have not considered the impact of product-specific variables in their investigations, such as the ones examined in the present work. Consequently, the non-significant indirect influence of salesperson consultation and salesperson helping behavior on buyers' new product purchase decision seems to raise important questions regarding the actual role of buyer trust as a mediator variable when product-focused variables are included in the examination.

The significant influence of salesperson consultation/helping behavior on buyer trust in models 3A/3B is consistent with prior findings. For example, salespersons' relational activities have previously been shown to increase buyer trust in different industrial settings (e.g., see Ahearne, Jelinek, & Jones, 2007; Hansen & Riggle, 2009).

Table 7.11: Mediation Results Comparison: Models 3A/B and Isolated Effects

Model	Predictor	Influence on →	Mediator	Influence on →	Binary Outcome
<i>Consultation model (3A)</i>	Salesperson consultation	Coefficient: 0.296 t-value: 4.999 p-value: 0.000	Buyer trust	Coefficient: 0.136 z-value: 0.527 p-value: 0.598	Purchase decision
		Indirect effect (coefficient): 0.040 Bootstrap confidence interval: [-0.210; 0.271] ¹			
	Salesperson consultation	Simple effect (coefficient): -0.176; z-value: -0.684 p-value: 0.494			→ Purchase decision
<i>Helping behavior model (3B)</i>	Salesperson helping behavior	Coefficient: 0.126 t-value: 2.523 p-value: 0.013	Buyer trust	Coefficient: 0.008 z-value: 0.034 p-value: 0.973	Purchase decision
		Indirect effect (coefficient): 0.001 Bootstrap confidence interval: [-0.084; 0.116] ¹			
	Salesperson helping behavior	Simple effect (coefficient): 0.037; z-value: 0.183 p-value: 0.855			→ Purchase decision
Model	Isolated Predictor	Influence on →	Mediator	Influence on →	Binary Outcome
<i>Consultation model (I1)</i>	Salesperson consultation	Coefficient: 0.511 t-value: 9.444 p-value: 0.000	Buyer trust	Coefficient: 0.342 z-value: 2.215 p-value: 0.027	Purchase decision
		Indirect effect (coefficient): 0.175 Bootstrap confidence interval: [0.020; 0.374] ¹			
	Salesperson consultation	Direct effect (coefficient): 0.107; z-value: 0.777 p-value: 0.437			→ Purchase decision
<i>Helping behavior model (I2)</i>	Salesperson helping behavior	Coefficient: 0.277 t-value: 5.640 p-value: 0.000	Buyer trust	Coefficient: 0.440 z-value: 3.083 p-value: 0.002	Purchase decision
		Indirect effect (coefficient): 0.122 Bootstrap confidence interval: [0.044; 0.243] ¹			
	Salesperson helping behavior	Direct effect (coefficient): -0.063; z-value: -0.602 p-value: 0.548			→ Purchase decision

Note: ¹95% bootstrap confidence interval (bias-corrected).

Moreover, additional analyses were performed in order to gain an increased confidence in the mediating results (i.e. the non-significant indirect influences of salesperson consultation and salesperson helping behavior) obtained from the logistic regression models 3A and 3B. In particular, the *isolated* significant indirect effects of salespersons' relational activities as identified in previous studies, were successfully replicated with the present study's dataset. The results of these isolated examinations are also displayed in Table 7.11. Although the quality of the collected data and measures for the current work had been thoroughly tested throughout Chapters 5 to 7, it was also deemed

important to rule out that the type of data (i.e. binary outcome variable) and analysis method (i.e. logistic regression) did not specifically impact on the mediation results obtained through models 3A and 3B. This appeared especially relevant since most of the previous results on the indirect effects of salespersons' relational activities (mediated through buyer trust) on performance outcomes had been derived through the employment of structural equation modeling (SEM). The successful replication of the significant indirect impact of salespeople's relational activities (here, salesperson consultation and helping behavior) are shown by the respective bootstrap confidence intervals, which are significantly different from zero; that is, [0.020; 0.374] for salesperson consultation and [0.044; 0.243] for salesperson helping behavior. Further to this, both salesperson relationship-building activities significantly increase buyer trust ($\beta = 0.511$ [$p = 0.000$] and $\beta = 0.277$ [$p = 0.000$]), and buyer trust in turn significantly influences buyers' purchase decision in each case ($\beta = 0.342$ [$p = 0.027$] and $\beta = 0.440$ [$p = 0.002$]).

7.6.3 Overall Model Evaluation and Goodness-of-Fit Statistics

The complete statistics on overall model evaluation and goodness-of-fit are presented in Table 7.12 for the *consultation model (2A)* and the *helping behavior model (2B)*. Both models returned good results for the (a) likelihood ratio test, (b) Hosmer-Lemeshow (H-L) test, (c) R_L^2 , and (d) additional pseudo R^2 indices commonly reported (i.e. Cox & Snell R^2 and Nagelkerke R^2). It is noted that the H-L test (goodness-of-fit test) should yield a non-significant statistic (e.g., Peng, Lee, & Ingersoll, 2002), which it did for both models ($p > 0.05$). Furthermore, the Cox and Snell R^2 can by definition not attain a value of 1 (Menard, 2000).

Table 7.12: Overall Model Evaluation and Goodness-of-Fit Statistics

Statistics	Consultation Model (2A)	Helping Behavior Model (2B)
Null model $-2LL^1$ (D_0)	245.784	245.784
Model $-2LL$ (D_M)	130.976	130.661
Model χ^2 (G_M) = ($D_0 - D_M$)	114.808	115.123
Degrees of freedom (df)	16	16
Significance (p -value)	0.000	0.000
H-L test ² (χ^2)	13.003	11.941
Degrees of freedom (df)	8	8
Significance (p -value)	0.112	0.154
R_L^2 (McFadden R^2)	0.467	0.468
Cox and Snell R^2	0.450	0.451
Nagelkerke R^2	0.623	0.625

Note: ¹The null model only includes the Y intercept. $-2LL = -2 \log$ likelihood.
²H-L test = Hosmer and Lemeshow Test

7.6.4 Prediction Accuracy: Classification Table

The prediction accuracy of both the *consultation model (2A)* and the *helping behavior model (2B)* is reported by means of a classification table. More precisely, classification results describe the “degree to which predicted probabilities agree with actual outcomes” (Peng, Lee, & Ingersoll, 2002, p.6). Table 7.13 shows that both logistic models fit the underlying data very well. The classification accuracy for the two models is extremely high, with 88.0% for the consultation model and 87.0% for the helping behavior model. In both cases, the prediction of the ‘accept’ (yes) decision is somewhat better (consultation model: 92.9%; helping behavior model: 92.1%) than for the ‘reject’ (no) decision (consultation model: 78.5%; helping behavior model: 76.9%). Nevertheless, the overall predictive accuracy of both logistic models (88.0% and 87.0%) compares favorably to various prior studies examining retail buyers’ new product acceptance decisions: 78.6% (Rao & McLaughlin, 1989); 78% (McLaughlin & Rao, 1990); 74.7% (Gerlich, Walters, & Heil, 1994). Furthermore, the present classification results are also close to the very high predictive accuracy results of 91.2% and 91.4% reported by White, Troy, and Gerlich (2000).

Table 7.13: Classification Accuracy for Consultation Model (2A) and Helping Behavior Model (2B)

Consultation Model (2A)				
	<i>Observed</i>	<i>Predicted</i>		Percentage correct
		<u>Purchase decision</u>		
		<u>No</u>	<u>Yes</u>	
<u>Purchase decision</u>	<u>No</u>	51	14	78.5
	<u>Yes</u>	9	118	92.9
Overall percentage				88.0
Helping Behavior Model (2B)				
	<i>Observed</i>	<i>Predicted</i>		Percentage correct
		<u>Purchase decision</u>		
		<u>No</u>	<u>Yes</u>	
<u>Purchase decision</u>	<u>No</u>	50	15	76.9
	<u>Yes</u>	10	117	92.1
Overall percentage				87.0

Note: The cut-off value for both models was 0.5.

7.6.5 Post Hoc Analysis of Product Heterogeneity

As detailed in Chapter 5, data was collected on new retail products from the non-perishables product category only - consistent with more recent work on new product acceptance decisions (cf. Kaufman, Jayachandran, & Rose, 2006).¹¹ Based on this focus, some potential influences on the results of the present study due to product heterogeneity (i.e. perishables versus non-perishables product category) could already be discarded. Nevertheless, additional analysis regarding specific categories (or subcategories) could be performed on the collected data and it was deemed important to present the results obtained from these examinations, in support of later interpretations.

Whereas meaningful subcategory-specific logistic regression models could not be run due to sample size limitations (see Rao & McLaughlin, 1989, for an example), it seemed feasible, however, to (1) investigate and test the homogeneity of proportions of new product acceptance rates across different product categories and (2) include a product category-specific covariate into the consultation model (2A) and the helping behavior model (2B).

7.6.5.1 Acceptance Rates Across Product Categories

Table 7.14 presents the acceptance rates across the different product categories. Based on product category information provided by the survey respondents (i.e. retail buyers), a total of 10 categories were indentified (including one miscellaneous group).

Table 7.14: Acceptance Rates Across Product Categories

Product Categories	Number of New Products	Acceptance Rates (%)
Accessories/fashion jewelry	15	66.7
Apparel (T-shirts, tops, etc.)	28	64.3
Body care/cosmetics	6	66.7
Confectionary/candy	8	62.5
Gifts/collectibles	13	69.2
Home decoratives	10	70.0
Housewares/household supplies	37	70.3
Office supplies/stationery	10	70.0
Snacks, crackers, chips	17	64.7
Miscellaneous ¹	48	62.5
All categories	192	66.1

Note: ¹Product categories with a number of new products ≤ 4 are not shown separately.

¹¹ It is noted again, that other works have not distinguished between the perishables and non-perishables product categories (or investigated product category-specific influences on results) (e.g., see Gerlich, Walters, & Heil, 1994; White, Troy, & Gerlich, 2000).

The overall acceptance rate of new products is 66.1%. As can be seen, retail buyers' acceptance rates are quite stable across the different categories, with a minimum of 62.5% (confectionary/candy and miscellaneous) and a maximum of 70.3% (housewares/household supplies). With respect to the overall acceptance rate, this represents a maximum negative deviation of 3.6% and maximum positive deviation of 4.2%.

In order to further examine buyers' new product acceptance across the different categories, a number of χ^2 tests of homogeneity of proportions were performed using PASW Statistics 18.0.0 (SPSS Inc., 2009). In particular, these χ^2 tests were used to assess whether the proportions of yes/no (i.e. accept/reject) decisions per product category significantly differed between the 10 categories. All of the conducted tests returned non-significant χ^2 results, in support of homogeneity of acceptance rates across product categories. For example, the largest deviations between acceptance rates among the 10 product categories, that is, between confectionary/candy and housewares/household supplies, as well as between miscellaneous and housewares/household supplies (7.8% in both cases), returned non-significant test results. Specifically, when testing if the proportions of the confectionary/candy and the miscellaneous category differ significantly from the housewares/household supplies category, the following results were obtained: $\chi^2_{(1)} = 0.231$ ($p = 0.631$) and $\chi^2_{(1)} = 1.387$ ($p = 0.239$) respectively.

7.6.5.2 Product Category Covariate

In addition to the analysis of the acceptance rates across the different product categories, a categorical product category covariate was specified, included in the consultation model (2A) as well as the helping behavior model (2B), and both logistic models run using PASW Statistics 18.0.0 LOGISTIC REGRESSION (SPSS Inc., 2009). In each of the two models, none of the different product categories significantly influenced the purchase decision. The significance of the regression coefficients ranged from $p = 0.361$ ($\beta = -1.280$) to $p = 0.877$ ($\beta = -0.134$) for the consultation model, and $p = 0.171$ ($\beta = 1.326$) to $p = 0.854$ ($\beta = 0.227$) for the helping behavior model. It is noted that due to the 10 different categories, the observation-to-predictor ratio for both of the models dropped below 8:1, which is slightly below the recommended 10:1 ratio. Thus, these results should be considered in conjunction with the obtained results previously presented in Section 7.6.5.1.

Overall, the homogeneity of new product acceptance rates across the different product categories and the non-significant influence of the product category covariate in the consultation/helping behavior model (2A/2B) show that category-specific effects did not impact the results of this study in any substantial manner.

7.7 Hypotheses Tests: Statistical Significance of Predictor Variables (Logistic Regression Models 2A and 2B)

The overall model evaluation, goodness-of-fits statistics, as well as classification accuracy of the consultation model (2A) and the helping behavior model (2B) have already been reported/discussed in the previous section. The different statistical test results suggested that both logistic models exhibit good model fit and show significant improvements over the intercept only (or null) model in predicting the new product acceptance decision. In fact, the predictive accuracy of models 2A and 2B was demonstrated to be extremely high; that is, 88% and 87% respectively.

Now, the central focus is directed towards the statistical tests of the individual hypotheses examined in the consultation model (2A) and the helping behavior model (2B). Table 7.15 presents the results of these tests (i.e. $H_1 - H_7$, $H_{8a} - H_{8e}$, $H_{9a} - H_{9e}$, and $C_1 - C_5$).¹² In logistic regression analysis, the influence of a predictor variable's coefficient on the outcome of interest (*here*, the new product purchase decision) is assessed by Wald's χ^2 test (e.g., Menard, 2001; Peng, Lee, & Ingersoll, 2002). The statistical significance of the coefficients is examined at the 0.05 significance level (two-tailed). Since a positive (+) influence was hypothesized for all of the predictor variables (i.e. a specific direction of the hypothesis was specified), the 0.1 significance level (two-tailed) was also taken into consideration.

¹² It is noted that $H_{10a,b}$ and $H_{11a,b}$ (examined in models 3A and 3B) were already discussed (Section 7.6.2).

Table 7.15: Results of the Individual Hypothesis Tests: Consultation Model (2A) and Helping Behavior Model (2B)¹

Hypothesis	Model Variable	Hypothesized Influence on Purchase Decision	Coefficient (β)		Wald's χ^2	
			2A	2B	2A	2B
<i>Product features</i>						
H ₁	Product quality (1)	Positive	0.293 ⁺	0.289 ⁺	2.005	1.851
H ₂	Product price (2) (favorable)	Positive	0.279 ⁺	0.281 ⁺	2.150	1.989
<i>Market demand</i>						
H ₃	Expected customer demand (3)	Positive	0.574 ⁺	0.489 ⁺	6.919**	4.855**
<i>Marketing strategy characteristics</i>						
<i>Financial</i>						
H ₄	Estimated gross margin (4)	Positive	0.397 ⁺	0.299 ⁺	5.327**	3.207*
<i>Marketing support</i>						
H ₅	Marketing support (index) (5)	Positive	-0.186	-0.079	0.705	0.134
<i>Salesperson relationship-building activities</i>						
H ₆	Salesperson consultation (6)	Positive	-0.119	n/a	0.263	n/a
H ₇	Salesperson helping behavior (7)	Positive	n/a	0.038 ⁺	n/a	0.040
<i>Interactions (salesperson consultation)</i>						
H _{8a} – H _{8e}	(2) x (6)	All Positive	-0.112	n/a	0.441	n/a
	(1) x (6)		0.255 ⁺	n/a	2.439	n/a
	(3) x (6)		-0.369	n/a	4.146**	n/a
	(4) x (6)		0.023 ⁺	n/a	0.028	n/a
	(5) x (6)		0.470 ⁺	n/a	7.675**	n/a
<i>Interactions (salesperson helping behavior)</i>						
H _{9a} – H _{9e}	(2) x (7)	All Positive	n/a	-0.114	n/a	0.753
	(1) x (7)		n/a	-0.040	n/a	0.122
	(3) x (7)		n/a	-0.009	n/a	0.005
	(4) x (7)		n/a	0.254 ⁺	n/a	4.582**
	(5) x (7)		n/a	0.219 ⁺	n/a	2.214
<i>Controls</i>						
C ₁	Product dependence	Positive	-0.002	0.056 ⁺	0.000	0.121
C ₂	Product importance	Positive	0.732 ⁺	0.638 ⁺	12.932**	11.236**
C ₃	Customer firm size (# of employees)	Positive	0.000	0.000	0.680	0.482
C ₄	Buyer-salesperson relationship duration	Positive	0.002 ⁺	0.000	0.259	0.007
C ₅	Buyer relationship orientation	Positive	0.021 ⁺	-0.006	0.013	0.001
	Intercept		-2.146	-2.003	3.029	3.171

**Significant at the 5% level (two-tailed test). *Significant at the 10% level (two-tailed test).
⁺ sign: coefficient is in hypothesized direction.
Each entry with 1 degree of freedom (df).

Notes: ¹H_{10a,b} and H_{11a,b} (indirect effects) in models 3A and 3B were already discussed separately (see Section 7.6.2).
n/a = not applicable.

Empirical support for the influence of *specific product-focused variables* on retail buyers' new product acceptance decisions is somewhat mixed in extant literature. Furthermore, the number of significant coefficients of product-focused predictors in previously tested logistic models frequently *varies between three and six* (e.g., see Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990; Rao & McLaughlin, 1989). Thus, the seemingly low number of significant regression coefficients in the consultation model (2A) and helping behavior model (2B) is not uncommon in this particular field of research. More precisely, model 2A returned *five* significant regression coefficients and model 2B returned *four* significant regression coefficients (denoted by asterisks [*] in Table 7.15). Further, the regression coefficients of most of the predictors are in accordance with the hypothesized direction (indicated by '+' signs in Table 7.15). It is also noted that none of the simple effects of salesperson consultation and salesperson helping behavior were statistically significant.

The subsequent discussion is organized as follows. First, the hypothesized interactions between the examined product-focused variables and salesperson relationship-building activities are discussed ($H_{8a} - H_{8e}$, $H_{9a} - H_{9e}$). Then, the hypotheses regarding the simple effects of the specific product-focused variables and salesperson consultation/helping behavior are considered ($H_1 - H_7$). Finally, the hypothesized control relationships are discussed ($C_1 - C_5$). Importantly, it is specifically emphasized at this point that the hypothesized interaction effects are discussed *before* the hypotheses regarding the simple effects are examined. This approach is in line with more recent literature pertaining to the interpretation of coefficients in regression models with interactive hypotheses (e.g., see Hayes, Glynn, & Huges, 2012; Kam & Franzese, 2007). It suffices here to say that the results of the hypothesized simple effects of the product-/ and salesperson-focused predictors must only be interpreted and understood in light of their respective hypothesized interactions; that is, in regression models with interactive terms, a simple effect represents a 'special case', interpretable only as an estimation of "the effect of one variable conditioned on the other equaling zero" (Hayes, Glynn, & Huges, 2012, p.11). A more detailed discussion of this topic is presented in Section 7.7.2 (i.e. before the examination of the simple effects).

