STORE LOYALTY?

- an Empirical Study of Grocery Shopping



EFI Mission

EFI, the Economic Research Institute at the Stockholm School of Economics, is a scientific institution which works independently of economic, political and sectional interests. It conducts theoretical and empirical research in management and economic sciences, including selected related disciplines. The Institute encourages and assists in the publication and distribution of its research findings and is also involved in the doctoral education at the Stockholm School of Economics.

EFI selects its projects based on the need for theoretical or practical development of a research domain, on methodological interests, and on the generality of a problem.

Research Organization

The research activities are organized in nineteen Research Centers within seven Research Areas. Center Directors are professors at the Stockholm School of Economics.

ORGANIZATION AND MANAGEMENT

Management and Organisation (A)

Ethics and Economics (CEE)

Public Management (F)

Information Management (I)

Man and Organisation (PMO)

Industrial Production (T)

Prof Sven-Erik Sjöstrand
Adj Prof Hans de Geer
Prof Nils Brunsson
Prof Mats Lundeberg
Acting Prof Jan Löwstedt
Prof Christer Karlsson

MARKETING

Information and Communications (CIC)

Risk Research (CFR)

Marketing, Distribution and Industrial Dynamics (D)

Distribution Research (FDR)

Adj Prof Bertil Thorngren
Prof Lennart Sjöberg

Prof Lars-Gunnar Mattsson
Associate Prof Magnus Söderlund

Economic Psychology (P) Prof Lennart Sjöberg

ACCOUNTING, CONTROL AND CORPORATE FINANCE

Accounting and Managerial Finance (B) Prof Lars Östman

Managerial Economics (C) Prof Peter Jennergren

FINANCE Finance (FI)

Finance (FI) Prof Clas Bergström

ECONOMICS

Health Economics (CHE)
International Economics and Geography (IEG)
Economics (S)
Prof Bengt Jönsson
Prof Mats Lundahl
Prof Lars Bergman

ECONOMICS STATISTICS
Economic Statistics (ES)

LAW

Law (RV) Prof Bertil Wiman

Chairman of the Board: Prof Sven-Erik Sjöstrand. Director: Associate Prof Bo Sellstedt,

Prof Anders Westlund

Adress

EFI, Box 6501, S-113 83 Stockholm, Sweden • Internet: www.hhs.se/efi/ Telephone: +46(0)8-736 90 00 • Fax: +46(0)8-31 62 70 • E-mail efi@hhs.se Internet: www.hhs.se/efi/

STORE LOYALTY?

-an Empirical Study of Grocery Shopping

Anne Mägi

AKADEMISK AVHANDLING

Som för avläggande av ekonomie doktorsexamen vid Handelshögskolan i Stockholm framläggs för offentlig granskning onsdagen den 9 juni 1999, kl. 10.15 i sal 750, Handelshögskolan, Sveavägen 65, Stockholm.

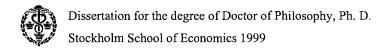


	7 1
	ī
	m - c - c - c - c - c - c - c - c - c -
	i

STORE LOYALTY?

- an Empirical Study of Grocery Shopping

Anne Mägi



© EFI and the author 1999 ISBN 91-7258-511-0

Keywords: customer loyalty

store choice behavior shopping orientations

Cover layout: Håkan Solberg, Mediaproduktion AB

original drawings by Bengt Good

Printed by: Elanders Gotab, Stockholm, 1999

Distributed by: EFI, The Economic Research Institute

Stockholm School of Economics

P.O. Box 6501, SE-113 83 Stockholm, Sweden

PREFACE

This report is a result of a research project carried out at the Foundation for Distribution Research at the Economic Research Institute at the Stockholm School of Economics.

This volume is submitted as a doctor's thesis at the Stockholm School of Economics. As usual at the Economic Research Institute, the author has been entirely free to conduct and present her research in her own ways as an expression of her own ideas.

The institute is grateful for the financial support provided by the K LIV foundation, the Torsten and Ragnar Söderberg Foundations and by the sponsors of the Foundation for Distribution Research. The present volume would not have been possible without the cooperation of the households that participated in the study. The Economic Research Institute wishes to warmly thank all involved for their generosity and openness.