7.7.1 Hypothesized Interaction Effects: $H_{8a} - H_{8e}$, $H_{9a} - H_{9e}$

7.7.1.1 Interactions with Salesperson Consultation: $H_{8a} - H_{8e}$

A total of five interactions between the relevant product-focused predictors and salesperson consultation were hypothesized in Chapter 4 ($H_{8a} - H_{8e}$). While three of these returned coefficients in line with the hypothesized direction (+) (i.e. 60%), only one

hypothesis was supported. H_{8e} stated that, higher salesperson consultation increases the positive association of higher marketing support with retail buyers' new product acceptance, and was supported. A coefficient of $\beta = 0.470$ (Wald's $\chi^2 = 7.675$; $p = 0.006$) was returned (consultation model 2A). It indicates that salespeople who perform higher levels of salesperson consultation can enhance the influence of marketing support (offered to the retailer for a particular new product) on buyers' purchase decision. This result highlights the vital role of the salesperson in advising the buyer about the specific marketing support available for a specific new product, and how the retailer could benefit from it.

Shifting the attention towards the unsupported hypotheses, H_{8a}, which stated that, higher salesperson consultation increases the positive effect of a more favorable product price on retail buyers' new product acceptance, returned a non-significant regression coefficient ($\beta = -0.112$ [Wald's $\chi^2 = 0.441$; $p = 0.506$]). Hence, this hypothesis was not supported. The result suggests that higher levels of performed consultation by the salesperson do *not* positively enhance buyers' product price assessments, leading to an increased likelihood of product acceptance (positive buyer response). Although not in line with the notions expressed in Chapter 4, this finding may be explained by the relational activity of consultation itself. Since salesperson consultation involves objective information provision (including objective pricing comparisons, both positive and negative) aimed at enhancing buyers' decision-making (and ultimately, building a trust-based relationship with the buyer), salesperson consultation may actually be unsuitable to successfully modify price perceptions and increase the impact of price on buyers' new product acceptance. For example, salesperson consultation could be contrasted to salesperson persuasion (typically, not conceptualized as a relational behavior), which focuses on convincing or persuading the buyer to purchase a particular product offer.

Next, H_{8b} stated that higher salesperson consultation increases the positive association of higher product quality with retail buyers' new product acceptance. A positive (+), yet, non-significant coefficient was obtained ($\beta = 0.255$ [Wald's $\chi^2 = 2.439$; $p = 0.118$]), and thus, this hypothesis was not supported. This result implies that salesperson consultation does *not* modify product quality assessments of the buyer, motivating a likely new product acceptance. In a similar vein as for H_{8a}, it appears that other salesperson behaviors may have a stronger influence on the relationship between product quality and buyers' acceptance decisions.

Also no support was found for H_{8c} , which stated that higher salesperson consultation increases the positive effect of higher expected customer demand on retail buyers' new product acceptance. In fact, a negative and significant regression coefficient was obtained ($\beta = -0.369$ [Wald's $\chi^2 = 4.146$; $p = 0.042$]). This is indeed surprising and suggests that higher levels of salesperson consultation *negatively* influence the effect of expected customer demand on buyers' acceptance decisions. In other words, with regard to buyers' expectations of market demand for a new product, a high level of salespersons' consultation efforts may actually be harmful. To this end, it may be that a trained buyer who understands the retailer's market well, including judging the potential salability of a new retail item, may perceive too much advice provision as an interference with his/her own expertise. Thus, excessive advice from salespeople in this regard may indeed be unwanted by the buyer or may lead the buyer to start questioning his/her own expectations, discouraging him/her from accepting the new product.

Finally, H_{8d} was also not supported. A positive (+), but non-significant regression coefficient of $\beta = 0.023$ (Wald's $\chi^2 = 0.028$; $p = 0.868$) was returned. This implies that greater levels of salesperson consultation do *not* significantly increase the influence of higher estimated gross margin on retail buyers' new product acceptance. Again, although not in line with the hypothesized effect, it could be argued that salespeople's consultation possibilities are somewhat limited in this regard. For example, even though the salesperson can recommend a retail price, buyers' estimation of the new product's gross margin incorporate (by definition) retail price and retail cost(s) expectations.¹³ Regarding the latter, the salesperson may be less able to provide advice concerning a specific retail operation.

7.7.1.2 Interactions with Salesperson Helping Behavior: $H_{9a} - H_{9e}$

In the same vein as salesperson consultation, five interaction terms were specified and hypothesized between the pertinent product-focused predictors and salesperson helping behavior in Chapter 4 ($H_{9a} - H_{9e}$). Whereas two of the obtained regression coefficients were consistent with the expected direction of the hypothesis (+) (i.e. 40%), just one was supported. H_{9d} , which stated that, a higher level of helping behavior increases the positive effect of higher estimated gross margin on retail buyers' new product acceptance, was supported. The coefficient, $\beta = 0.254$ (Wald's $\chi^2 = 4.582$; $p = 0.032$), was positive and significant. This finding indicates that salespersons' helping deeds/actions geared at benefiting the retailer stimulate a greater impact of higher levels of estimated gross margin on new product acceptance. It highlights the critical function a

¹³ A product's gross margin is defined as (retail price - retail cost)/retail price.

salesperson may fulfill in assisting the retailer to maximize returns from scarce shelf space - an important retailer objective (cf. Kaufman, Jayachandran, & Rose, 2006), for which new products with high estimated gross margins are likely to be vital.

Turning now the focus to those hypotheses that did not attain support from the analysis, H_{9a} stated that higher salesperson helping behavior increases the positive association of lower product price with retail buyers' product acceptance. A non-significant regression coefficient was returned ($\beta = -0.114$ [Wald's $\chi^2 = 0.753$; $p = 0.385$]), and hence, this hypothesis was not supported. This suggests that salespeople's helping actions do not impact on the relation between product price and new product acceptance. However, considering that such positive effects of salesperson assistance have been identified in the case of estimated gross margin (discussed above), it appears that salespeople's helping behavior is more successful when both, retail costs (including product price) *and* retail price, are affected. In other words, it may be difficult for salespersons' helping actions to evoke an increased positive effect of product price on the new product acceptance decision because product price alone does not indicate (i.e. estimate) return maximization. For example, a new retail item may be offered to the buyer at a low (or very competitive) price, yet, this particular product may require the retailer to accomplish a number of burdensome tasks in order to successfully sell this item, adding to the product's retail cost(s). Then, given a specific retail price estimated by the buyer, returns from this new item may actually be considerably low.

Next, H_{9b} also did not obtain support. This hypothesis stated that higher salesperson helping behavior increases the positive influence of higher product quality on retail buyers' new product acceptance. A coefficient of $\beta = -0.040$ (Wald's $\chi^2 = 0.122$; $p = 0.727$) was returned. This result indicates that salespeople's helping deeds do not modify the influence of product quality on product acceptance. However, it may be that such a relationship is not as straightforward. For example, a salesperson's aiding activities that support a retail buyer in composing or complementing a successful product assortment (i.e. a profitable and preferably fast 'turning' product assortment) may require the selling of a product mix that constitutes a range of different levels of product quality - depending on the retailer's needs. In this instance then, it can be expected that salesperson helping behavior should not (*per se*) increase the anticipated positive effect of product quality on retail buyers' new product acceptance.

H_{9c} , also not supported by the results of the analysis, stated that higher salesperson helping behavior increases the positive association of higher expected customer demand

with retail buyers' new product acceptance. An insignificant coefficient was obtained ($\beta = -0.009$ [Wald's $\chi^2 = 0.005$; $p = 0.944$]). This finding suggests that salespeople's engagement in helping actions aimed at benefiting the retailer does not elicit a more positive buyer assessment of expected customer demand, and consequently, a more likely acceptance of a new product. While salespeople can directly assist the retailer and its staff in customer demand-related tasks, such as actively demonstrating how to generate more customer demand at the point of sale (POS), it could be that such type of aid is less likely to influence the retail buyer's overall expectations of the future and long-term sales potential of a particular new retail item. In view of this, a salesperson's focus on specific marketing support elements (e.g., advising on media support provided by the vendor) seems more effective to encourage retail buyers' new product acceptance (see H_{8e}).

Finally, H_{9e} , which stated that, higher levels of salesperson helping behavior increase the positive impact of higher marketing support on retail buyers' new product acceptance, was not supported. Although the obtained regression coefficient was positive (+), it was insignificant ($\beta = 0.219$ [Wald's $\chi^2 = 2.214$; $p = 0.137$]). This implies that higher levels of helping behavior carried out by the salesperson do not further enhance the positive impact of marketing support on product acceptance. In comparison to H_{8e} , which had indicated that an appropriately high level of salesperson consultation indeed 'activates' the positive effect of marketing support on retail buyers' product purchase decision, salespeople do not seem to have the opportunity to further influence this relationship through helping deeds or actions. For example, many of the marketing support elements that may be provided by the manufacturer for a specific new retail product, such as media support or cooperative advertising funds, may not offer the possibility for the salesperson to 'get significantly involved' and carry out additional actions in order to considerably benefit the retailer. Thus, a focus on the communication task (i.e. salesperson consultation) to affect the positive link between marketing support and retail buyers' new product acceptance seems more promising.

7.7.2 Hypothesized Simple Effects: $H_1 - H_7$

As briefly mentioned at an earlier point, the results of the hypothesized simple effects of the examined product-/ and salesperson-focused predictors (i.e. $H_1 - H_7$) must only be interpreted and understood in light of their respective hypothesized interactions (i.e. $H_{8a} - H_{8e}$ and $H_{9a} - H_{9e}$). In (logistic) regression models with interactive terms, that is, in models in which predictors (e.g., X and Z) and their interactive term (e.g., $X*Z$) coexist, the individual effects of the predictors (e.g., X and Z , given their estimated regression

coefficients) are *simple* effects (e.g., Hayes, Glynn, & Huye, 2012; Kam & Franzese, 2007). More precisely, and in the terminology of Hayes, Glynn, and Huye (2012, p.11), “[T]hey estimate the effect of one variable conditioned on the other equaling zero.”¹⁴ Due to this, it is preferable to refer to such influences as *simple* effects (Hayes, Glynn, & Huye, 2012).¹⁵

In the context of the present work, this implies that the individual effects of the product-focused predictors in the consultation model (2A) and helping behavior model (2B) are interpretable only, given that the respective salesperson-focused predictor is zero, and vice versa. For example, the individual impact of product quality on the purchase decision is conditional to salesperson consultation or salesperson helping behavior being zero in the respective model.

Furthermore, it is deemed important to point out that due to the mean-centering process which had been applied in the current work (see Section 7.3.2.1), all of the simple effects (whether relating to product-focused or salesperson-focused predictors) are indeed interpretable “within the range of the data (i.e., at the sample mean)” (Hayes, Glynn, & Huye, 2012, p.10; also cf. Kam & Franzese, 2007). Specifically, since all predictors used to create the interaction terms were measured on 7-point *Likert*-type scales, with anchors “Strongly Disagree (1) and Strongly Agree (7)”, zero is not included within the scales’ bounds. Mean-centering, however, ensured that an appropriate interpretation of the simple effects (given the pertinent coefficients) was possible within the data range; that is, as a result of the mean-centering procedure, a value of zero relates to the pertinent predictors’ respective sample means (cf. Hayes, 2012; Hayes, Glynn, & Huye, 2012; Kam & Franzese, 2007). As a consequence, the following discussion on the simple effects needs to be comprehended in the previously explained manner.

7.7.2.1 Simple Effects of Product-Focused Predictors: $H_1 - H_5$

Five hypotheses corresponding to simple effects of product-focused predictors were formulated in Chapter 4. Whereas four out of five regressions coefficients are in accordance with the hypothesized influences (+) in each of the two models 2A and 2B (i.e. 80%), only two hypotheses were supported (i.e. 40%). H_3 , which stated that, higher expected customer demand is positively associated with retail buyers’ new product acceptance, was supported. Expected customer demand returned regression coefficients of $\beta = 0.574$ (Wald’s $\chi^2 = 6.919$; $p = 0.009$) and $\beta = 0.489$ (Wald’s $\chi^2 = 4.855$;

¹⁴ For more detailed information on this topic, see Kam and Franzese (2007), for example.

¹⁵ The often utilized terminology of ‘main effect(s)’ from ANOVA is inappropriate in this case, and in fact, its usage in the regression analysis context is incorrect (Hayes, Glynn, & Huye, 2012).

$p = 0.028$) for the consultation model and helping behavior model respectively. It implies that new products, which are expected by the retail buyer to have a high customer demand, are more likely to be accepted. This finding is consistent with previous work measuring future sales potential of new retail products, such as buyers' expected category growth (e.g., McLaughlin & Rao, 1990). Further, it is an important result because buyers' perceptions of the salability, and hence, the future success of a new retail item, hinges to a large extent on the expectations of the intermediary. That said, the role of the salesperson needs to be highlighted. Whereas the finding for H_3 indicates that a mean (or average) level of consultation activity performed by the salesperson does not (negatively) impact on the positive influence of expected customer demand on buyers' purchase decision, H_{8c} had shown that higher consultation levels with regard to buyers' expectations of customer demand for a new retail item, may in fact be harmful.

The second supported hypothesis was H_4 , returning coefficients of $\beta = 0.397$ (Wald's $\chi^2 = 5.327$; $p = 0.021$) and $\beta = 0.299$ (Wald's $\chi^2 = 3.207$; $p = 0.073$ ¹⁶) for the two models respectively. It was hypothesized that a higher estimated gross margin for a new product is positively associated with retail buyers' acceptance of this item. The result indicates that a higher estimated return from a new item will likely induce the buyer to purchase the product. Although some previously reported findings, showing a negative effect of gross margin on the purchase decision, are not in line with the present result (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989), the finding of a positive influence on product acceptance is consistent with previous hypotheses (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989) and the theoretical argument that return maximization from scarce shelf space is an important performance aim of retail buyers (cf. Kaufman, Jayachandran, & Rose, 2006). Furthermore, the results show that at an average (or mean) level of consultation or helping behavior carried out by the salesperson, that is, the salesperson 'does not go out of his/her way' to advice or engage in helping activities, new products with greater estimated gross margins are still likely to be accepted by the buyer. However, in this regard it needs to be emphasized that a salesperson who exhibits a great level of helping behavior (i.e. helping the retailer to sell high margin items more successfully) will contribute towards this effect, and indeed, increase the positive effect of a new item with high estimated gross margin on the purchase decision (see H_{9d}).

Turning the attention towards the simple effects of the product-focused predictors that were not supported, H_1 stated that, higher product quality is positively associated with

¹⁶ Significant at 0.1 (two-tailed).

retail buyers' new product acceptance. Although the hypothesized direction of the influence was correct (+), insignificant regression coefficients were returned (i.e. $\beta = 0.293$ [Wald's $\chi^2 = 2.005$; $p = 0.157$] and $\beta = 0.289$ [Wald's $\chi^2 = 1.851$; $p = 0.174$] respectively). This implies that (overall) product quality does not seem to be a good predictor of retail buyers' decision to purchase a new product - no matter what level of relational activities performed by the salesperson (also see H_{8b} and H_{9b}). This finding is somewhat surprising because past empirical findings suggest that buyer ratings of product quality (including such as packaging) positively influence the acceptance decision (e.g., McLaughlin & Rao, 1990). However, it appears that retail buyers' decision-making process is more complex. For example, buyers may look for different levels of product quality, depending on the importance to carry specific items within the retail assortment (also see H_{9b}). To this end, product quality seems not always to be a sufficient determinant for new product success.

The next unsupported hypothesis, H_2 , stated that a more favorable product price offered to the retailer is positively associated with product acceptance decisions. Again, while the direction of the coefficients was correct (+), they were insignificant (i.e. $\beta = 0.279$ [Wald's $\chi^2 = 2.150$; $p = 0.143$] and $\beta = 0.281$ [Wald's $\chi^2 = 1.989$; $p = 0.158$] respectively). This result implies that better pricing does not predict the new product acceptance decision sufficiently well. In the relevant literature, the influence of price has been hypothesized cautiously in the past (e.g., McLaughlin & Rao, 1990) and previous findings are not straightforward. Also, as discussed in Chapter 4, different conceptualizations regarding the effect of pricing decisions on selling outcomes exist. In the present case, the level of the investigated relational activities carried out by the salesperson did not seem to matter with respect to a product's price (also see H_{8a} and H_{9a}). All in all, it seems likely that financial measures, such as expected gross margin or profit, are better indicators of new product acceptance decisions. As these measures incorporate not only the (expected) retail cost(s), but also the (expected) retail price, they appear to be of greater value in this context.

Finally, H_5 hypothesized that a higher level of marketing support offered to the retailer is positively associated with buyers' new product acceptance. This hypothesis was not supported, in fact, returning negative coefficients of $\beta = -0.186$ (Wald's $\chi^2 = 0.705$; $p = 0.401$) and $\beta = -0.079$ (Wald's $\chi^2 = 0.134$; $p = 0.715$). This finding is especially interesting and important in light of H_{8e} , and in view of the critical role of the salesperson. In particular, while a salesperson engaging in a high level of consultation activity positively affects the relationship between seller's marketing support and retail buyers'

new product acceptance ($p = 0.006$), at a mean (or an average) performance level of consultation, marketing support seems to have no influence. This suggests that it is critical for the salesperson to carry out an appropriately high level of consultation in order to sufficiently advise the buyer on how the retailer can successfully take advantage of the offered marketing support for a specific new item. Since marketing support includes marketing strategy variables such as media support or product sampling/demonstrations, which are under the direct control of the seller (cf. Rao & McLaughlin, 1989; Gerlich, Walters, & Heil, 1994, for example), a salesperson may waste this opportunity to impact on retail buyers' new product decisions only due to the performance of insufficient consultation activities.

7.7.2.2 Simple Effects of Salesperson-Focused Predictors: H_6 & H_7

Two hypotheses were formulated in Chapter 4, which correspond to simple influences of salesperson-focused predictors in models 2A and 2B (i.e. H_6 and H_7). None of these two hypotheses was supported. H_6 stated that higher salesperson consultation is positively associated with retail buyers' new product acceptance (consultation model 2A). Returning a regression coefficient of $\beta = -0.119$ (Wald's $\chi^2 = 0.263$; $p = 0.608$), this hypothesis was not supported (and in opposite of the hypothesized '+' direction). This implies that salesperson's consultation efforts do not have a significant impact on the purchase decision without a strong product offering. For example, while the influence of marketing support was 'activated' through higher levels of salesperson consultation, the latter carries little impact when the product offering (i.e. the different product-focused variables) is average (at a mean level).

In a similar vein, H_7 which hypothesized that, a higher level of salesperson helping behavior is positively associated with retail buyers' new product acceptance (helping behavior model 2B), also returned a non-significant (yet, positive) coefficient ($\beta = 0.038$ [Wald's $\chi^2 = 0.040$; $p = 0.842$]). Again, this suggests that salespeople's helping behavior does not significantly influence the new product purchase decision when the product offering (i.e. the various product-focused variables) is average (at the mean value).

In effect, *because* hypotheses H_6 and H_7 are not supported, they are of great interest.¹⁷ More precisely, while the here investigated salesperson relationship-building activities have been shown to enhance the seller's offering under certain circumstances, their effectiveness also appears to be contingent upon their interactions with positively

¹⁷ It noted at this point again that the non-significant mediating effects of salesperson consultation and salesperson helping behavior, through buyer trust, had already been discussed previously (results of models 3A and 3B).

assessed product-related criteria, such as a high estimated gross margin or high marketing support. In other words, in cases where retail buyers evaluate a new retail product as average (across the here examined product-focused variables), results indicate that the relational activities of salesperson consultation and salesperson helping behavior are ineffective (i.e. their simple effects are insignificant).

7.7.3 Hypothesized Control Relationships: C₁ - C₅

As presented in Chapter 4, five control relationships were hypothesized in this study's logistic models. Only one hypothesis was supported. C₂, which stated that, higher product importance is positively associated with retail buyers' new product acceptance, returned significant and positive coefficients of $\beta = 0.732$ (Wald's $\chi^2 = 12.932$; $p = 0.000$) and $\beta = 0.638$ (Wald's $\chi^2 = 11.236$; $p = 0.001$) for the consultation model (2A) and the helping behavior model (2B) respectively. This indicates that a strong relationship exists between retail buyers' new product purchase decisions and the importance of a particular product for the retailer. For example, even though the buyer may expect a high customer demand for a new item with high estimated gross margin, the consideration whether this specific product fits into the retailer's assortment appears to be critical ('assortment fit decision'). A new product is more likely to be accepted by the retail buyer if it is an essential item for the retailer. If it is not, such as in cases where the product is not sufficiently unique (i.e. not sufficiently different from already carried items), retail buyers' are more likely to reject it. It is emphasized that this effect on new product acceptance was highly significant.

Focusing the consideration on the unsupported control relationships, C₁ returned non-significant regression coefficients in both models (2A and 2B); that is, $\beta = -0.002$ (Wald's $\chi^2 = 0.000$; $p = 0.989$) and $\beta = 0.056$ (Wald's $\chi^2 = 0.121$; $p = 0.728$) respectively. C₁ stated that, higher product dependence is positively associated with retail buyers' new product acceptance. Since this relationship was not supported, retail buyers' new product acceptance is not specifically impacted by product sourcing dependency for the offered new items. Although this finding may seem surprising at first, this can have a number of logical reasons that are beyond the bounds of the present study. For example, consistent with the qualitative findings and prior work on retail buyers' new product acceptance (e.g., Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000), a new product was defined as "a stock-keeping unit" that the retailer has not previously carried (Rao & McLaughlin, 1989, p.84). Due to this, it is likely that the evaluated new retail items included line extensions, me-too products, and innovations (see Gerlich, Walters, & Heil, 1994). Especially for line extensions and

me-too products, it can be expected that a number of alternatives (i.e. similar other items) are available from more than one supplier. In these cases, product dependence should not be a critical factor for retail buyers' acceptance decisions.

Next, C_3 , which hypothesized a positive association between greater customer firm size (measured by the number of employees of the retailer) and new product acceptance, was also not supported. The respective coefficients were $\beta = 0.000$ (Wald's $\chi^2 = 0.680$; $p = 0.409$) and $\beta = 0.000$ (Wald's $\chi^2 = 0.482$; $p = 0.487$) for the two models (2A and 2B). This implies that, although a wide range of retailers are represented in this work's dataset, retailer size did not significantly influence the acceptance decision. While it can be expected that larger retailers naturally have greater purchase volumes than smaller retailers, the result suggests that retail buyers' new product acceptance decisions do not fundamentally differ between smaller and larger retail organizations (of course, this finding can only be related to the key variables of interest in this study).

Also not supported were C_4 and C_5 . Hypothesis C_4 stated that longer buyer-salesperson relationship duration is positively associated with retail buyers' new product acceptance. Coefficients of $\beta = 0.002$ (Wald's $\chi^2 = 0.259$; $p = 0.611$) and $\beta = 0.000$ (Wald's $\chi^2 = 0.007$; $p = 0.933$) were returned. In a similar vein, non-significant coefficients were obtained for C_5 ($\beta = 0.021$ [Wald's $\chi^2 = 0.013$; $p = 0.908$] and $\beta = -0.006$ [Wald's $\chi^2 = 0.001$; $p = 0.976$]), which stated that higher buyer relationship orientation is positively associated with retail buyers' new product acceptance. In the context of this study, these findings suggest that retail buyers will not simply accept new retail products 'just because' of a long relationship with a particular salesperson or buyers' desire to source new items via a relationship with a specific salesperson. In view of the earlier discussed findings regarding the non-significant simple effects of the salesperson relationship-building activities (i.e. salesperson consultation and salesperson helping behavior are ineffective when the product-focused variables are average/exhibit mean values), at this point, the results for C_4 and C_5 seem rather unsurprising.

7.8 Summary

The main objective of the current Chapter was the presentation of the results of the theory-testing phase. The individual hypotheses developed in Chapter 4 were tested by the use of logistic regression analysis. After a detailed discussion and report on the analysis technique of logistic regression (Section 7.2), the operationalization of the model variables (Section 7.3), and the confirmation of the logistic regression conditions (Section 7.4), Sections 7.5 to 7.7 presented the results of the actual logistic model testing

routines. Throughout these latter sections it was deemed important to also specifically highlight and discuss the overall utilized analysis strategy, the mediation testing procedure via the PROCESS modeling tool (Hayes, 2012), as well as the post hoc analysis of product heterogeneity (among others).

In general, the results of the logistic model comparison routine showed that the *consultation model 2A* and the *helping behavior model 2B* were the appropriate models to be examined in detail, justifying subsequently performed analyses. Each of these two models returned good overall model evaluation and goodness-of-fit statistics. Importantly, the classification accuracy for both models - 88.0% for the consultation model and 87.0% for the helping behavior model - is extremely high.

The results of the statistical tests of the predictor variables supported four hypotheses in each of the two models (i.e. 25% of the hypotheses tested in each model), a number not uncommon in the specific research field of retail buyers' new product acceptance decisions (e.g., see Gerlich, Walters, & Heil, 1994; Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000). In addition, the direction (+) for most of the investigated predictors was consistent with expectations. Interestingly, the simple effects of the studied relationship-building activities (i.e. salesperson consultation and salesperson helping behavior) were statistically insignificant.

Support was found for the following hypotheses. At a mean (or average) level of salesperson consultation or salesperson helping behavior, ***higher expected customer demand is positively associated*** with retail buyers' new product acceptance (H₃), and ***higher estimated gross margin is positively associated*** with retail buyers' new product acceptance (H₄). Furthermore, ***higher salesperson consultation increases the positive association of higher marketing support*** with retail buyers' new product acceptance (H_{8e}), and ***higher salesperson helping behavior increases the positive association of higher estimated gross margin*** with retail buyers' new product acceptance (H_{9d}). Finally, ***higher product importance is positively associated*** with retail buyers' new product acceptance (C₂). Taken together, these findings generally provide (a) *some additional* support for past research (product-focused predictors), (b) *some first and new* empirical evidence concerning the important interactive role of salesperson relational activities, yet, also (c) *some first and new* evidence against the commonly advocated and accepted viewpoint that salespeople's relational behaviors alone can lead to improved selling performance.

The subsequent and final Chapter (Chapter 8) will provide a synthesis of the central findings and contributions resulting from this work. More precisely, both the study's theoretical and managerial implications are discussed in light of salesperson-/ and retail buying-oriented research. Further, the present work's limitations are detailed and some suggestions for future research are provided.

Chapter 8

Discussion and Conclusions

***T**his final Chapter of the study summarizes the central conclusions and discusses the main implications derived from the research findings. In addition, the limitations of the work are specified, and suggestions for future research are provided.*

8.1 Introduction to the Concluding Discussion

The principal focus of this final Chapter is directed towards the summarization and discussion of the central conclusions as well as implications that can be derived from the present study's findings. In particular, the research's main contributions to marketing theory and the practice of B2B selling are highlighted. Regarding the theoretical implications, the emphasis is primarily placed on the work's contributions to salesperson-oriented research, with special attention focused on salesperson performance-related issues. With regard to the managerial implications, the discussion predominately concentrates on B2B field salespeople who sell merchandise to retailers. Resulting from this, a number of suggestions are put forward which are of potential practical interest to sales ventures (i.e. manufacturers, distributors, etc.) and their sales forces. The Chapter closes by detailing the work's limitations and proposing a future research agenda.

8.2 Theoretical Implications of the Research

Three key areas can be identified to which the current study contributes in terms of theoretical advancements. First, the new theory of the interactive and relative role of salesperson relationship-building activities in the context of retail buyers' new product selections contributes to specific prior theoretical knowledge; that is, institutional theory (economic sociology literature strand) (e.g., Granovetter, 1985), the relational perspective (specifically, relationship selling) (e.g., Moncrief & Marshall, 2005; Johnston & Marshall, 2005), and the new product acceptance literature (e.g., Rao & McLaughlin, 1989). Second, the present work also contributes to prior academic research by providing some first empirical evidence regarding important interactive influences of salespeople's relational behaviors in a new retail product context. In addition, the evidence resulting from this study challenges the widely advocated (and often seemingly unquestioningly accepted) standpoint that salespeople's relational activities *alone* can lead to enhanced selling performance. Third, the current research contributes to prior scholarly work by providing additional support for some formerly hypothesized influences on new product acceptance decisions, as well as a rigorous (re-)assessment of previously published measurement scales.

8.2.1 New Theory Development: The Interactive and Relative Role of Salesperson Relationship-Building Activities in Retail Buying

Linking back to the beginning of this study (Chapters 1 and 2), literature review-based deliberations suggested that past scholarly work has not provided any extensive knowledge on the effectiveness of salespeople's relationship-building behaviors in consideration of the actual product offering, that is, product-focused variables that

represent important facets (and often the core) of a business exchange. In this regard, it was highlighted that currently little is known with respect to the interactive and relative (here, simple) influences of relational activities on sales outcomes. For example, do salesperson relationship-building activities deliver enough additional benefits and value to the sales process to reinforce (i.e. positively modify) specific aspects of the product offering, ultimately leading to increased sales performance? Do salespeople's relational activities impact on sales outcomes even though aspects of the product offering are moderate (i.e. at an average level)? In light of the important role presently ascribed to salespeople's relationship-building efforts (e.g., Bradford et al., 2010; Johnston & Marshall, 2005), this study provides some first insights into the above outlined issues.

Utilizing both qualitative and quantitative research methods, the present work focuses on the U.S. retail industry, employing a buyer-centric perspective. By doing so, this study also responds to a recent call in the marketing literature to examine "those selling activities that are customer-centric, and therefore valued by the buyers, and not by the sales managers alone" (Singh & Koshy, 2010, p.540), as well as the notion that it is necessary to better understand "the process by which merchandise buyers make their decisions" (Grewal & Levy, 2007, p.448). As a consequence, the current work informs salespeople (and sales managers) of the interactive and simple influences of specific relational activities performed when selling to retail ventures - a context which warrants more research attention since "[A] vast majority of research that informs sales managers of purchasing processes has focused on sales to industrial rather than retail operations" (Bowler et al., 2011, p.8).

The qualitative part of the study (Chapter 3) focused on the identification of important salesperson relationship-building activities as well as the buying situations in which these activities may be most critical, each in the context of the retail industry and from the perspective of the buyer. Ensuring the attainment of research objectives 1 and 2 stated in Chapter 1 (i.e. the accomplishment of the *'what'* and *'when'* objectives), this exploratory work was deemed essential because past research work has largely concentrated on salesperson-centric examinations and classifications of industrial selling activities (e.g., Moncrief, 1986; Moncrief, Marshall, & Lassk, 2006), which are likely to differ from activities performed by salespeople operating in other industries (Moncrief, 1986). Although the importance of building relationships with customers has also been emphasized for the consumer goods industry (e.g., Grönroos, 1997), in fact, literature asserts that consumer goods companies have pioneered several relational practices and more customer-centric selling approaches (Bradford et al., 2010), in Chapters 1 and 2 it

was shown that scholarly research is rarely explicitly concerned with salespeople's relationship-building activities in such a context. Thus, one contribution the present work makes is to highlight the importance of salespeople's relational behaviors for sales to retail operations. In addition, the qualitative part of this study is arguably the first investigation that specifically explores such salesperson behaviors from the standpoint of the retail buyer.

Furthermore, the main component of the exploratory work dealt with the delineation of two key relationship-building activities as deemed important by buyers in the retail industry; that is, salesperson consultation and salesperson helping behavior. Whereas the number of important relational activities resulting from the data analysis may appear to be fairly limited at first sight, it seems necessary to reiterate at this point that the objective of the qualitative part was *not* the creation of any type of 'sales activity taxonomy' (e.g., see Moncrief, Marshall, & Laskk, 2006), but rather the detection of critical relationship-building tasks that, based on *the perceptions of retail buyers*, may have the potential to play an important role in buyers' product purchase assessments (as discussed in more detail in Chapter 3). As mentioned before, this exploratory work also identified the buying decision context in which such relational activities appeared to have the greatest impact. Specifically, data analysis results showed that the sales of new retail products may bear the largest opportunity for such behaviors to carry weight. Taken together, the qualitative part of this dissertation also contributes to existing research on its own by taking a different approach towards the investigation of salesperson relationship-building activities, that is, it identifies important relational behaviors of salespeople in the retail industry, rather than in an industrial context and delineates these based on buyer reports, rather than information provided by salespeople.

However, without any doubt, the main contribution of the present study is delivered by the quantitative element of this work and the respective attainment of research objective 3 (see Chapter 1). In particular, this second part of the research is the first attempt to provide important insights into the *interactive and relative (here, simple) influences* of specific salesperson relationship-building activities and product-focused variables on retail buyers' new product acceptance decisions. While previous scholarly sales work has typically investigated the effects of salespersons' relational behaviors on performance outcomes in isolation (e.g., Ahearne, Jelinek, & Jones, 2007; Hansen & Riggle, 2009), and retail buying-oriented research has mainly focused on product-related drivers alone to predict purchase decisions (e.g., Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000), the present study takes a different, simultaneous approach by

examining the influences of product-focused variables *and* salespeople's relational activities, and importantly, the latter's modifying impact on buyers' purchase decisions. Thus, this study makes a unique contribution to existing knowledge on the role of salespersons' relational activities in sales, and sales to retail operations in particular, by informing salespeople (and sales managers) on buyers' purchasing behavior.

In addition, the present study contributes towards the advancements of specific conceptualizations and theories available in the academic literature. First, this research work makes a contribution to institutional theory (e.g., Granovetter, 1985; 1992) by generating first insights into how salespersons' relational behaviors in personal interactions, and not simply the mere existence or the content (i.e. the quality) of personal relationships, can positively modify economic actions, such as buyers' assessment and selection of new retail products. Next, the current work also contributes to the relational perspective (relationship selling in particular) (e.g., Moncrief & Marshall, 2005; Johnston & Marshall, 2005) and the new product acceptance literature strand (e.g., Rao & McLaughlin, 1989) by providing first evidence on how salespeople's relationship-building activities can, in consideration of the product offering, influence new product buying decisions.

As discussed in Chapter 2, in more recent years a development towards simultaneous investigations of product-focused and relational-focused variables in certain marketing literature streams has been observed. Interestingly, little of this evolution is currently identifiable in the relevant sales literature, and Kaufman, Jayachandran, and Rose's (2006) work seems to represent an exception in the pertinent retail buying-oriented literature strand. Thus, the present study appears to also make a valuable contribution in this respect by adding additional insights to this theoretical development.