Bo Sellstedt
Director of the Economic Research Institute
at the Stockholm School of Economics

Claes-Robert Julander Professor, President of the Stockholm School of Economics

Acknowledgements

Getting a PhD is sometimes compared to getting a driver's license for doing research. Having recent experience of a two-year struggle with the "real" driver's license, the metaphor feels accurate in more than one way.

In both processes, I have relied on the help and support of others. While I might not always have appeared to be grateful, I would hereby like to express my deepest gratitude to a number of people. My supervisors have in different ways helped me with my work on this thesis. Claes-Robert Julander, who has been my main supervisor, has followed my work for the past seven years and has always been very supporting. By letting me try my own ideas quite freely, he has shown a great belief in my own abilities, thereby increasing my own belief in them. Magnus Söderlund, who became involved in the advisory committee at a late stage, has with admirable zeal read and commented on my text. Richard Wahlund has always been very encouraging, and provided indispensable practical support during the data collection procedure. Last, but definitely not least, Folke Ölander from Århus, Denmark, has throughout the process been a great support, pinning down the crucial aspects I have had to tackle. His comments on the manuscript at different stages have been vital to finding the weak spots of my arguments.

In addition to my supervisors, Robert East, UK, and Martti Laaksonen, Finland, have at different stages of the process generously provided comments on my work. Per-Olov Edlund has been very helpful with a number of statistical issues. Ulrika Holmberg, Gothenburg, with whom I share the research interest of customer store loyalty, has given me valuable feedback on the project, which I hope I will get the opportunity to reciprocate.

The past and present inhabitants of the Foundation for Distribution Research have provided an amiable and fun-filled atmosphere in which to work. I would like to thank Anna, Carina, Fredrik, Hanna, Helena, Jonas, Kim, Lars, Magnus, Maria, Micke D., Micke H., Per, Sassa, Lotta and Ulla for generously helping me with the thesis in various ways, and for being such good company. A special thanks goes to Lars, who painstakingly read my manuscript at a crucial time of the process, and to Jonas, who during all this period patiently has been answering a flood of questions about everything and nothing.

I am grateful for the financial support I have received from the Torsten and Ragnar Söderberg Foundations, as well as the grant awarded by K LIV-foundation for financing the research project on which this thesis is built. Rune Castenäs has been very helpful with arranging and rearranging my financing.

In the research process, I have received help from family and friends with trying out parts of the data collection procedure. Lotta Elf generously helped me with contacting respondents for my first set of interviews, as well as by participating in an interview herself. I would also like to acknowledge the help I received during the data collection process from Anneli, Emma, Hanna, Helle and Fredrik. A special thanks goes to Emma for meticulously taking care of the data entry procedure. The research had, of course, not been possible without the participation of a great number of people from Ludvika, and I am specifically grateful to the eight persons I interviewed in the second phase of the project.

I am also very grateful to Stephanie Lindqvist, who has been helpful with trying to improve the language of this text, among other things introducing me to how the hyphen should be used in the English language.

My parents Birgitta and Mart and my sisters Karin and Linda and their families have been very supportive throughout the whole process of thesis writing. Their friendly questioning about when I would finish the thesis has helped me not to loose track of the final goal. My family, and specifically Karin, has also been an indispensable support in the process of getting the "real" driver's license in time for the journeys I took by car to Ludvika for the interviews.

Finally, my warmest thanks goes to Jojje who has been a never failing support during all this time. He has lovingly used both carrots and sticks to help me keep the dead-lines I had set up for myself. He has also spent many, many hours in the passenger seat more or less stoically putting up with my reckless driving. I would have managed neither driver's license nor this thesis without him.