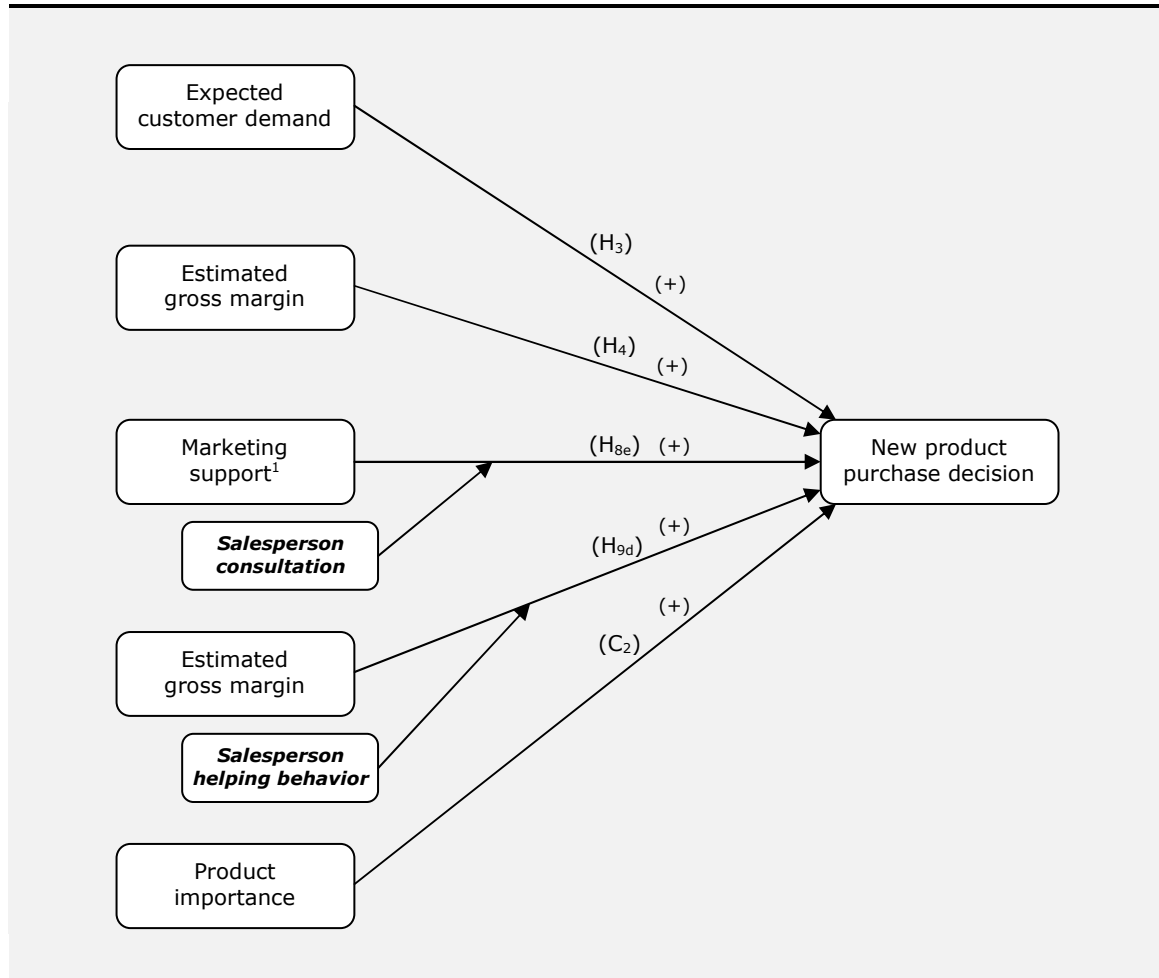
8.2.2 Interactive and Simple Influences on the New Product Purchase Decision

The present research also provides some first empirical evidence on how salesperson relationship-building activities (*here*, salesperson consultation and salesperson helping behavior) can play an important role in positively modifying retail buyers' new product assessments and selection decisions. While the product-related variables of expected customer demand, estimated gross margin, and product importance¹ returned significant test results for their positive effects (i.e. simple effects) on retail buyers' new product purchase decision, salesperson consultation and salesperson helping behavior were

¹ Previous work concerned with retail buyers' new product purchase decisions has not controlled for 'product importance'. For more details, see Chapter 4 (theoretical framework).

found to *positively moderate* the influence of marketing support and estimated gross margin respectively. Figure 8.1 presents an overview of the hypotheses that were supported by the present research. In this regard, it is necessary to mention here again that a number of hypotheses did not receive any support from the data (even though many of them were in the hypothesized [+] direction; see Chapter 7 for more details).²

Figure 8.1: Supported Hypotheses



Note: ¹Index comprised of six indicators: media support, couponing, product sampling/demonstrations, introductory allowances, cooperative advertising funds, and slotting fees.

At this point, it is recalled that the influences on the new product buying decision are context-specific; that is, they are applicable to the retail industry setting and the selling of new merchandise to retail operations. That said, they have been shown to be relevant across a wide range of different non-perishable product categories, retailer firm sizes, buyer-salesperson relationship durations, as well as different levels of product dependence and buyer relationship orientation, which increases the generalizability of

² The conceptual framework for this study was developed in Chapter 4 and the tests of the individual hypotheses were discussed in Chapter 7.

the findings within the retail industry (see Chapter 7 for the detailed analyses). In view of this, it is highlighted that in comparison to some previous scholarly research on new product acceptance decisions (e.g., White, Troy, & Gerlich, 2000), which have relied on a single retailer (i.e. one retail chain) and only a few retail buyers to evaluate many different products, this study has surveyed 146 retail buyers from 137 retailers across the U.S.A., who completed new product evaluations. This also attests to the greater generalizability of the present findings.

In theoretical terms, the study's first new empirical evidence regarding the supported modifying influences of salesperson consultation and salesperson helping behavior, even though at an early conceptualization stage, is generally consistent with the relational viewpoint in the marketing and sales literatures insofar as they show that salespeople's relational activities can enhance transactions, leading to increased selling performance. However, this specific modifying role of relationship-building activities in business exchanges also challenges the implicit assumption underlying most previous scholarly sales research, that salespeople's relational behaviors alone (i.e. directly and in isolation) can yield increased sales performance. Effectively, in Chapters 1 and 2 it was shown that prior academic research on salespersons' relational activities has mostly examined such deeds in isolation, and without any consideration of the product or service offering, which arguably makes up the core 'unit' of any exchange. In contrast, the present study suggests that specific relationship-building tasks performed by the sales force seem to interact with product-focused components of the product offering, effecting selling success in a combined fashion, and not in isolation. This finding is also consistent with Wathne, Biong, & Heide's (2001, p.62) notion that "buyers do make joint assessments of different sources of utility", such as relationship-building activities and product-focused factors.

Also of theoretical interest is the fact that the literature on retail buyers' product acceptance has predominantly focused on product-related determinants of new product success. Hence, the evidence of the important modifying role of salesperson relationship-building activities in buyers' new product buying decisions offers additional salesperson-oriented factors that also appear to influence purchase decisions. Almost two decades ago Gerlich, Walters, and Heil (1994) concluded from their own and other research, which only included product-focused determinants of new product buying decisions, that "[T]he lack of support for some of the hypotheses across each study indicates a need for greater theory development and better measurement of potential factors" (p.89). In light of theory development, the present study offers first insights into

salespersons' relational activities and their interactive role as promising additional determinants of new product success.

Despite this first evidence of some positive modifying effects of salesperson consultation and salesperson helping behavior, however, it is also worth elaborating on the returned significant *negative* influence of salesperson consultation (which was not hypothesized); that is, it was found that a higher level of salesperson consultation decreases the positive effect of expected customer demand on retail buyers' new product acceptance. In Chapter 7 it was already highlighted that this implies that, with respect to retail buyers' market demand expectations for a new item, a high degree of salespeople's consultation efforts may indeed be detrimental to selling success, influencing the buyers' purchasing decisions negatively.³ Important to the current discussion is the fact that, from a theoretical standpoint, this finding runs counter to the relational perspective in the modern marketing and sales literature, which emphasizes that relationship-building activities improve selling performance (e.g., see Boles et al., 2000; Palmatier et al., 2008). Thus, this present finding provides some empirical evidence that salespeople's relational behaviors may, in consideration of specific components of a product offering, actually have negative effects on financial results.

8.2.3 Empirical Support for Previous Research

Whereas the preceding two sections (8.2.1 and 8.2.2) have dealt with the central theoretical contributions of this study, there are a number of additional issues that are worth considering. In particular, the present research also contributes to extant theory, even though arguably to a smaller extent, by providing a rigorous reassessment of the previously published measurement scales as well as support for a couple of previously hypothesized product-focused influences on retail buyers' new product purchase decisions. Further to this, some important implications regarding hypotheses that did *not* find support from the analyses can be derived.

8.2.3.1 Previous Research - Supported

First, some specific implications can be drawn from the rigorous two-phase assessment procedure performed to evaluate the utilized measurement scales (Chapter 6). Since all of the employed measures had been previously developed and used in different scholarly studies, the analyses were mainly concerned with the re-evaluation of the scales. However, it appears that the two recommended progressive stages of exploratory *and* confirmatory factor analysis methods (e.g., Gerbing & Hamilton, 1996)

³ For theoretical arguments as to why this may be the case, see Section 7.7.1.1 in Chapter 7.

have typically not been used in past studies to assess the employed multi-item measures (usually only confirmatory factor analysis has been performed). Additionally, a number of the utilized scales have not been employed in the specific context of retail buyers' purchase decisions, and hence, sales to retail operations. For example, although the measurement items adapted from Bradford, Crant, and Phillips (2009) for the salesperson helping behavior construct originate from B2B sales research, they were initially employed in an industrial sales context. Hence, it can be argued that the present study also makes a contribution through a rigorous re-assessment of these specific scales, confirming their applicability in a retail industry setting.

While in general no major problems were observed regarding the measures during the exploratory factor analysis (EFA) or confirmatory factor analysis (CFA), such as multidimensionality issues, it is worth pointing out again that the CFA routine identified some specific scale items which needed to be removed from the respective measures mainly to prevent high correlations between error terms in the specified CFA models. To provide an example, the employed 6-item scale adapted from Agnihotri, Rapp, and Trainor (2009) (for measurement of the salesperson consultation construct) had to be reduced to a 4-item scale. Although this did not cause any problems for subsequent analyses (see Chapters 6 and 7), it seems that this specific measure could possibly be developed further within the sales research context.⁴

Next, a further contribution to extant scholarly work is provided by a couple of significant simple influences of product-focused variables on the buying decision, which are in line with previously expected effects in the new product acceptance literature (e.g., Rao & McLaughlin, 1989). First, the simple positive influence of expected customer demand on retail buyers' new product purchasing decision supports empirical evidence from prior studies, showing that the anticipated future sales potential of a new retail item by itself (or here, at a mean/average level of consultation or helping behavior performed by the salesperson) is a critical factor in buyers' product assessments and selections (for example, cf. Gerlich, Walters, & Heil, 1994; McLaughlin & Rao, 1990). Thus, the present study's findings further underscore that the success of a new retail product is to a great degree contingent upon the market demand perceptions of the channel intermediary (i.e. the retailer). Second, the simple positive effect of estimated gross margin on buyers' purchasing decision is also consistent with previously hypothesized product-focused influences (e.g., Rao & McLaughlin, 1989), however, the present work is one of the first

⁴ It is noted that Agnihotri, Rapp, and Trainor (2009) did not apply a CFA routine, but only an EFA procedure. That said, the authors sourced items from Ahearne, Gruen, and Jarvis (1999) as well as Ahearne, Jelinek, and Jones (2007), which have been subject to CFAs.

to actually support such a positive impact. Nevertheless, this finding underlines the generally advocated argument that a central objective of retailers is the return maximization from limited shelf space (cf. Kaufman, Jayachandran, & Rose, 2006). Finally, the positive influence of product importance on retail buyers' new product acceptance decisions, although not formerly hypothesized as a determinant in the specific new product acceptance literature strand, is in line with prior research findings controlling for such an impact on purchasing behavior (e.g., see Cannon & Homburg, 2001). This result implies that buyers' considerations of whether a particular new item is essential for the retailer to carry in its product assortment, is a critical control factor in buyers' new product selections. Thus, this finding also suggests that product importance is a promising additional (control) influence on new product success in a retail industry context.

8.2.3.2 Previous Research - Not Supported

Additional important theoretical implications for existing theory can be derived from the study's unsupported hypotheses. As a start, while findings suggest that salesperson consultation and salesperson helping behavior can positively modify the influence of specific components of the product offering on the new product purchasing decision (e.g., it was shown how salesperson consultation 'activates' the positive impact of marketing support on the buying decision), no support was found for the simple effects of either salesperson consultation or salesperson helping behavior on retail buyers' new product acceptance decision. In the present case, this implies that these relational activities performed by the salesperson do not significantly influence new product selection without a reasonably strong product offering. Specifically, when the different product-focused components (i.e. product features, market demand, and marketing strategy characteristics) are average (or at a mean level), intensified relational efforts of salesperson consultation and salesperson helping behavior do not seem to induce the buyer to accept a new retail product. Importantly, the mediation analysis of the indirect effects of salesperson consultation and salesperson helping behavior in the tested logistic models, mediated through buyer trust, were also found to be insignificant.⁵ These findings are of great interest in consideration of extant research and theory for a couple of reasons. First, and as alluded to earlier, the relational viewpoint in marketing would suggest that salespeople's relationship-building activities alone can lead to increased

⁵ It is emphasized at this point again that the *isolated* indirect effects of salesperson consultation and salesperson helping behavior were also investigated. Previous scholarly work has identified *isolated* significant indirect effects (i.e. mediated through buyer trust) for several relational activities performed by salespeople. Analyses *isolating* the indirect effects of salesperson consultation and salesperson helping behavior successfully replicated such findings of prior research, utilizing the present study's dataset and analysis method. For more details, see Section 7.6.2 in Chapter 7.

selling performance, and hence, impact buyers' acceptance decisions. Second, the insignificant indirect effects of both investigated relational activities also lead to some questions regarding the critical role prescribed to trust as a mediating variable of relational behaviors. For example, why does buyer trust not sufficiently affect retail buyers' new product purchasing decisions in models incorporating the key components of the product offering? Taken together, the study provides some first evidence that a competitive advantage through the performance of relationship-building activities (such as salesperson consultation and salesperson helping behavior) may only be attainable for the salesperson if (a) specific components of the product offering are sufficiently strong and (b) the performed relational behaviors positively interact with the specific elements of the product offering. If (a) and (b) are met, then it seems that salespeople's relational activities can increase the likelihood that retail buyers indeed select new products, ultimately leading to higher sales performance.

Also worth discussing are the unsupported hypotheses regarding the simple positive influences of the product features (i.e. product quality and product price) on the new product buying decision. With respect to product quality, in Chapter 7 it was highlighted that past research has found support for the positive impact of product quality on buyers' product selections (e.g., McLaughlin & Rao, 1990; Rao & McLaughlin, 1989). Hence, the present findings for product quality conflict with previous work, suggesting that more theory development may be necessary regarding this product-focused determinant. For example, contingent on the retailer's product assortment objectives, buyers may search for different degrees of product quality for specific categories. This would then imply that higher quality items may not always be favored over lower quality products within a wider product assortment. Concerning product price, hypotheses in the new product acceptance literature have been cautiously formulated (see respective discussion in Chapter 7); that is, effects seem to be less clear and theoretical explanations for both, the positive impact of lower and higher prices have been brought forward (see Chapter 4). In the context of buyers' purchasing decisions for new products, it appears that for the influence of the product price variable also more specific theory needs to be developed. Alternatively, focusing on other financial determinants, such as estimated gross margin, may prove more successful in predicting retail buyers' new product acceptance decisions.

8.3 Managerial Implications of the Research

Whereas the previous sections have focused on the discussion of the theoretical contributions of the present research, the attention is now directed towards the application of the study's findings to the marketing profession, and the practice of sales in particular. Although a wide array of different perspectives and standpoints have been expressed in the extant literature as to the exact role of and link between marketing theory (scholarly work) and marketing practice (practitioner work) (for example, see Cornelissen & Lock, 2005, for a review and discussion), within the academic marketing discipline it is the common *modus operandi* to *also* make a considerable contribution to marketing practice. In view of this, the subsequent sections present the managerial implications of the present research.

In particular, the managerial implications can be divided into three main parts. First, this research has implications for field salespeople carrying out relational activities and how these can increase the likelihood of improved selling performance. Second, implications can also be inferred with regard to the recruitment, training, and guidance of field salespeople who are involved in sales to retail operations. Third, some scholarly recommendations resulting from the present work are provided to supplier organizations and their field salespeople. The subsequent discussion is organized in this same order.

8.3.1 The Role of Salesperson Relationship-Building Activities in Retail Buying

Probably the most essential implication of the present research is that field salespeople can influence retail buyers' new product selection decisions by performing relationship-building activities, such as salesperson consultation and salesperson helping behavior, which can *positively modify* buyers' new product assessments. The gained insights on how these relational activities interact with specific components of the product offering to increase the likelihood of new product acceptance, should aid salespeople in better allocating their resources (e.g., time, effort, attention, or monetary resources). In this regard, two issues appear to be of central importance. First, the selling situation of new retail products, which appeared to have the greatest potential for relational activities to carry weight (see Chapter 3), may provide more focus to salespeople performing behaviors to build relationships with their customers. Second, salespeople selling to retail operations should consider the specific elements of individual product offerings before devoting resources to relational behaviors, rather than simply carrying them out 'broadly'. Both of these implications may be especially important for the practice of sales because previous academic research informing salespeople about the effectiveness of specific relational activities has widely ignored the particular selling situation (e.g.,

reorders versus new products) and the impact of the product offering (e.g., see Ahearne, Jelinek, & Jones, 2007; Hansen & Riggle, 2009).

For many years now it has been suggested in sales-oriented textbooks (e.g., Jobber & Lancaster, 2009; Johnston & Marshall, 2005) as well as scholarly sales studies (e.g., Moncrief & Marshall, 2005) that salespeople need to engage in relationship-building activities in order to nurture relationships with customers and achieve improved selling performance. Resulting from this theoretical development in the literature, sales academics have started to examine specific relational activities, which can be ambiguous at times (Ahearne, Jelinek, & Jones, 2007), and their isolated positive impact on various relational and performance outcomes (see Chapter 2 for more details). Findings regarding the positive link between relationship-building behaviors and preferable seller outcomes have typically led scholars to advise sales practitioners that carrying out relational activities should be encouraged (e.g., Bradford, Crant, & Phillips, 2009; Geiger & Turley, 2005). However, relationship-building has not always proven to be successful (e.g., see Cram, 1994), and scholars have made attempts to identify appropriate strategies to improve the outcomes resulting from its application in practice. For example, advice has been given to sales managers and salespeople to direct relational efforts towards the most important customers (e.g., Bradford, Crant, & Phillips, 2009) and especially those, who are receptive to such efforts (see Palmatier et al., 2008). Despite these attempts, however, previous suggestions to practitioners on the effectiveness of relationship-building activities have largely been made *in isolation*, neither considering the particular selling situation (e.g., new products), nor the influences of the actual components of the product offering on sales performance. The present study takes both of these issues into account, providing field salespeople who sell merchandise to retail ventures with some first evidence on how the relational efforts of consultation and helping behavior can increase the positive effect of specific elements of the product offering on retail buyers' new product assessments and selections. Intuitively, these findings appear to have great appeal to sales professionals because their customers are buying professionals who predominantly focus on product-related determinants, such as market demand for a product, when making new product purchasing decisions (e.g., see Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000); in fact, they are trained to do so (Kotler & Keller, 2006). Thus, the present study provides some evidence for salespeople on how some of their relational efforts may improve the likelihood of selling new retail merchandise in consideration of key components of the product offering.

Furthermore, the implications of the present study are also a lot more *specific* than some of the suggestions provided to sales professionals on relationship-building behaviors in previous work. In particular, it is explicitly emphasized again that the findings inform field salespeople about the buying behavior of retail buyers and hence, are directly applicable to salespeople selling to retail operations, rather than industrial ventures. Since “an understanding of the nature of purchasing processes in a retail context has been much slower to develop” (Bowler et al., 2011, p.8), the managerial implications may be especially welcomed. As a result, the findings appear to provide more focus in aiding salespeople who do sell merchandise to retail businesses to better allocate their relational efforts, including the time, attention, and other resources spent on performing them. For example, the present findings imply that field salespeople’s higher levels of consultation can enhance (in fact, ‘activate’) the positive influence of the marketing support (offered for a new product) on buyers’ purchasing decision. In a similar vein, higher levels of salespeople’s helping behavior increases the positive impact of estimated gross margin on buyers’ new product acceptance. Both of these findings show how the salesperson can add value to the selling process by performing relational activities, which influence retail buyers’ new product assessments and selection decisions. Specifically, it highlights the salespersons’ role as (a) relational advisor to the retailer on marketing support issues and (b) relational assistant to the retailer in order to maximize returns from scarce shelf space (cf. Kaufman, Jayachandran, & Rose, 2006). That said, the present study also suggests that salespeople should carry out the relational activities of consultation and helping behavior with some caution as they do not appear to be worth the effort for the selling of every new product.⁶ Based on the findings from this work, these relational behaviors did not influence buyers’ new product purchasing decisions when the components of the product offering were average (i.e. at a mean level). In other words, it appears that retail buyers cannot be easily induced to buy a product that is perceived as ‘average’ simply by carrying out a high level of consultation or helping behavior. This is an important implication for sales professionals because it accredits that not only their behaviors, but also the product offering is vital to the retail buyer.⁷ Unfortunately, the latter is too often ignored in academic advice on relational activities provided to sales practitioners.

⁶ It was also previously discussed that in terms of buyers’ expected customer demand for a new product, higher salesperson consultation had a negative impact on the positive relationship between expected customer demand and new product acceptance.

⁷ In fact, in Chapter 7 it was shown that the simple influences of expected customer demand and estimated gross margin, as well as the ‘control’ effect of product importance, were significant. These findings support previous scholarly work on key product-related determinants of retail buyers’ new product purchasing decisions (e.g., Rao & McLaughlin, 1989).

8.3.2 Recruitment, Training, and Guidance of Field Salespeople

The present research is specific enough to put forward some advice regarding the recruitment, training (or coaching), and guidance of salespeople, which by its very nature is most applicable to those recruiting and managing sales forces. As a point of departure, hiring future salespeople from a list of applicants, who may or may not possess the necessary skill set to perform a specific sales job, can be a difficult task. This might be especially true when screening for behavior-based performance capabilities, such as the investigated relational behaviors in this study. Thus, it seems that there will always be a chance to recruit unsuitable candidates. However, in view of this possibility, sales researchers have suggested a number of recruitment instruments that appear to be applicable when screening for behavior-based competences. For example, Lee and Cadogan (2009, p.369) have suggested specific “recruitment tools” such as “role-plays” or “scenario designs”, which could also be applied by recruiters to evaluate candidates’ behaviors in new product selling situations. In order to provide a concrete illustration, role-plays may be a valuable way to assess applicants’ ability to carry out appropriate relationship-building activities, such as consultation behavior regarding an ‘imaginary’ or ‘actual’ new retail product. While observing the performed activities, recruiters could rate and profile candidates’ behaviors based on a list of desired actions. Another approach would be to provide applicants with specific ‘new product scenarios’ and instruct them to select a number of activities that they would carry out - based on the scenario provided.

While the above suggestions will certainly not solve all issues involved in screening applicants for behavior-based competences, such as the relational behaviors of salesperson consultation and salesperson helping behavior, they may improve the selection of future salespeople. In this regard, sales managers and human resources staff may wish to review and adapt their recruitment curricula for identifying behavior-based capabilities by incorporating specific new product selling situations.

Nevertheless, the hiring of appropriate sales personnel is only the first step towards attaining a successful sales force, the training (or coaching), guidance, as well as monitoring of field salespeople’s behavior is also important. This is particularly relevant in cases where sales managers (and their organizations) employ behavior-based control systems in order to monitor, evaluate, and improve field salespeople’s selling performance (e.g., see Anderson & Oliver, 1987; Cravens et al. 1993; Oliver & Anderson, 1994). Based on the present study’s findings, sales managers may be able to better direct their salespeople by training and coaching them on issues such as what and when to perform relational activities (e.g., consultation and helping behavior in new product

selling situations). Specifically, it can be suggested that it is worth considering the study's findings in the design of training and professional advancement programs because relationship-building skills are teachable (Ledingham, Kovac, & Simon, 2006). In fact, field salespeople cannot only be trained, but also motivated to carry out relationship-building activities such as 'professional information provision' (consultation) and 'assisting deeds or actions' (helping behavior), both geared at supporting the customer (i.e. the retailer) to attain its business objectives (cf. Agnihotri, Rapp, & Trainor, 2009; Bradford, Crant, & Phillips, 2009). Next to this, the present study suggests that sales managers should ensure that their salespeople possess an appropriate level of new product knowledge, not only important for the selling task *per se*, but also for salespeople to be able to identify for which new products their relational efforts may be most successful (see Section 8.3.1 for more details).

8.3.3 Recommendations for Supplier Organizations and their Field Salespeople

In conclusion, some recommendations are proposed to supplier firms of retail merchandise (e.g., manufacturers, distributors, etc.) and their field salespeople inquiring guidance on how to utilize the present study's findings most effectively.

From an overall company perspective, it appears to be important to highlight the role of the particular sales force control system employed to monitor, direct, and improve salespeople's operations. Two main approaches have been discussed in the academic literature; that is, behavior-based and outcome-based sales force control (e.g., Anderson & Oliver, 1987; Cravens et al. 1993; Oliver & Anderson, 1994). "In behavior-based control systems, salespeople are monitored more closely, subject to considerable direction, evaluated on an input basis by subjective and more complex measures, and rewarded with a higher proportion of fixed compensation. In outcome-based control systems, salespeople are monitored less frequently, offered little direction, evaluated on outcome measures by objective and simple methods, and rewarded with a higher proportion of incentive (variable) compensation" (Anderson & Oliver, 1987, p.85). The present study's findings indicate that companies (and sales managers in particular) may want to ensure that specific behavior-based controls are in operation in order to direct salespeople's relational efforts (such as consultation and helping behavior) in new product selling situations more effectively. Indeed, this may be of interest to a wide array of supplier organizations, including those that focus considerable attention towards objective outcome-based controls (e.g., the attainment of sales quotas), because few companies utilize sales force measures that are entirely outcome-based (cf. Cravens et

al., 1993).⁸ Since the sales force control system used by a company to monitor and evaluate salespeople's selling performance may encourage or discourage certain relational behaviors (e.g., the compensation scheme can be an important determinant), supplier organizations and their sales managers should review their current sales force controls. However, even though the present findings suggest that the relational activities of consultation and helping behavior can increase the likelihood of selling success for certain new products, results also showed that these relational efforts need to be carried out with caution. Specifically, these relational efforts appeared to carry most weight when specific components of the new product offering are reasonable strong, and hence, sales force controls should not 'blindly' promote salesperson relationship-building activities, but rather guide salespeople's focus towards those new products that 'deserve' the additional efforts. In line with previous research findings suggesting that companies and their salespeople need to focus their relationship-building activities more effectively (e.g., see Bradford, Crant, & Phillips, 2009; Palmatier et al., 2008), the present findings may help to further improve the use of some resources, such as time and money, directed towards relational activities.

From the standpoint of the salesperson, efforts focused on relationship-building with customers are often likely to be directly linked to the measures used by sales managers to evaluate selling performance. In cases where relational behaviors are encouraged by the employed sales force control system, salespeople should review what communication-based and action-based activities they actually perform to nurture customer relationships and affect sales performance. The insights gained from this work suggest that higher levels of consultation and helping behavior can increase the chances of new product success if the product offering is appropriately strong. More precisely, salesperson consultation can 'activate' the specific marketing support components offered to a retailer for a new item, and salesperson helping behavior seems to increase the impact of estimated gross margin on new product acceptance. Thus, salespeople should channel their consultation and helping behavior towards those new products that offer the respective incentive for the retail buyer to purchase a particular item. Furthermore, since buyers seem to be most receptive to relationship-building activities when the new product offering provides an incentive to buy, the present findings also suggest that retail buyers appear to favor building relationships with salespeople who offer less ambiguous products. This in turn implies that salespeople's consultation and helping behavior efforts appear to be rather unsuccessful when the buyer perceives the

⁸ To be sure, also few companies exist which employ a sales force control system that is entirely behavior-based (cf. Cravens et al., 1993).

components of the new product offering as average. Hence, other selling tactics for such items may be more appropriate because relational activities alone seem not to be appropriate to induce the retail buyer to purchase average performing items. In fact, salespeople may want to consider selling new products that are perceived as average to customers who are not the focus of relationship-building attempts. Finally, the insights gained from the current work also highlight the importance of specific product-related determinants of retail buyers' new product selection decisions when salespeople do *not* 'go out of their way' or 'go the extra mile' to provide high levels of consultation and helping behavior to customers. For example, results showed that a high estimated gross margin of a new item was a good predictor of retail buyers' new product acceptance decisions even when salespeople's consultation and helping behavior were at an average level. Although salesperson helping behavior increased the positive influence of estimated gross margin on buyers' new product acceptance, such previously stated findings also support the notion that product-related determinants of selling success remain central factors in retail buyers' new product purchase decisions.

In view of the above discussion, it is also clear that not all companies, sales managers, and field salespeople will deem the findings of the present study as important, especially if selling strategies (and/or tactics), company policies, and sales force control systems are explicitly focused on a transactional, rather than relational, selling approach. However, as the sales occupation increasingly requires many salespeople to build profitable customer relationships (e.g., see Moncrief & Marshall, 2005), the present findings appear to be relevant to a large number of organizations and field sales forces. In this regard, the present findings may aid salespeople to better allocate some of their relational activities in terms of *how* to behave and *when* to perform such behavior.

8.4 Study Limitations and Directions for Further Research

While the present study makes a number of unique contributions to existing research, it is also important to be aware of its limitations. The following addresses these limitations and provides directions for further research.

Although the study's data was collected from professional buyers reporting on actual new product purchasing decisions, the findings are specific to the retail industry and cannot be used for generalizations in other industries. Further testing will be required in order to extend the conceptual framework to other industry settings. For example, future research could investigate the interactive and relative role of relationship-building activities in industrial or service contexts, but also consumer markets seem feasible. In

addition, within the context of the retail industry there also appear to be further research opportunities. For example, since the present study has focused on non-perishable retail merchandise only, other studies may want to include or exclusively focus on perishable merchandise.

Next, the sampling frame for the present study was limited to retail professionals in the U.S.A. Although this enabled the testing of the conceptual framework in one clearly geographically delineated population of merchandise buyers, the generalizability of the findings are limited to sales of new products to U.S.-based retail operations. Results for other countries/cultures may differ. An avenue for further research may be to test the conceptual model or similar other interactive frameworks with data from other cultures. For example, future scholarly work could investigate the purchasing behavior of retail buyers in Asian markets, identifying whether the interactive and simple effects of salesperson relationship-building activities vary from Western countries.

Furthermore, the generated survey data used to test the conceptual framework of this study is cross-sectional in nature. While this ensured consistency with previous research works examining retail buyers' new product selections (e.g., Rao & McLaughlin, 1989; White, Troy, & Gerlich, 2000), it also restricts causal inferences. Further research may be able to employ a longitudinal approach, perhaps through cooperation with one retail chain. However, whereas this will enable the investigation of specific salesperson relationship-building activities over time, it also poses challenges regarding the comparability of new product offerings at different points in time.

Another point that is worth mentioning is the employment of the marketing support index in the present study (also see Chapter 6). While this index was created in order to successfully capture and incorporate all key marketing support determinants (as suggested in the pertinent extant literature) into this study's conceptual model, its use does not allow to draw any inferences regarding the interactive and simple influences of individual marketing support elements, such as media support or cooperative advertising funds. This limitation should be addressed by future studies.

The qualitative data collected in the context of the U.S. retail industry (Chapter 3) suggested two key relationship-building activities performed by field salespeople that have the potential to play an important role in retail buyers' new product assessments and selections. Nevertheless, an additional avenue for further research is the study of other relational activities carried out by salespeople, both in the retail industry as well as

other contexts. For example, Moncrief, Marshall and Lassk's (2006) sales position taxonomy could be utilized to test specific interactive effects of their identified relational activities with components of new product offerings in industrial sales settings. Since presently very little empirical knowledge exists regarding such influences, further contributions in this research area will be important.

Also of interest will be the distinction between different types of new products in future studies (cf. Gerlich, Walters, & Heil, 1994). For example, do salespeople's relational efforts interact differently with particular components of a new me-too product, line extension, and innovation? Of course, one important consideration in this regard would be the generation of sub-samples (for each type of new product) that are of appropriate size.

In addition, future scholarly works may direct their attention towards examining the present conceptual framework (or similar other interaction models) for different types of field salespeople. Examples include such as manufacturer-employed, distributor-employed, or independent sales reps (also see Chapter 6). In this regard, it would also surely be interesting to identify if sales force compensation (e.g., high fixed portion of compensation versus high variable portion of compensation) encourages or discourages certain relational behaviors. These and other control variables may be worth exploration in future studies.

Further research may also test the interactive and simple effects of salesperson relationship-building activities in group purchasing situations, such as purchasing processes of buying committees. The respective influences may differ from the obtained results in the present study.

Finally, even though the present study concentrates on retail buyers' new product acceptance decisions, future research extending the current theoretical framework by examining the effects of salespeople's relational activities and other determinants in product delisting decisions also seems useful. Such investigations may be especially interesting in situations in which retailers' new product acceptance and deletion tasks are interrelated (also see Rao & McLaughlin, 1989).

In summary, this study offers some first insights into the interactive and relative (here, simple) influences of specific salesperson relationship-building activities and product-focused variables on retail buyers' new product selection decisions. In view of these

contributions to extant literature, the present Chapter has discussed important theoretical and managerial implications resulting from this work. Hence, it has been demonstrated that the present research considerably contributes to the advancement of marketing theory *and* marketing practice (especially, the sales profession). However, although some particular interactive and simple influences have been supported by the investigated logistic regression models, it is also clear that this study represents only a first step towards a better understanding of such effects. Further research efforts should be undertaken in order to gain deeper insights into how specific salesperson relationship-building activities may enhance (i.e. positively modify) new product offerings, leading to an increased likelihood of new product selling success. In light of this, a number of directions for future inquiry have been proposed. The author of the present study hopes that the findings and suggestions resulting from this research provide an impetus for further investigations in this area.

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Appendices

Appendix 1 Research Materials Related to the Quantitative Data Collection

Appendix 1.1 Employed Scale Items

1.1.1 Product-Focused Variables

1.1.1.1 Product Features: Product Quality (adapted from De Wulf, Odekerken-Schröder, & Van Kenhove's, 2003; Gaski & Etzel, 1986)

Relative to other proposed new products in this category, ...

1. the quality of this product meets my expectations.
2. I am satisfied with the quality of this product.
3. the quality of this product is appropriate for its purpose.

1.1.1.2 Product Features: Product Price (adapted from De Wulf, Odekerken-Schröder, & Van Kenhove's, 2003; Dodds, Monroe, & Grewal, 1991)

Relative to other proposed new products in this category, ...

1. this product can be considered as favorably priced.
2. the price of this product is acceptable.
3. the price of this product can be regarded as competitive.

1.1.1.3 Market Demand: Expected Customer Demand (adapted from Wieseke, Homburg, & Lee, 2008)

1. I believe the potential customer demand for this product is strong.
2. I see a market for this product.
3. For this product I see high customer demand.

1.1.1.4 Marketing Strategy Characteristics: Financial (Kaufman, Jayachandran, & Rose, 2006)

This product relative to other proposed new products in this category has ...

1. a high estimated gross margin (for your organization).

1.1.1.5 Marketing Strategy Characteristics: Marketing Support (Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989)

This product relative to other proposed new products in this category has ...

1. high planned media support (e.g., TV, radio, etc; not including cooperative advertising).
2. high planned couponing.
3. high planned product sampling/demonstrations.

4. strong introductory allowances.
5. strong cooperative advertising funds.
6. a high slotting fee.

1.1.2 Salesperson-Specific Activities

1.1.2.1 Salesperson Relationship-Building Activities: Salesperson Consultation (adapted from Agnihotri, Rapp, & Trainor, 2009)

1. This particular salesperson frequently provides me with new and useful information.
2. This particular salesperson tailors her/his product presentations to fit my needs.
3. This particular salesperson always presents information to me in a clear and concise manner.
4. When selling to me, this particular salesperson frequently makes objective comparisons between products.
5. When selling to me, this particular salesperson acknowledges both the strengths and weaknesses of her/his products.
6. When selling to me, this particular salesperson frequently uses market-related information to support her/his claims.

1.1.2.2 Salesperson Relationship-Building Activities: Salesperson Helping Behavior

(adapted from Bagozzi, Verbeke, & Gavino, 2003; Bradford, Crant, & Phillips, 2009; Van Dyne & Le Pine, 1998)

1. This particular salesperson does things voluntarily for my company.
2. This particular salesperson assists others in my company with their work for the benefit of my company.
3. This particular salesperson gets involved in extra work tasks to benefit my company.
4. This particular salesperson volunteers to attend functions that help my company.
5. This particular salesperson helps me and others in my company with our work responsibilities.
6. This particular salesperson helps me and colleagues with heavy workloads.
7. This particular salesperson willingly gives of her/his time to help me and colleagues around me.
8. This particular salesperson is always willing to lend a helping hand to me and colleagues.

1.1.3 Buyer-Specific Variable

1.1.3.1 Buyer Mediator: Buyer Trust in Salesperson (Palmatier et al., 2008; also see De Wulf, Odekerken-Schröder, & Iacobucci, 2001)

1. I have trust in this salesperson.
2. I have confidence in this salesperson's integrity and reliability.
3. This salesperson is trustworthy.

1.1.4 Buying Decision

1.1.4.1 New Product Buying Decision: Accept/Reject Decision (e.g., Kaufman, Jayachandran, & Rose, 2006; Rao & McLaughlin, 1989)

1. Did you purchase this new product? (yes/no)

1.1.5 Controls

1.1.5.1 Product: Product Dependence (Palmatier et al., 2008)

1. There are many other suppliers who could provide me with a similar product. (r)
2. It would be expensive in time and costs to switch to a different supplier for this product.
3. It would be difficult for me to buy this product from a different supplier.