Stockholm, April 25, 1999

Anne Mägi

Table of contents

1.	11	NTRODUCTION	1
	1.1	Why loyalty?	1
	1.2	THE RESEARCH PROBLEM	2
	1.3	PURPOSE OF THE STUDY	4
	1.4	CONTENT OF THE THESIS	5
2.	T	HEORETICAL FRAMEWORK	6
	2.1	WHAT IS "LOYALTY"?	7
	2.	1.1 What's in a word?	7
	2.	1.2 Objects of loyalty	8
	2.	1.3 Loyalty in marketing theory	9
	2.	.1.4 Loyalty measurement	16
	2.	1.5 A summary on definitions and measurements of loyalty	25
	2.2	STUDIES ON "LOYALTY" AS DETERMINED BY CUSTOMER EVALUATIONS	28
	2.	2.1 Support for an influence of CS and PSQ on asserted loyalty	29
	2.	2.2 Why not a very strong relationship between CS/PSQ and behavioral loyalty?	31
	2.	2.3 Summary	37
	2.3	STUDIES ON "LOYALTY" AS DETERMINED BY SHOPPER CHARACTERISTICS	38
	2.4	SUMMARIZING RESEARCH ON "LOYALTY"	41
	2.5	STORE CHARACTERISTICS AFFECTING STORE PATRONAGE BEHAVIOR	
	2.	5.1 Salient store characteristics – an overview	46
		5.2 Store image	
	2.	5.3 Store location and its effect on shopping behavior	50
	2.	5.4 The effects of promotions on shopping behavior	53
	2.	5.5 The effect of loyalty programs on store choice behavior	54
	2.6	SHOPPER AND HOUSEHOLD CHARACTERISTICS AND PATRONAGE BEHAVIOR	55
	2.	6.1 Shopper characteristics and patronage behavior	55
	2.	6.2 Household characteristics and patronage behavior	60
	2.7	THE SHOPPER/HOUSEHOLD AND STORE PERSPECTIVES: A SYNTHESIS	63
	2.8	THEORETICAL FRAMEWORK FOR THE EMPIRICAL STUDY	
	2.9	RESEARCH OBJECTIVES AND RESEARCH QUESTIONS	73
	2.	9.1 Patronage behavior	74
		$9.2\ Determinants\ of\ behavioral\ loyalty,\ choice\ of\ primary\ store\ and\ store\ avoidance.$	
	2.	9.3 "Intentional" vs. spurious loyals – examining the loyalty grid	75
	2.	9.4 Provisioning strategies	77

3. F	RESEARCH APPROACH	78
3.1	INTRODUCTION	78
3.2	THE SETTING	79
3.3	THE DATA COLLECTION PHASE (DIARY AND QUESTIONNAIRE)	80
3.4	THE DIARY	82
3	.4.1 Design	82
3	.4.2 Variables derived from the diary data	83
3.5	THE QUESTIONNAIRE	85
3	.5.1 Evaluation of stores	85
3	.5.2 General shopping attitudes and behaviors	86
3	.5.3 Store avoidance	89
3	.5.4 Other household background data and miscellaneous	90
3	.5.5 Level of analysis – the household or the individual?	90
3.6	THE INTERVIEWS	92
4. F	RESULTS	94
4.1	How do households behave?	
4	1.1 Store repertoire – how many stores are used?	95
	1.2 How much is spent in the main store?	
	1.3 Primary-store share-of-visits	
	1.4 Carman's measure of entropy	
	1.5 Comparing measures of behavioral loyalty	
	1.6 Comparing behavioral measures with respondents' own assessment of main sto	
	1.7 Store avoidance	
	1.8 Behavioral loyalty and store repertoire as related to other patronage dimension	
	1.9 A summary of the analyses of patronage behavior	
4.2	HOW DO SHOPPERS EVALUATE STORES?	
4	.2.1 Are there any perceived differences between stores?	109
	2.2 Evaluations of stores and the development of a measure of strength of preference	
	2.3 Relative evaluations versus evaluations per se	
4.3	WHAT DETERMINES THE DEGREE OF BEHAVIORAL LOYALTY?	
4	3.1 Household/shopper characteristics	117
4	3.2 The relationship between attitudinal preference and degree of behavioral loyal	ty 119
	3.3 Location and degree of behavioral loyalty	
	3.4 Degree of behavioral loyalty and customer membership cards	
	3.5 Multivariate analyses for degree of behavioral loyalty	
	.3.6 Explaining the share-of-purchase on the store level	
4.4	WHAT AFFECTS THE CHOICE OF PRIMARY STORE?	
4.5	WHAT DETERMINES STORE AVOIDANCE?	
4.6	LOYALTY CATEGORIZATION BASED ON BEHAVIORAL AND ATTITUDINAL DATA	139
	.6.1 A comparison of respondents in the loyalty categories	
·	. , , , , , , , , , , , , , , , , , , ,	