1.1.5.2 Product: Product Importance (based on Cannon & Homburg, 2001)

Compared to other purchases you make in the same product category, this product is:

1. Important - Unimportant (r)
2. Nonessential - Essential
3. High priority - Low priority (r)
4. Insignificant - Significant

1.1.5.3 Retailer: Customer Firm Size (e.g., see Cadogan et al., 2005)

1. How many people are employed by your company?

1.1.5.4 Relationship: Buyer-Salesperson Relationship Duration (e.g., Palmatier et al., 2008)

1. About how long have you known this salesperson? (years/months)

1.1.5.5 Relationship: Buyer Relationship Orientation (Palmatier et al., 2008)

1. Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success.
2. A close relationship with this salesperson is important to my success.
3. A strong relationship with this salesperson would be very helpful in buying her/his products.
4. I **don't** need a close relationship with this salesperson to successfully buy her/his products. **(r)**
5. I believe that a strong relationship with this salesperson is needed to successfully buy her/his products.

Note: Reverse coded items are indicated by a bold **(r)**.

Appendix 1.2 Preliminary Questionnaire

Notes: Questionnaire shown does not represent its actual size. Original questionnaire size is A5 (booklet format).

**PURCHASE DECISIONS
FOR NEW PRODUCTS**

QUESTIONNAIRE FOR CORPORATE BUYERS

Steffen Fixson

Doctoral Candidate

and

Prof. Nick Lee

Professor of Marketing & Organizational Research

Aston Business School: Marketing Group
Aston Street
Aston Triangle
Birmingham B4 7ET
UK



Aston University
Birmingham

ASTON BUSINESS SCHOOL

Code: _____

SECTION 1: YOUR PURCHASE DECISION AND INTENTIONS

1.1 Please report on the first new product presented to you by your salesperson. A new product is one which your organization has not carried before. Indicate whether you have purchased this new product. Please remember that all data is confidential.

Your purchase decision.

Did you purchase this new product? (please tick) NO YES (if yes, please go to section 2)

1.2 ONLY if you did not purchase this new product, please use the following scale to indicate the likelihood of you purchasing this new product from this salesperson and supplier firm in the future. Otherwise, please go to section 2.

Future purchase intentions.

Please indicate the probability that you will buy this specific new product from this salesperson and supplier in the future: (please circle)

Unlikely	1	2	3	4	5	6	7	Likely
Very improbable	1	2	3	4	5	6	7	Very probable
Impossible	1	2	3	4	5	6	7	Possible
No chance	1	2	3	4	5	6	7	Certain

SECTION 2: YOUR SUPPLIER FIRM'S OFFERING

2.1 The following statements refer to your supplier's offering regarding this new product. Please use the subsequent scale to indicate how closely you think these statements describe your supplier's offering. (place the appropriate number in the relevant box)

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>	<input type="text" value="7"/>	

Product quality of this new product.

Relative to other proposed new products in this category, ...

- the quality of this product meets my expectations.....
- I am satisfied with the quality of this product.....
- the quality of this product is appropriate for its purpose.....

Wholesale price of this new product.

Relative to other proposed new products in this category, ...

- this product can be considered as favorably priced.....
- the price of this product is acceptable.....
- the price of this product can be regarded as competitive.....

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	

Marketing of this new product.

This product relative to other proposed new products in this category has ...

high planned media support (not including cooperative advertising).....	<input type="checkbox"/>
high planned couponing.....	<input type="checkbox"/>
high planned product sampling/demonstrations.....	<input type="checkbox"/>
strong introductory allowances.....	<input type="checkbox"/>
strong cooperative advertising funds.....	<input type="checkbox"/>
a high estimated gross margin.....	<input type="checkbox"/>
a high slotting fee.....	<input type="checkbox"/>

Your value perceptions of this new product.

This product is good value for money.....	<input type="checkbox"/>
At the price shown this product is economical.....	<input type="checkbox"/>
This product is a good buy.....	<input type="checkbox"/>

2.2 *The following statements also relate to this new product. Please use the subsequent scale to indicate how closely you think these statements describe your point of view (place the appropriate number in the relevant box).*

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	

Expected demand for this new product.

I believe the potential customer demand for this product is strong.....	<input type="checkbox"/>
I see a market for this product.....	<input type="checkbox"/>
For this product I see high customer demand.....	<input type="checkbox"/>

Dependence on this new product.

There are many other suppliers who could provide me with a similar product.....	<input type="checkbox"/>
It would be expensive in time and costs to switch to a different supplier for this product.....	<input type="checkbox"/>
It would be difficult for me to buy this product from a different supplier.....	<input type="checkbox"/>

2.3 *Please complete the subsequent statement regarding the product category of this new product.*

Product category.

This new product belongs to the product category of _____.

2.4 The subsequent statements refer to the importance of this new product. Please use the subsequent scales to indicate how closely you think each statement describes the importance of this new product for your organization (please circle the appropriate number on each scale).

Importance of this new product.

Compared to other purchases you make in the same product category, this product is: (please circle)

Important	1	2	3	4	5	6	7	Unimportant
Nonessential	1	2	3	4	5	6	7	Essential
High priority	1	2	3	4	5	6	7	Low priority
Insignificant	1	2	3	4	5	6	7	Significant

2.5 The following question asks you about your interaction history with this supplier firm. Remember all data is confidential.

Your interaction history with this supplier firm.

How long have you had business dealings with this supplier firm in your career? ____ years and ____ months

SECTION 3: YOUR SALESPERSON'S ACTIVITIES

3. The following statements refer to your salesperson's activities carried out when usually dealing with you or your organization. Please use the subsequent scale to indicate how closely you think each statement describes your salesperson's activities (place the appropriate number in the relevant box).

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	7

Salesperson taking actions for you & your organization.

- This particular salesperson does things voluntarily for my company.....
- This particular salesperson assists others in my company with their work for the benefit of my company.....
- This particular salesperson gets involved in extra work tasks to benefit my company.....
- This particular salesperson volunteers to attend functions that help my company.....
- This particular salesperson helps me and others in my company with our work responsibilities.....
- This particular salesperson helps me and colleagues with heavy workloads.....
- This particular salesperson willingly gives of her/his time to help me and colleagues around me.....
- This particular salesperson is always willing to lend a helping hand to me and colleagues.....

Salesperson consulting.

- This particular salesperson frequently provides me with new and useful information.....
- This particular salesperson tailors her/his product presentations to fit my needs.....
- This particular salesperson always presents information to me in a clear and concise manner.....
- When selling to me, this particular salesperson frequently makes objective comparisons between products.....

Strongly Disagree		Neither Agree nor Disagree		Strongly Agree
1	2	3	4	5
6				7

When selling to me, this particular salesperson acknowledges both the strengths and weaknesses of her/his products.....

When selling to me, this particular salesperson frequently uses market-related information to support her/his claims.....

This particular salesperson uses company brochures to emphasize points.....

This particular salesperson regularly informs me about special offers.....

When selling to me, this particular salesperson frequently presents me with information that supports my purchasing decisions.....

When selling to me, this particular salesperson regularly provides me with guiding advice that facilitates my purchasing decisions.....

SECTION 4: YOU AND YOUR SALESPERSON

4.1 Please use the subsequent scale to indicate the extent to which the statements below describe how you feel (place the appropriate number in the relevant box).

Strongly Disagree		Neither Agree nor Disagree		Strongly Agree
1	2	3	4	5
6				7

Your trust in this salesperson.

I have trust in this salesperson.....

I have confidence in this salesperson's integrity and reliability.....

This salesperson is trustworthy.....

Your commitment to this salesperson.

The relationship that I have with this salesperson ...

is something I am very committed to.....

is very important to me.....

is something I intend to maintain for the long-term.....

is something I really want to maintain.....

deserves my maximum effort to maintain.....

Your satisfaction with this salesperson.

I am very satisfied with this salesperson.....

I am very pleased with this salesperson.....

I would highly recommend this salesperson to others.....

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	

You & your relationship with this salesperson.

Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success.....

A close relationship with this salesperson is important to my success.....

A strong relationship with this salesperson would be very helpful in buying her/his products.....

I **don't** need a close relationship with this salesperson to successfully buy her/his products.....

I believe that a strong relationship with this salesperson is needed to successfully buy her/his products.....

4.2 The following questions ask you a few more details about you and your salesperson. Remember all data is confidential.

Salesperson characteristics.

Is this salesperson? (please tick) male female

Is this salesperson? (please tick)

an independent sales rep (i.e. working on a commission basis for a rep firm/multiple manufacturers) employed by one specific manufacturer Other (please specify) _____

employed by one specific distributor _____

Your interaction history with this salesperson.

About how long have you known this salesperson? ____ years and ____ months

How much of your time interfacing with this supplying firm is with this salesperson? ____ %

Your purchasing with this salesperson.

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree		
	1	2	3	4	5	6	7

If this salesperson stopped representing this supplier firm, I would likely still buy from this salesperson.

Of all the potential products you could purchase from this salesperson, approximately what % do you currently buy from this salesperson? ____ %

Of all the products you presently purchase from this salesperson, approximately what % does the new product account for? ____ %

Of all the products presently carried in the product category of this new product, approximately what % do you currently buy from this salesperson? ____ %

Sales aggressiveness of this salesperson.

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree		
	1	2	3	4	5	6	7

When we interact, this salesperson is concerned only with presenting the product, selling the company's products, and taking orders.....

This salesperson is aggressive.....

This salesperson works intensely to make me buy the supplier's products, even when I say that we have no need.....

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!
YOUR CONTRIBUTION IS GREATLY APPRECIATED!!!

Please return all completed questionnaires to:





Aston Business School: Marketing Group
Aston Street
Aston Triangle
Birmingham B4 7ET
UK

Notes: Questionnaire part shown does not represent its actual size. Original questionnaire part size is A4.

PURCHASE DECISIONS FOR NEW PRODUCTS
QUESTIONNAIRE FOR CORPORATE BUYERS


Aston University
Birmingham
Aston Business School: Marketing Group
Aston Street, Aston Triangle
Birmingham B4 7ET, UK

Steffen Fixson
Doctoral Candidate
and
Prof. Nick Lee
Professor of Marketing & Organizational Research

YOU AND YOUR WORK EXPERIENCE

*The following few questions ask you details about you and your work experience. It is important that you answer them honestly, **remember all data is confidential.***

How old are you? _____ Years

Are you? _____ Male _____ Female
(please tick)

How long have you worked in the retail industry?

_____ Years

How long have you worked in corporate buying
throughout your career?

_____ Years

How long have you worked for this organization?

_____ Years

How long have you worked in your current job as a
buyer?

_____ Years

What is your highest educational
qualification? (please tick)

- _____ Postgraduate degree
- _____ University degree
- _____ Some university courses
- _____ College degree
- _____ Some college courses
- _____ Professional qualifications
- _____ Completed high school
- _____ Partial high school
- _____ Other

THANK YOU FOR COMPLETING THIS PART OF THE QUESTIONNAIRE!

Code: _____

Notes: Questionnaire part shown does not represent its actual size. Original questionnaire part size is A4.

PURCHASE DECISIONS FOR NEW PRODUCTS
QUESTIONNAIRE FOR CORPORATE BUYERS


Aston University
Birmingham
Aston Business School: Marketing Group
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Steffen Fixson
Doctoral Candidate
and
Prof. Nick Lee
Professor of Marketing & Organizational Research

YOUR FIRM

*The following few questions ask you details about your firm. It is important that you answer them honestly, **remember all data is confidential.***

What were your company's approximate annual sales for the past year?.....	\$ _____
How many people are employed by your company?.....	_____ <i>people</i>
How many people fulfill corporate buying functions in your organization?.....	_____ <i>people</i>

THANK YOU FOR COMPLETING THIS PART OF THE QUESTIONNAIRE!

Code: _____

Appendix 1.3 Instructions for Completing Questionnaires

Notes: Instruction letter shown does not represent its actual size. Original instruction letter size is A4.

PURCHASE DECISIONS FOR NEW PRODUCTS QUESTIONNAIRE FOR CORPORATE BUYERS


Aston University
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Aston Business School: Marketing Group
Aston Street, Aston Triangle
Birmingham B4 7ET, UK

Steffen Fixson
Doctoral Candidate
and
Prof. Nick Lee
Professor of Marketing & Organizational Research

INSTRUCTIONS FOR COMPLETING QUESTIONNAIRES

Please read before filling out the first questionnaire!

GENERAL INSTRUCTIONS

The questionnaire asks you to report on **an actual purchase decision for a new product**. A new product is one which your organization has not carried before (e.g., a new item, new flavor or new size of an existing item, etc). Please complete questionnaires **after** new product presentations (i.e. after buyer-salesperson meetings) for **the first new product that was offered to you**. Each participating corporate buyer can complete multiple questionnaires, **but each new product, salesperson, and supplier firm can only be evaluated a maximum of one time** during the data collection period (i.e. one buyer-salesperson meeting can be used to complete one questionnaire).

The questionnaire is rather short. *Please remember all data is confidential. Neither you, nor your firm will be identified by name.*

'YOU AND YOUR WORK EXPERIENCE' & 'YOUR FIRM' PAGES (2 separate sheets in your package)

Before filling out the first questionnaire, please complete the 'YOU AND YOUR WORK EXPERIENCE' and 'YOUR FIRM' pages.

COMPLETING QUESTIONNAIRES

Each questionnaire consists of **4 sections**. Please always complete **all** of them.

Section 1: Asks you to report on "Your Purchase Decision and Intentions"

Section 2: Asks you to evaluate "Your Supplier Firm's Offering"

Section 3: Asks you to evaluate "Your Salesperson's Activities"

Section 4: Asks you to evaluate "Your Buying History/Relationship with your Salesperson"

If possible, please write the name of the first new product to be evaluated, the first name of the salesperson, and the name of the supplier firm **on the first page** of the questionnaire to help you to complete it. This is only to allow us to keep accurate records, not to identify any individual or company. **Please** follow any instructions provided on the questionnaire. As a general guidance, you are **mostly** asked to respond to questions/statements by either **ticking** boxes, **circling** numbers on scales, or **placing** numbers in boxes - besides a few open questions.

Visual examples:

Ticking boxes:

Circling numbers: ⑤

Placing numbers in boxes: 6

Open question: _____ (write your answer on the provided line)

Product/salesperson/supplier name: _____ (write each name on the provided line)

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY!

IT IS GREATLY APPRECIATED!

Appendix 1.4 Final Questionnaire (Version 1 displayed)

Notes: For version 2, *only* the item sequence was different. Questionnaire shown does not represent its actual size. Original questionnaire size is A5 (booklet format).

PURCHASE DECISIONS FOR NEW PRODUCTS

QUESTIONNAIRE FOR CORPORATE BUYERS

Steffen Fixson

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Birmingham B4 7ET
UK



Aston University
Birmingham

ASTON BUSINESS SCHOOL

Please fill in, if possible:

Name of first new product: _____

First name of salesperson: _____

Name of supplier firm: _____

Code: _____

START HERE: INTRODUCTION TO THE QUESTIONNAIRE

This questionnaire asks you to report on **your purchase decision for a new product**. A new product is one which your organization has not carried before (e.g., a new item, new flavor or new size of an existing item, etc). Relating to your purchase decision, you are asked to provide details on the supplier firm's offering and the salesperson who offered you this new product. Please begin with **section 1**.

SECTION 1: YOUR PURCHASE DECISION AND INTENTIONS

1.1 Please report on the first new product presented to you by your salesperson. Bear in mind, a new product is one which your organization has not carried before. Indicate whether you have purchased this new product. Please remember that all data is confidential.

Your purchase decision.

Did you purchase this new product? (please tick) NO YES (if yes, please go to section 2) ←

1.2 ONLY if you did not purchase this new product, please use the following scale to indicate the likelihood of you purchasing this new product from this salesperson and supplier firm in the future.

Future purchase intentions.

Please indicate the probability that you will buy this specific new product from this salesperson and supplier in the future: (please circle)

Unlikely	1	2	3	4	5	6	7	Likely
Very unprobable	1	2	3	4	5	6	7	Very probable
Impossible	1	2	3	4	5	6	7	Possible
No chance	1	2	3	4	5	6	7	Certain

SECTION 2: YOUR SUPPLIER FIRM'S OFFERING

2.1 The following statements refer to your supplier's offering regarding this new product. Please use the subsequent scale to indicate how closely you think these statements describe your supplier's offering. (place the appropriate number in the relevant box)

Strongly Disagree	Neither Agree nor Disagree	Strongly Agree
<input type="text" value="1"/>	<input type="text" value="4"/>	<input type="text" value="7"/>
<input type="text" value="2"/>	<input type="text" value="5"/>	<input type="text" value="6"/>
<input type="text" value="3"/>		

Product quality of this new product.

Relative to other proposed new products in this category, ...

- the quality of this product meets my expectations.....
- I am satisfied with the quality of this product.....
- the quality of this product is appropriate for its purpose.....

Wholesale price of this new product.

Relative to other proposed new products in this category, ...

- this product can be considered as favorably priced.....
- the price of this product is acceptable.....
- the price of this product can be regarded as competitive.....

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	

Marketing of this new product.

This product relative to other proposed new products in this category has ...

high planned media support (e.g., TV, radio, etc; not including cooperative advertising).....	<input type="checkbox"/>
high planned couponing.....	<input type="checkbox"/>
high planned product sampling/demonstrations.....	<input type="checkbox"/>
strong introductory allowances.....	<input type="checkbox"/>
strong cooperative advertising funds.....	<input type="checkbox"/>
a high estimated gross margin (for <u>your</u> organization).....	<input type="checkbox"/>
a high slotting fee.....	<input type="checkbox"/>

Your value perceptions of this new product.

This product is good value for money.....	<input type="checkbox"/>
At the price shown this product is economical.....	<input type="checkbox"/>
This product is a good buy.....	<input type="checkbox"/>

2.2 *The following statements also relate to this new product. Please use the subsequent scale to indicate how closely you think these statements describe your point of view (place the appropriate number in the relevant box).*

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	

Expected demand for this new product.

I believe the potential customer demand for this product is strong.....	<input type="checkbox"/>
I see a market for this product.....	<input type="checkbox"/>
For this product I see high customer demand.....	<input type="checkbox"/>

Dependence on this new product.

There are many other suppliers who could provide me with a similar product.....	<input type="checkbox"/>
It would be expensive in time and costs to switch to a different supplier for this product.....	<input type="checkbox"/>
It would be difficult for me to buy this product from a different supplier.....	<input type="checkbox"/>

2.3 *Please complete the subsequent statement regarding the product category of this new product.*

Product category.

What is the product category of this new product? _____ product category

2.4 The subsequent statements refer to the importance of this new product. Please use the subsequent scales to indicate how closely you think each statement describes the importance of this new product for your organization (please circle the appropriate number on each scale).

Importance of this new product.

Compared to other purchases you make in the same product category, this product is: (please circle)

Important	1	2	3	4	5	6	7	Unimportant
Nonessential	1	2	3	4	5	6	7	Essential
High priority	1	2	3	4	5	6	7	Low priority
Insignificant	1	2	3	4	5	6	7	Significant

2.5 The following question asks you about your interaction history with this supplier firm. Remember all data is confidential.

Your interaction history with this supplier firm.

How long have you had business dealings with this supplier firm in your career? ____ years and ____ months

SECTION 3: YOUR SALESPERSON'S ACTIVITIES

3. The following statements refer to your salesperson's activities carried out when usually dealing with you or your organization. Please use the subsequent scale to indicate how closely you think each statement describes your salesperson's activities (place the appropriate number in the relevant box).

Strongly Disagree				Neither Agree nor Disagree			Strongly Agree
1	2	3	4	5	6	7	

Salesperson taking voluntary actions for you & your organization.

- This particular salesperson does things voluntarily for my company.....
- This particular salesperson assists others in my company with their work for the benefit of my company.....
- This particular salesperson gets involved in extra work tasks to benefit my company.....
- This particular salesperson volunteers to attend functions that help my company.....
- This particular salesperson helps me and others in my company with our work responsibilities.....
- This particular salesperson helps me and colleagues with heavy workloads.....
- This particular salesperson willingly gives of her/his time to help me and colleagues around me.....
- This particular salesperson is always willing to lend a helping hand to me and colleagues.....

Salesperson consulting.

- This particular salesperson frequently provides me with new and useful information.....
- This particular salesperson tailors her/his product presentations to fit my needs.....
- This particular salesperson always presents information to me in a clear and concise manner.....
- When selling to me, this particular salesperson frequently makes objective comparisons between products.....

Strongly Disagree	2	3	Neither Agree nor Disagree	5	6	Strongly Agree
1			4			7

When selling to me, this particular salesperson acknowledges both the strengths and weaknesses of her/his products.....

When selling to me, this particular salesperson frequently uses market-related information to support her/his claims.....

This particular salesperson uses company brochures to emphasize points.....

This particular salesperson regularly informs me about special offers.....

When selling to me, this particular salesperson frequently presents me with information that supports my purchasing decisions.....

When selling to me, this particular salesperson regularly provides me with guiding advice that facilitates my purchasing decisions.....

SECTION 4: YOU AND YOUR SALESPERSON

4.1 Please use the subsequent scale to indicate the extent to which the statements below describe how you feel (place the appropriate number in the relevant box).

Strongly Disagree	2	3	Neither Agree nor Disagree	5	6	Strongly Agree
1			4			7

Your trust in this salesperson.

I have trust in this salesperson.....

I have confidence in this salesperson's integrity and reliability.....

This salesperson is trustworthy.....

Your commitment to this salesperson.

The relationship that I have with this salesperson ...

is something I am very committed to.....

is very important to me.....

is something I intend to maintain for the long-term.....

is something I really want to maintain.....

deserves my maximum effort to maintain.....

Your satisfaction with this salesperson.

I am very satisfied with this salesperson.....

I am very pleased with this salesperson.....

I would highly recommend this salesperson to others.....

Strongly Disagree		Neither Agree nor Disagree		Strongly Agree
1	2	3	4	5
6				7

You & your relationship with this salesperson.

Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success.....

A close relationship with this salesperson is important to my success.....

A strong relationship with this salesperson would be very helpful in buying her/his products.....

I **don't** need a close relationship with this salesperson to successfully buy her/his products.....

I believe that a strong relationship with this salesperson is needed to successfully buy her/his products.....

4.2 The following questions ask you a few more details about you and your salesperson. Remember all data is confidential.

Salesperson characteristics.

Is this salesperson? (please tick) male female

Is this salesperson? (please tick)

an independent sales rep (i.e. working on a commission basis for a rep firm/multiple manufacturers) employed by one specific manufacturer Other (please specify) _____

employed by one specific distributor _____

Your interaction history with this salesperson.

About how long have you known this salesperson? ___ years and ___ months

How much of your time interfacing with this supplying firm is with this salesperson? (please estimate) ___ %

Your purchasing with this salesperson.

If this salesperson stopped representing this supplier firm, I would likely still buy from this salesperson. (please tick)

Strongly Disagree	Neither Agree or Disagree			Strongly Agree
(1)	(2)	(3)	(4)	(5)
(6)				(7)

Of all the potential products you could purchase from this salesperson, approximately what % do you currently buy from this salesperson? (please estimate) ___ %

Of all the products presently carried in the product category of this new product, approximately what % do you currently buy from this salesperson? (please estimate) ___ %

If you purchased this new product **If not, go to the next section** ← → Of all the products you presently purchase from this salesperson, approximately what % does this new product account for? (please estimate) ___ %

Sales aggressiveness of this salesperson.

When we interact, this salesperson is concerned only with presenting the product, selling the company's products, and taking orders (please tick).....

Strongly Disagree	Neither Agree or Disagree			Strongly Agree
(1)	(2)	(3)	(4)	(5)
(6)				(7)

This salesperson is aggressive (please tick).....

(1)	(2)	(3)	(4)	(5)	(6)	(7)
-----	-----	-----	-----	-----	-----	-----

This salesperson works intensely to make me buy the supplier's products, even when I say that we have no need (please tick).....

(1)	(2)	(3)	(4)	(5)	(6)	(7)
-----	-----	-----	-----	-----	-----	-----

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!
YOUR CONTRIBUTION IS GREATLY APPRECIATED!!!

Please return all completed questionnaires to:





Aston Business School: Marketing Group
Aston Street
Aston Triangle
Birmingham B4 7ET
UK

Notes: Questionnaire part shown does not represent its actual size. Original questionnaire part size is A4.

PURCHASE DECISIONS FOR NEW PRODUCTS
QUESTIONNAIRE FOR CORPORATE BUYERS


Aston University
Birmingham
Aston Business School: Marketing Group
Aston Street, Aston Triangle
Birmingham B4 7ET, UK

Steffen Fixson
Doctoral Candidate
and
Prof. Nick Lee
Professor of Marketing & Organizational Research

YOU AND YOUR WORK EXPERIENCE

*The following few questions ask you details about you and your work experience. It is important that you answer them honestly, **remember all data is confidential.***

How old are you? _____ Years

Are you? _____ Male _____ Female
(please tick)

How long have you worked in the retail industry?

_____ Years

How long have you worked in corporate buying
throughout your career?

_____ Years

How long have you worked for this organization?

_____ Years

How long have you worked in your current job as a
buyer?

_____ Years

What is your **highest** educational
qualification? (please tick **highest**
only)

_____ Postgraduate degree

_____ University degree

_____ Some university courses

_____ College degree

_____ Some college courses

_____ Professional qualifications

_____ Completed high school

_____ Partial high school

_____ Other

THANK YOU FOR COMPLETING THIS PART OF THE QUESTIONNAIRE!

Code: _____

Notes: Questionnaire part shown does not represent its actual size. Original questionnaire part size is A4.

PURCHASE DECISIONS FOR NEW PRODUCTS
QUESTIONNAIRE FOR CORPORATE BUYERS


Aston University
Birmingham
Aston Business School: Marketing Group
Aston Street, Aston Triangle
Birmingham B4 7ET, UK

Steffen Fixson
Doctoral Candidate
and
Prof. Nick Lee
Professor of Marketing & Organizational Research

YOUR FIRM

*The following few questions ask you details about your firm. It is important that you answer them honestly to the best of your knowledge. **Remember all data is confidential.***

What were your company's approximate annual sales for the past year?.....	\$ _____
How many people are employed by your company?.....	_____ <i>people</i>
How many people fulfill corporate buying functions in your organization?.....	_____ <i>people</i>

THANK YOU FOR COMPLETING THIS PART OF THE QUESTIONNAIRE!

Code: _____

Appendix 1.5 Cover Letter

Notes: Cover letter shown does not represent its actual size. Original cover letter size is A4. Association's name and quote are blackened.



Address Line 1
Address Line 2
Address Line 3

Date (Weekday, dd/Month/yyyy)

PARTICIPATION IN RESEARCH PROJECT - [REDACTED] MEMBERS

Dear **First and Last Name**,

My name is Steffen Fixson and I am a researcher at Aston Business School in Birmingham, UK. I am currently conducting my doctoral research project and would be very appreciative if you could assist me by agreeing to participate in my study.

The research investigates the relative influence of product-focused variables and salesperson relationship-building activities on retail buyers' purchase behavior. As the selection of new products can involve a high level of uncertainty for buyers, the present study is concerned with retail buyers' *actual* purchase decisions of *new products*. With this in mind, I am kindly asking you to complete a short questionnaire after a new product presentation, reporting on (a) a new product purchase decision (bought – yes/no) and (b) your evaluation of this new product as well as the salesperson who offered the product. The prepaid return envelope includes three questionnaires, giving you the *option* to report on more than one new product purchase decision (if possible). A detailed instruction letter is included, detailing and helping you to complete one or more questionnaire(s).

"[REDACTED]"

Importantly, I would like to assure you that all the data collected will remain confidential, and no person or your firm will be identified by name. As your contribution is highly appreciated, participants will have the chance to win a voucher to be redeemed at a chosen online retailer: First prize \$100, second prize \$50, and third prize \$25. Codes have been assigned to each questionnaire *only* for the purpose of identifying the winners of the prize draw.

I am aware of the fact that you have many other demands on your time, but if you could help me out I would be most grateful. Your assistance will make a major contribution to the completion of this study. If needed, I would be most pleased to provide you with any additional information.

Thank you very much for your time!

Yours sincerely,



Steffen Fixson
Researcher

E-mail: fixsons@aston.ac.uk
Tel: +44 (0)121-204-5241

Appendix 1.6 Reminder/Thank You Postcard

Notes: Adapted from Dillman (2007), Figure 4.4, p.180. Postcard shown does not represent its actual size. Original postcard size is A6. Association's name is blackened.



Dear **First and Last Name**,

Recently a survey for corporate buyers seeking your evaluation of an actual purchase decision for a new retail product was mailed to you. Your name was drawn randomly from [redacted]'s member directory.

If you have already completed and returned the questionnaire(s) to us, please accept our sincere thanks. If not, please do so soon. We are very grateful for your help!

Sincerely,

A handwritten signature in black ink that reads "Steffen Fixson".

Steffen Fixson
Researcher
Aston University
Aston Business School
Marketing Group
Birmingham, B4 7ET
U.K.

Address Line 1
Address Line 2
Address Line 3

U.S.A.

Appendix 1.7 First 'Special Contact' Letter

Notes: Adapted from Dillman (2007), Figure 4.6, p.185. Letter shown does not represent its actual size. Original letter size is A4. Association's name is blackened.



Address Line 1
Address Line 2
Address Line 3

Date (Weekday, dd/Month, yyyy)

RESEARCH PROJECT - [REDACTED] MEMBERS: CAN YOU HELP, PLEASE?

Dear First and Last Name,

During the last four to five weeks, we have sent you two mailings about an important research study we are conducting at Aston Business School (UK) with associates of the [REDACTED].

The research's purpose is to understand the relative influence of product-focused variables and salesperson relationship-building activities on retail buyers' purchase behavior. As the selection of new products can involve a high level of uncertainty for buyers, the present study is concerned with retail buyers' *actual* purchase decisions of *new products*. Therefore, the results may not only be beneficial for research, but also for management of US retailers.

The study is drawing to a close and we would like to ask you very kindly to still participate. As your experiences and evaluations may be different from people who have already responded, hearing from you would assure that the survey results are as accurate as possible.

We also want to assure you that your response will remain anonymous and confidential, if you decide to reply to our survey. In case you require a second questionnaire package for participation, please do not hesitate to ask for one via email (fixsons@aston.ac.uk) – we would be happy to send it.

Finally, we appreciate your willingness to consider our request as we conclude this effort to better understand the buying behavior of retail purchasing professionals in the US market. Thank you very much.

Yours sincerely,

Steffen Fixson
Researcher

E-mail: fixsons@aston.ac.uk
Tel: +44 (0)121-204-5241

Appendix 1.8 Second 'Special Contact' Letter

Notes: Partially adapted from Dillman (2007), Figure 4.6, p.185. Letter shown does not represent its actual size. Original letter size is A4. Association's name is blackened.



Address Line 1
Address Line 2
Address Line 3

Date (Weekday, dd/Month/yyyy)

RESEARCH PROJECT - [REDACTED] CONTACTS: CAN YOU HELP VIA E-MAIL?

Dear **First and Last Name**,

Over the last two months, we have sent you a survey package and two reminders for an important research study we are conducting at Aston Business School (UK) with associates of the [REDACTED].

The research's purpose is to understand the relative influence of product-focused variables and specific salesperson activities on retail buyers' purchase behavior. As the selection of new products can involve a high level of uncertainty for buyers, the present study is concerned with retail buyers' *actual* purchase decisions of *new products*. Therefore, the results are going to have major benefits to US retailers. Of course, they are also vital to the completion of my doctorate.

If you have already completed and returned the questionnaire(s) to us, please accept our sincere thanks. If not, please may I ask that you do so soon. **However, we have been made aware that a number of our contacts have lost or misplaced the survey package. Because of this, we have also set up a system so that you can now also participate via e-mail!**

Simply send a short e-mail to fixsons@aston.ac.uk, and you will receive a short response with the relevant attachments (.doc files), which you can conveniently fill in on your computer screen, and e-mail back to me here in the UK.

The completion of the survey should only take a few minutes and we would like to ask you very kindly to still participate. Your own personal views are *vital* because your professional experiences and viewpoints may be different from people who have already responded. Therefore, hearing from you is crucial for the accuracy of the results. Please be assured that your response will in all circumstances remain anonymous and confidential. Furthermore, please be reminded that participants will have the chance to win a voucher to be redeemed at a chosen online retailer.

Finally, we genuinely appreciate your willingness to consider our request as we attempt to better understand the buying behavior of retail purchasing professionals in the US market. Thank you very much.

Yours sincerely,



Steffen Fixson
Researcher

E-mail: fixsons@aston.ac.uk
Tel: +44 (0)121-204-5241

Appendix 1.9 Final Questionnaire (Web-Based Version)

Notes: Version 1 is displayed. For version 2, *only* the item sequence was different.

Screenshots shown do not represent their actual size. Service provider name has been removed.

Page 1:

Aston University
Birmingham

Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

WELCOME TO THE SURVEY!

Steffen Fixson (PhD Candidate) & Prof. Nick Lee (Professor of Marketing & Organizational Research)

Aston Business School, Marketing Group, Birmingham B4 7ET, U.K.

THANK YOU for your time and your interest in supporting us to advance the IMPORTANT FIELD of RETAIL BUYING!

Please click the 'NEXT' button to start! Remember all data is confidential.

9%

Next

Page 2:

Aston University
Birmingham

Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

STARTING QUESTIONS

Do you work in the USA?

Yes
 No

Do you work for a store-based retailer (i.e. NOT an online '.com' retailer)?

Yes
 No

Do you work in retail BUYING?


Yes
 No

Do you make your retail buying decisions independently (i.e. NOT made by a buying committee)?

Yes
 No

18%

Page 3:

 Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

BRIEF INTRODUCTION & INSTRUCTIONS

This survey asks you to report on an actual PURCHASE DECISION FOR A NEW PRODUCT. A new product is one which your organization has not carried before (e.g., a new item, new flavor or new size of an existing item, etc). Relating to your purchase decision, you are asked to provide details on the supplier firm's offering and the salesperson who offered you this new product.

Each participant can complete the survey THREE times (i.e. assess three different purchase/non-purchase decisions), BUT each new product, salesperson and supplier firm can only be evaluated a maximum of ONE time during the data collection period.

Please complete surveys promptly AFTER new product presentations (i.e. after buyer-salesperson meetings) for the FIRST new product that was offered to you (ONE buyer-salesperson meeting can be used to complete ONE survey).

Are you completing this survey for the ...?


... 1st time

... 2nd time

... 3rd time

The survey takes approximately 10 minutes to complete! Please click the 'NEXT' button!

Page 4:

 Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

SECTION 1: YOUR PURCHASE DECISION

Please report on the FIRST NEW PRODUCT presented to you by your salesperson. Bear in mind, a new product is one which your organization has not carried before. Indicate whether you DID OR DID NOT purchase this new product.

Please fill in, if possible (this will allow us to keep accurate records only, NOT to identify any individual or company):

Name of first new product

First name of salesperson


Name of supplier firm

Did you purchase this new product?

Yes

No

Page 5:


Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

FUTURE PURCHASE INTENSIONS

Please indicate the probability that you will buy this specific new product FROM THIS SALESPERSON AND SUPPLIER in the FUTURE.

Unlikely Likely
 1 2 3 4 5 6 7

Very improbable Very probable
 1 2 3 4 5 6 7


Impossible Possible
 1 2 3 4 5 6 7

No chance Certain
 1 2 3 4 5 6 7

45%

Prev Next

Page 6:


Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

SECTION 2: YOUR SUPPLIER FIRM'S OFFERING (A)

The following statements refer to YOUR SUPPLIER'S OFFERING regarding this new product. Please use the subsequent scales to indicate how closely you think these statements describe your supplier's offering.

Product quality of this new product. Relative to other proposed new products in this category, ...

	1	2	3	4	5	6	7
	Strongly Disagree			Neither_Agree nor_Disagree			Strongly Agree
... the quality of this product meets my expectations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I am satisfied with the quality of this product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the quality of this product is appropriate for its purpose.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wholesale price of this new product. Relative to other proposed new products in this category, ...

	1	2	3	4	5	6	7
	Strongly Disagree			Neither_Agree nor_Disagree			Strongly Agree
... this product can be considered as favorably priced.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the price of this product is acceptable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the price of this product can be regarded as competitive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Marketing of this new product. This product relative to other proposed new products in this category has ...