4.7 A CLOSE-UP ON HOUSEHOLDS' SHOPPING BEHAVIOR	144
4.7.1 The households	145
4.7.2 Provisioning strategies used by the households	156
4.7.3 Perceptions of the stores	160
4.7.4 A final comment about the interviews	161
5. CONCLUSIONS	163
5.1 A SUMMARY OF FINDINGS	163
5.1.1 Patronage behavior	164
5.1.2 Explaining behavioral loyalty, choice of primary store and store avoidance	165
5.1.3 Comparing "intentional" vs. "spurious" loyals	168
5.1.4 Exploring provisioning strategies	168
5.2 DISCUSSION	170
5.3 MANAGERIAL IMPLICATIONS	172
5.4 LIMITATIONS OF THE STUDY	175
5.5 FUTURE RESEARCH	177
5.5.1 Research issues related to store loyalty and store patronage	177
5.5.2 Research issues related to research on loyalty in general	178
References	179
APPENDIX 1 – THE QUESTIONNAIRE (TRANSLATED VERSION)	187
APPENDIX 2 - ADDITIONAL TABLES	193
APPENDIX 3 – COMPARISONS ACROSS STORES	196

1. Introduction

1.1 Why loyalty?

"The new theory also makes loyalty a truer litmus test of corporate performance than profits ever were or could be. Profits alone are an unreliable measure because it is possible to raise reported short-term earnings by liquidating human capital. Pay cuts and price increases can boost earnings, but they have a negative effect on employee and customer loyalty and so shorten the duration and worth of those assets. Since the only way a business can retain customer and employee loyalty is by delivering superior value, high loyalty is a certain sign of solid value creation."

from The Loyalty Effect by F Reichheld (1996, p. 5)

This quote nicely captures the weight accredited to the topic of customer loyalty in today's business environment. It is probably no exaggeration that the rationale for increasing customer loyalty has become ingrained in marketing thought to the extent that it has become axiomatic.

When the importance of customer loyalty is discussed, reference is often made to Reichheld and Sasser's 1990 article in the Harvard Business Review (1990). In the article, the authors provide impressive figures on increases in profitability accrued through increasing customer retention, and discuss why customers become more profitable to a company the longer they stay with it. First, in many industries, there are setup costs for newly acquired customers, and, depending on the industry, these costs take some time to recover. It is not, however, only the setup costs which are important. The longer the customer stays with a company, the more he or she is assumed to spend with the company, the lower the costs to serve this customer, and the less price sensitive he or she is assumed to be. Moreover, profits will accrue indirectly by decreasing marketing costs since loyal customers provide free advertising. Taken together, these factors suggest that it is more profitable to cater to the needs of existing customers than to acquire new customers.

The concern for increasing customer loyalty has spread to the grocery retailing industry. A recent survey shows that customer loyalty is one of the top priorities for retail managers in Europe (*Food Business News* 1999). In the grocery retailing sector in Sweden, as in many other countries, major retailers are working with various kinds of customer loyalty schemes (Sopanen 1996). The importance of store loyalty for grocery retailing, was however, acknowledged by Tate already in 1961. In the article *The Supermarket Battle for Store Loyalty*, he argued for store loyalty as an important success factor in the increasingly competitive field of

grocery retailing. Thus, although the issue of customer loyalty lately has received significant attention, the recognition of its importance is far from new.

1.2 The research problem

The recognition of the importance of loyal customers has spurred a large research effort aimed at understanding the determinants of customer loyalty. These efforts have largely been devoted to studying the impact of customer satisfaction and perceived service quality. Empirical studies in several service contexts have also shown a relationship between perceived service quality or customer satisfaction and some measure of customer loyalty (cf. Anderson, Fornell and Lehman 1994; Boulding, Kalra, Staeling and Zeithaml 1993; Cronin and Taylor 1992; Fornell 1992; Mägi 1995). Thus there seems to be support for the rather straightforward claim: "satisfy your customers, and you will gain their loyalty."

However, findings that challenge the notion of a simple relationship between perceived service quality, or satisfaction, and loyal behavior, have also been presented. For example, Reichheld (1993) shows that many satisfied customers do change service providers. A study on Swedish grocery shoppers showed that although loyal shoppers in general were more satisfied, there were also shoppers that were highly satisfied with a specific store and yet did not use it for the majority of their purchases (Mägi 1995). Such findings suggest that although perceived service quality and customer satisfaction are important determinants, they are not the sole drivers of loyalty.