	1	2	3	4	5	6	7
	Strongly Disagree			Neither_Agree nor_Disagree			Strongly Agree
... high planned media support (e.g. TV, radio, etc; not including cooperative advertising).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... high planned couponing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... high planned product sampling/demonstrations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... strong introductory allowances.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... strong cooperative advertising funds.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... a high estimated gross margin (for YOUR organization).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... a high slotting fee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 6 (continued):

Your value perceptions of this new product.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
This product is good value for money.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At the price shown this product is economical.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is a good buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

55%

Page 7:

Aston University
Birmingham

Purchase Decisions for New Products -Survey for Retail Buyers-

SECTION 2: YOUR SUPPLIER FIRM'S OFFERING (B)

The following statements also relate to THIS NEW PRODUCT. Please use the subsequent scales to indicate how closely you think these statements describe your point of view.

Expected demand for this new product.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
I believe the potential customer demand for this product is strong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see a market for this product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For this product I see a high customer demand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dependence on this new product.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
There are many other suppliers who could provide me with a similar product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be expensive in time and costs to switch to a different supplier for this product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It would be difficult for me to buy this product from a different supplier.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IMPORTANCE OF THIS NEW PRODUCT. Compared to other purchases you make in the same product category, this product is:

Important **Unimportant**

1 2 3 4 5 6 7

Nonessential **Essential**

1 2 3 4 5 6 7

High priority **Low priority**

1 2 3 4 5 6 7

Insignificant **Significant**

1 2 3 4 5 6 7

What is the product category of this new product?

Page 7 (continued):

Your interaction history with this supplier firm. How long have you had business dealings with this supplier firm in your career?


years

months

64%

Page 8:

Exit this survey



Purchase Decisions for New Products -Survey for Retail Buyers-

SECTION 3: YOUR SALESPERSON'S ACTIVITIES

The following statements refer to YOUR SALESPERSON'S ACTIVITIES carried out when usually dealing with you or your organization. Please use the subsequent scales to indicate how closely you think each statement describes your salesperson's activities

Salesperson taking voluntary actions for you & your organization.


	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
This particular salesperson does things VOLUNTARILY for my company.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson ASSISTS others in my company with their work for the benefit of my company.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson gets involved in EXTRA work tasks to benefit my company.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson VOLUNTEERS to attend functions that help my company.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson HELPS me and others in my company with our work responsibilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson HELPS me and colleagues with heavy workloads.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson WILLINGLY GIVES of her/his time to help me and colleagues around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson is ALWAYS WILLING to lend a helping hand to me and colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Salesperson consulting.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
This particular salesperson frequently provides me with new and useful information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson tailors her/his product presentations to fit my needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


Page 8 (continued):

This particular salesperson always presents information to me in a clear and concise manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When selling to me, this particular salesperson frequently makes objective comparisons between products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When selling to me, this particular salesperson acknowledges both the strengths and weaknesses of her/his products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When selling to me, this particular salesperson frequently uses market-related information to support her/his claims.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson uses company brochures to emphasize points.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This particular salesperson regularly informs me about special offers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When selling to me, this particular salesperson frequently presents me with information that supports my purchasing decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When selling to me, this particular salesperson regularly provides me with guiding advice that facilitates my purchasing decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


73%

Prev Next

Page 9:


Exit this survey

Purchase Decisions for New Products -Survey for Retail Buyers-

SECTION 4: YOU & YOUR SALESPERSON

Please use the subsequent scales to indicate the extent to which the statements below describe how YOU feel.

Your trust in this salesperson.

	1	2	3	4	5	6	7
	Strongly Disagree			Neither_Agree nor_Disagree			Strongly Agree

I have trust in this salesperson.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have confidence in this salesperson's integrity and reliability.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This salesperson is trustworthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Your commitment to this salesperson. The relationship that I have with this salesperson ...

	1	2	3	4	5	6	7
	Strongly Disagree			Neither_Agree nor_Disagree			Strongly Agree

... is something I am very committed to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... is very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 9 (continued):

... is something I intend to maintain for the long-term.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... is something I really want to maintain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... deserves my maximum effort to maintain.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Your satisfaction with this salesperson.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
I am very satisfied with this salesperson.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very pleased with this salesperson.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would highly recommend this salesperson to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You & your relationship with this salesperson.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A close relationship with this salesperson is important to my success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A strong relationship with this salesperson would be very helpful in buying her/his products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I DON'T need a close relationship with this salesperson to successfully buy her/his products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that a strong relationship with this salesperson is needed to successfully buy her/his products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions ask you a few more details about YOU AND YOUR SALESPERSON.

Is this salesperson?

Male
 Female

Is this salesperson?

An independent sales rep (i.e. working on a commission basis for a rep firm/multiple manufacturers)
 Employed by one specific distributor.
 Employed by one specific manufacturer.
Other (please specify)

About how long have you know this salesperson?

years
months

How much of your time interfacing with this supplying firm is with this salesperson?

Please estimate %

Your purchasing with this salesperson.

	1 Strongly Disagree	2	3	4 Neither_Agree nor_Disagree	5	6	7 Strongly Agree
If this salesperson stopped representing this supplier firm, I would likely still buy from this salesperson.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Of all the potential products YOU COULD PURCHASE from this salesperson, approximately what % do YOU CURRENTLY BUY from this salesperson?

Please estimate %

Of all the products PRESENTLY CARRIED in the PRODUCT CATEGORY of this NEW PRODUCT, approximately what % do YOU CURRENTLY BUY from this salesperson?

Please estimate %

Page 9 (continued):

Answer the following question **ONLY** if you purchased this new product: **Of all the products YOU PRESENTLY PURCHASE from this salesperson, approximately what % does THIS NEW PRODUCT account for?**

Please estimate %


Sales aggressiveness of this salesperson.

	1	2	3	4	5	6	7
	Strongly Disagree			Neither_Agree nor_Disagree			Strongly Agree
When we interact, this salesperson is concerned only with presenting the product, selling the company's products, and taking orders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This salesperson is aggressive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This salesperson works intensely to make me buy the supplier's products, even when I say that we have no need.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

82%

[Prev](#) [Next](#)

Page 10:

 [Exit this survey](#)

Purchase Decisions for New Products -Survey for Retail Buyers-

SECTION 5: YOU & YOUR FIRM

The following questions ask you details about you and your firm. It is important that you answer them honestly, remember all data is confidential.

Are you?

Male
 Female

How old are you?
Years

What is your HIGHEST educational qualification?

Postgraduate degree
 University degree
 Some university courses
 College degree
 Some college courses
 Professional qualifications
 Completed high school
 Partial high school
Other (please specify)

How long have you worked in the RETAIL INDUSTRY?
Years

How long have you worked in RETAIL BUYING THROUGHOUT YOUR CAREER?
Years

How long have you worked in CORPORATE BUYING THROUGHOUT YOUR CAREER?
Years

How long have you worked for THIS ORGANIZATION?
Years

Page 10 (continued):

How long have you worked in YOUR CURRENT JOB AS A BUYER?
Years

What were your company's approximate annual sales for the past year?
US \$


How many people are employed by your company?
Number of people

How many people fulfill RETAIL BUYING functions in your organization?
Number of people

How many people fulfill CORPORATE BUYING functions in your organization?
Number of people

91%

Page 11:



Purchase Decisions for New Products -Survey for Retail Buyers-

COMPLETED!

THANK YOU FOR COMPLETING THIS SURVEY! YOUR CONTRIBUTION IS GREATLY APPRECIATED!
Please click the 'DONE' button!

100%

Appendix 1.10 Initial Invitation Message (Web-Based Survey)

Notes: Message text shown does not represent its actual size. Initials for last names were used due user restrictions in the professional online network.

Subject line:

Please HELP ADVANCE the IMPORTANT FIELD of RETAIL BUYING by participating in a SHORT ONLINE SURVEY!

Main text:

Dear **First Name and Initial (Last Name)**,

We would like to invite you to participate in a short online survey for an important research study that we are conducting at Aston University, Aston Business School (UK). You have been chosen randomly – based on your Job Title. Please be assured that participation is completely anonymous and confidential!

Our study attempts to better understand retail buyers' purchase behavior in the US market. As the selection of new products can involve a high level of uncertainty for buyers, the present study is concerned with retail buyers' *actual* purchase decisions of *new products*. With this in mind, I am kindly asking you to complete a short online questionnaire after a new product presentation, reporting on (a) a new product purchase decision (bought – yes/no) and (b) your evaluation of this new product as well as the salesperson who offered the product. Also, the survey gives you the option to report on up to three different new product purchase decisions (if possible).

Your own personal views are IMPORTANT because your professional experiences and viewpoints may be different from people who have already responded.

We genuinely appreciate your willingness to consider our request as we attempt to better understand the buying behavior of retail buying professionals in the US market. The results are going to have major benefits to US retailers. Of course, they are also vital to the completion of my doctorate. Thank you very much!

The link: https://www.name_survey_website_provider.com/collector_extention

Yours sincerely,
Steffen Fixson
Academic Researcher

Appendix 1.11 First Reminder Message (Web-Based Survey)

Notes: Partially adapted from Dillman (2007), Figure 4.6, p.185. Message text shown does not represent its actual size. Initials for last names were used due user restrictions in the professional online network.

Subject line:

REMINDER short online survey – PLEASE HELP advance the important field of retail buying!

Main text:

Dear **First Name and Initial (Last Name)**,

Over the last couple of weeks I have sent you an invitation to participate in an important research study that we are conducting at Aston University, Aston Business School (UK). You have been chosen randomly – based on your Job Title. This is a friendly reminder to still participate in our study.

If you are among those people who have already completed the survey, please accept our SINCERE THANKS. Also, please may I remind you that you can evaluate three different new products (bought or not bought), i.e. complete the survey up to three times. Any further completed survey would be of tremendous help!

If you did not have a chance yet to participate, PLEASE may I kindly ask you to still do so. Your own personal views are VITAL because your professional experiences and viewpoints may be different from people who have already responded. Please complete the online questionnaire after a new product presentation, reporting on (a) a new product purchase decision (bought – yes/no) and (b) your evaluation of this new product as well as the salesperson who offered the product. Participation is completely anonymous and confidential!

We genuinely appreciate your willingness to consider our request as we attempt to better understand the buying behavior of retail buying professionals in the US market. The results are going to have major benefits to US retailers. Of course, they are also critical for the completion of my doctorate. Thank you very much.

The link: https://www.name_survey_website_provider.com/collector_extention

Yours sincerely,
Steffen Fixson
Academic Researcher

Appendix 1.12 Final Reminder Message (Web-Based Survey)

Notes: Partially adapted from Dillman (2007), Figure 4.6, p.185. Message text shown does not represent its actual size. Initials for last names were used due user restrictions in the professional online network.

Subject line:

FINAL REMINDER short online survey – Can you help, PLEASE?

Main text:

Dear **First Name and Initial (Last Name)**,

Over the last few weeks I have sent you a couple of invitations to participate in an important research study that we are conducting at Aston University, Aston Business School (UK). You have been chosen randomly – based on your Job Title. This is a final reminder to still participate in our study.

If you are among those people who have already completed the survey, please accept our SINCERE THANKS. Also, please may I remind you that you can evaluate three different new products (bought or not bought), i.e. complete the survey up to three times. Any further completed survey would be of tremendous help!

If you did not have a chance yet to participate, PLEASE may I kindly ask you to still do so. Your own personal views are VITAL because your professional experiences and viewpoints may be different from people who have already responded. Please complete the online questionnaire after a new product presentation, reporting on (a) a new product purchase decision (bought – yes/no) and (b) your evaluation of this new product as well as the salesperson who offered the product. Participation is completely anonymous and confidential!

We genuinely appreciate your willingness to consider our request as we attempt to better understand the buying behavior of retail buying professionals in the US market. The results are going to have major benefits to US retailers. Of course, they are also critical for the completion of my doctorate. Thank you very much.

The link: https://www.name_survey_website_provider.com/collector_extention

Yours sincerely,
Steffen Fixson
Academic Researcher

Appendix 1.13 Brief Questionnaire for Non-Respondents (Web-Based Survey)

Notes: Screenshots shown do not represent their actual size. Service provider name has been removed.

Page 1:

Aston University
Birmingham

Purchase Decisions for New Products - Brief Survey for Retail Buyers-

WELCOME TO THIS BRIEF SURVEY!

Steffen Fixson (PHD Candidate) & Prof. Nick Lee (Professor of Marketing & Organizational Research)

Aston Business School, Marketing Group, Birmingham B4 7ET, U.K.

THANK YOU for your time and your interest in supporting us to advance the IMPORTANT FIELD of RETAIL BUYING!

Please click the "NEXT" button to start! Remember all data is confidential.

12%

Next

Page 2:

Aston University
Birmingham

Purchase Decisions for New Products - Brief Survey for Retail Buyers-

STARTING QUESTIONS

Do you work in the USA?

Yes
 No

Do you work for a store-based retailer (i.e. NOT an online ".com" retailer)?

Yes
 No

Do you work in retail BUYING?

Yes
 No

Do you make your retail buying decisions independently (i.e. NOT made by a buying committee)?

Yes
 No

Have you previously responded to the "full" survey?

Yes
 No

Page 3:

Aston University
Birmingham

Exit this survey

Purchase Decisions for New Products - Brief Survey for Retail Buyers-

BRIEF INTRODUCTION & INSTRUCTIONS

This SHORT survey asks you to report on an actual PURCHASE DECISION FOR A NEW PRODUCT. A new product is one which your organization has not carried before (e.g. a new item, new flavor or new size of an existing item, etc). Relating to your purchase decision, you are asked to provide ONLY A FEW details on the supplier firm's offering and the salesperson who offered you this new product.

Please complete this survey promptly AFTER a new product presentation (i.e. after a buyer-salesperson meeting) for the FIRST new product that was offered to you.

Please click the NEXT button!

Progress bar: 38%

Prev Next

Page 4:

Aston University
Birmingham

Exit this survey

Purchase Decisions for New Products - Brief Survey for Retail Buyers-

SECTION 1: YOUR PURCHASE DECISION

Please report on the FIRST NEW PRODUCT presented to you by your salesperson. (Bear in mind, a new product is one which your organization has not carried before. Indicate whether you DID OR DID NOT purchase this new product.

Please fill in, if possible (this will allow us to keep accurate records only, NOT to identify any individual or company):

Name of first new product:

First name of salesperson:

Name of supplier firm:

Did you purchase this new product?


Yes

No

Progress bar: 60%

Prev Next

Page 5:


Exit this survey

Purchase Decisions for New Products - Brief Survey for Retail Buyers-

SECTION 2: YOUR SUPPLIER FIRM'S OFFERING

The following statements relate to THIS NEW PRODUCT. Please use the subsequent scales to indicate how closely you think these statements describe your point of view.

Margin of this new product. This product relative to other proposed new products in this category has ...

	1 Strongly Disagree	2	3	4 Neither Agree nor Disagree	5	6	7 Strongly Agree
... a high estimated gross margin (for YOUR organization).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Expected demand for this new product.

	1 Strongly Disagree	2	3	4 Neither Agree nor Disagree	5	6	7 Strongly Agree
I believe the potential customer demand for this product is strong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see a market for this product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For this product I see a high customer demand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

IMPORTANCE OF THIS NEW PRODUCT. Compared to other purchases you make in the same product category, this product is:

Important **Unimportant**

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
-------------------------	-------------------------	-------------------------	-------------------------	-------------------------	-------------------------	-------------------------


Insignificant **Significant**

<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 7
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62%

Prev Next

Page 6:


Exit this survey

Purchase Decisions for New Products - Brief Survey for Retail Buyers-

SECTION 4: YOU & YOUR SALESPERSON

Please use the subsequent scale to indicate the extent to which the statements below describe how YOU feel.


You & your relationship with this salesperson.

	1 Strongly Disagree	2	3	4 Neither Agree nor Disagree	5	6	7 Strongly Agree
Business transactions with this salesperson require a close relationship between me and this salesperson to ensure their success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A close relationship with this salesperson is important to my success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A strong relationship with this salesperson would be very helpful in buying her/his products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that a strong relationship with this salesperson is needed to successfully buy her/his products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

75%

Prev Next

Page 7:

 Exit this survey

Purchase Decisions for New Products -Brief Survey for Retail Buyers-

SECTION 5: YOU & YOUR FIRM

The following questions ask you details about you and your firm. It is important that you answer them honestly, remember all data is confidential.

Are you?

Male

Female

What is your HIGHEST educational qualification?

Postgraduate degree

University degree

Some university courses

College degree

Some college courses

Professional qualifications

Completed high school

Partial high school

Other (please specify)

How long have you worked in the RETAIL INDUSTRY?

Years

How long have you worked in CORPORATE BUYING THROUGHOUT YOUR CAREER?

Years

What were your company's approximate annual sales for the past year?

US \$

How many people are employed by your company?

Number of people

88%

Page 8:

 Exit this survey

Purchase Decisions for New Products -Brief Survey for Retail Buyers-

COMPLETED!

THANK YOU FOR COMPLETING THIS BRIEF SURVEY! YOUR CONTRIBUTION IS GREATLY APPRECIATED!

Please click the 'DONE' button!

100%

Appendix 1.14 Invitation Message (Brief Web-Based Questionnaire for Non-Respondents)

Notes: Partially adapted from Dillman (2007), Figure 4.6, p.185. Message text shown does not represent its actual size. Initials for last names were used due user restrictions in the professional online network.

Subject line:

FINAL CONTACT – Can you help by spending 3-5 min, PLEASE?

Main text:

Dear **First Name and Initial (Last Name)**,

Over the last few weeks I have sent you a couple of invitations to participate in an important research study that we are conducting at Aston University, Aston Business School (UK). You have been chosen randomly – based on your Job Title.

If you are among those people who have completed the ‘full’ survey, please accept our SINCERE THANKS. If you did not have a chance to participate, PLEASE may I kindly ask you to spend 3-5 minutes to complete a VERY BRIEF version of the original questionnaire. Any further response would be of tremendous help!

Please complete this VERY BRIEF online questionnaire after a new product presentation. Also please remember that participation is completely anonymous and confidential!

We genuinely appreciate your willingness to consider our request as we attempt to better understand the buying behavior of retail buying professionals in the US market. The results are going to have major benefits to US retailers. Of course, they are also critical for the completion of my doctorate. Thank you very much.

The link: https://www.name_survey_website_provider.com/collector_extention

Yours sincerely,
Steffen Fixson
Academic Researcher