When considering loyalty to grocery stores, it should be taken into account that most consumers divide their grocery purchases over several stores, and that there are large differences in how they spread purchases across stores (Cunningham 1961; East, Harris, Lomax, Wilson and Perkins 1997; Tate 1961). To what extent do evaluations of specific stores determine these usage patterns? If consumers do not perceives large differences between available stores, other factors might play a more important role. For example, a consumer might have a set of stores, which he or she finds equally satisfying, and determine the destination of particular shopping trips based on situational factors such as promotions or time schedule. A consumer's ideas on "how to shop" could also be assumed to affect how he or she divides purchases across stores. For example, price oriented consumers have been shown to use a large number of stores in their search for good prices (Williams, Painter and Nicholas 1978, McGoldrick and Andre 1997). Which stores consumers use and how they are used could also be affected by restrictions imposed on the household in terms of a limited food budget and limited time available for carrying out the chore of grocery shopping (Carman 1970, McGoldrick and Andre 1997). Several differences among shoppers and in household characteristics, such as income, working hours, attitudes to shopping, etc., could help to explain the large variation in store-loyal behavior across households.

The above suggests that store loyalty could be determined by both the shopper's evaluations of and satisfaction with a specific store, as well as by different shopper and household characteristics. But what is it that we are trying to explain? Additional complexity is added to the task of understanding the causes of customer loyalty by the ambiguity surrounding the concept of "loyalty" itself. In contrast to the great research efforts devoted to understanding the determinants of loyalty, there is comparatively little research on this concept: although loyal customers are today regarded as valuable assets for a firm, there is no clarity concerning how "loyal" customers should be identified. If the concept in itself is unclear, how can we study it empirically and how can we understand its determinants?

In the research covering the concept of loyalty, a certain agreement seems to exist that loyalty should be considered a multi-dimensional construct, that is, most definitions include both behavioral and attitudinal components. It has been argued that mere repeat purchasing not caused by an attitudinal preference – "spurious loyalty" – should be delineated from "true" intentional loyalty (Dick and Basu 1994; Jacoby and Chestnut 1978). In contrast, empirical measurements have almost exclusively tapped into either the behavioral or the attitudinal aspect of loyalty, thus not fully capturing the concept as it has commonly been defined. If the attitudinal and behavioral dimensions are not strongly related, using one of these measures will provide observations that might deviate substantially from what has been argued to be "true" loyalty. Thus, although there is an abundance of studies on loyalty, the lack of correspondence between empirical investigations and theoretical conceptualizations suggests that little is known about whether consumers are truly "loyal" according to a multi-dimensional conceptualization of loyalty.

Loyalty has, however, also been regarded as an exclusively behavioral phenomenon (cf. Cunningham 1961, Tucker 1964, East, Harris, Willson and Lomax 1995, Desmet and Volle 1996). One reason for doing so is that the attitudinal and behavioral aspects in the multi-dimensional conceptualization of loyalty cannot be assumed to be closely related (East 1997). However, there are also alternative approaches for defining behavioral loyalty. Behavioral loyalty could be seen as a customer's allegiance to a company over time, that is, retention, or the exclusiveness with which the company is used in a specified time period. These two aspects are not necessarily closely related. A customer might use a specific provider regularly for a long time period, thereby exhibiting high allegiance, but at the same time use several competitors, and only devote a small share of spending on this specific provider.

Although there is some confusion concerning what should be included in the concept of loyalty and over what constitutes a loyal customer, most authors would agree that the customer's behavior is an integral part of loyalty. Customers' behavior should thus preferably be the starting point for investigations of loyalty. Store patronage behavior is a rather complex study object, not because the store choice decision in itself is complex, but because grocery shopping is linked to many other aspects of a household's everyday life, and decisions on which stores to patronize are thus affected by a large number of other factors. When taking such issues into consideration, an interesting question is to what extent the store itself and its attributes play a role in how households shape their patronage patterns.

To summarize, there are important research problems of both practical and theoretical relevance in the area of store loyalty. From a retailer perspective, knowledge about how and why households distribute their spending on groceries over several stores is essential. One question which should be investigated concerns the extent to which evaluations of specific stores explain consumers' relative spending in these stores, and to what extent households' spending patterns across stores are determined by shopper or household specific variables. Is strong patronage concentration always due to positive evaluations of specific stores, or can behavioral loyalty be caused by mere inertia? Do consumers who spread their purchases over several stores lack preferences for any particular store? To what extent do factors other than the stores and their comparative merits affect consumers' patronage behavior? Looking at the larger pattern of patronage, rather than the consumer's usage of and relationship to a single store, will provide new insights on store loyalty behavior and its determinants.

Much current research on loyalty is limited to treating "loyalty" as the dependent variable in studies on customer satisfaction and/or perceived service quality. In these contexts, the concept of loyalty is little elaborated upon, and furthermore, the empirical investigations on loyalty as such are limited. The intended theoretical contribution of this study is to extend the discussion of store loyalty through a critical review of the loyalty literature, by drawing on relevant literature from the field of store patronage behavior and by substantiating the theoretical review with empirical findings.

1.3 Purpose of the study

The purpose of this study is to explore store loyalty from a store patronage perspective and to investigate the effects of store evaluations and shopper characteristics on store loyalty.

Considering the ambiguity surrounding the concept of loyalty, achieving this purpose obliges an evaluation of the concept in itself. Such a scrutiny is also needed before the objectives of the empirical study can be specified.

1.4 Content of the thesis

Chapter two of this thesis contains a literature review, which includes a discussion on the perspective on "loyalty" taken by this author. The review is summarized with a proposed theoretical framework for the empirical study. This chapter also outlines the four research objectives that follow from the literature review and the theoretical framework. They are, briefly stated:

- to describe households' store-patronage behavior and, specifically, behavioral loyalty
- to analyze the determinants of the degree of behavioral loyalty, the choice of primary store, and store avoidance
- to compare characteristics of shoppers categorized as "intentional" and "spurious" loyals
- to explore households' overall approach to the task of grocery shopping, that is, their "provisioning strategies"

In chapter three, the empirical study is described. In short, the study design consists of a four-week purchase diary combined with a questionnaire. Moreover, in a second stage of the study, in-depth interviews were made with a small sub-sample of the households that participated in the diary/survey part of the study.

The empirical results of the study are presented in chapter four. The findings from the study are summarized in chapter five, which also contains a discussion on the generalizability of the findings and the limitations of the research. Chapter five also discusses the implications of these findings for research and management.

2. Theoretical framework

Marketing scholars are far from unanimous about the appropriate way in which to view loyalty. A study on store loyalty thus necessitates a closer look on how "loyalty" has been treated in marketing theory. As already suggested by the title, the behavioral aspects of loyalty will, for reasons outlined further on, be the focal point of this thesis. From this perspective it is seen as fruitful to complement loyalty research with theories and findings from general retail patronage research. Patronage research has a long tradition of studying store choice behavior in general, including issues such as which attributes of a store are important, and why consumers shop at certain stores (not necessarily taking into consideration repeated store choices).

Conceptual issues aside, two main perspectives on the determinants of store loyalty can be identified. Currently, the more common perspective focuses on how perceptions of, evaluations of, and satisfaction with store characteristics are linked to store loyalty. This perspective is in line with the extensive customer satisfaction/perceived service quality literature that has grown in importance over the last decades. The other perspective is concerned with how consumer characteristics explain variations in behavioral loyalty.

The differences between these two perspectives are also distinguishable within research on store patronage behavior in general. A large part of this research has investigated how store attributes affect store choice. There is also, however, research that focuses on how consumer characteristics, mainly shopping orientations, affect store choice behavior. This theoretical review will partially be structured according to the categorization both of store loyalty and of store patronage behavior research into store attribute related research vs. shopper characteristics related research. An overview of the chapter is provided in Figure 1.

The chapter begins with a discussion of the loyalty concept as defined and operationalized in marketing. Thereafter empirical studies on store loyalty and its determinants are reviewed, followed by a summary and a discussion on how loyalty is viewed in this thesis.

The presentation of store patronage research is also divided into research related to store characteristics (2.5), and shopper characteristics (2.6), respectively. In section 2.7, a synthesis of these perspectives is presented.

The chapter ends with a summary and discussion of the theoretical review. In addition, the research objectives derived from the theoretical discussion and pursued in the remainder of the thesis are presented.

- 2.1 What is loyalty? A discussion of definitions and measurements of loyalty within marketing literature.
- 2.2 Empirical studies on (perceptions of) store characteristics and loyalty.
- 2.3 Empirical studies on shopper/household characteristics and loyalty.
- 2.4 A summary of loyalty research and an outline of how loyalty will be regarded in this thesis.
- **2.5** Store patronage research with store characteristics in focus.
- 2.6 Store patronage research with shopper/household characteristics in focus.
- **2.7** A synthesis of the shopper/household and store characteristics perspectives.
- **2.8** A summary of the theory chapter followed by the research objectives pursued in the empirical study.

Figure 1. An overview of this chapter

2.1 What is "loyalty"?

2.1.1 What's in a word?

Marketers, both practitioners and academics, have borrowed the word "loyalty" from the domain of everyday language to denote a phenomenon within the field of consumer behavior. The reason for the use of this word is understandable - "loyalty" is an alluring expression, involving positive connotations such as fidelity and devotion. The idea, therefore, of having loyal customers should sound very appealing to marketing managers.

However, borrowing an everyday word for a specific research domain is not without problems. In everyday situations the need for clearly defined words is not acute; the meaning is often clarified by the context. But for most consumer behavior and marketing research purposes, we struggle to define distinct concepts. Such concepts are needed for building and developing general theories and aggregating findings across studies in the process of refining and testing these theories. Thus, a more specific use of the word in question is sought by most marketing researchers – and the question of *how* the concept should be specified then arises.

Lately it has been argued that the development of the concept of "loyalty" within marketing research has far removed the interpretation of the word from its original semantic meaning (Fournier and Wao 1997; Fournier 1998). Although this may be a legitimate comment on the use of "loyalty" within the field of marketing, this thesis focuses on the term as it has been used in marketing research up until now and the merits and usefulness of this practice. The aim is thus not to develop a new and "better" definition or conceptualization of loyalty that might be truer to the semantic meaning of the word. Although it is a valid question to probe whether or not we as consumers are loyal to grocery stores in the same way we are in considering ourselves or others loyal in other contexts, for example in marriage or citizenship, it will not be pursued here.

Other terminology has also been used in marketing research to denote related aspects of consumer behavior, for example "brand insistence," "brand bias," "brand commitment," etc. In some instances the word "retention" has been used to describe the extent to which customers stay with a provider. Although some of these terms might better capture what marketers, or at least some of them are interested in, the use of the word "loyalty" as a marketing concept has gained strong ground.

2.1.2 Objects of loyalty

Before going too deeply into the marketing literature on loyalty, it should be emphasized that there are different objects of consumers' loyalties. From a wider perspective, consumers may be considered to be loyal to such things as their favorite time for shopping, a specific shopping street, or a specific choice of a meal at fast food outlets. A somewhat more narrow perspective is usually taken in marketing literature in which loyalty is considered in relation to a specific provider, be it a branded consumer product, a service provider, or a store. The bulk of the research on loyalty within the field of marketing has been devoted to brand loyalty. Many measurements of loyalty have also been developed for fast-moving consumer goods. It should, however, not be taken for granted that all research on brand loyalty is readily applicable to store loyalty.

Gremler and Brown (1996) argue that the construct "service loyalty" has been treated differently from brand loyalty in the literature. As grocery stores provide a service, their argument would be of interest here. They list the following reasons for the distinctiveness of service loyalty (1996, p. 172):

- a) service providers have the ability to create stronger loyalty bonds with their clients than do suppliers of more tangible goods,
- loyalty is greater or more prevalent among service consumers than among goods consumers,

- c) services provide more opportunities for person-to-person interactions which, in turn, often provide more opportunities for loyalty to develop
- d) perceived risk is often greater when purchasing services than goods
- e) with some services, switching between providers may involve certain barriers not present with brand switching for goods

It is not clear, however, whether the authors suggest that these issues are relevant for a larger definition of "service loyalty" or for understanding differences in the prevalence and nature of the determinants of loyalty to brands and service providers, respectively.

As brand choices and store choices yield different consequences for the household, it is plausible that loyalty to brands and stores have different determinants. One issue is whether the choice processes for stores and individual products are comparable. One factor, which has greater impact on store choice than on brand choice, would be the spatial factor and related temporal aspects. For example, given that a specific store carries several brands of the same item, the choice of a specific brand does not have any consequences for the time needed to make a purchase trip. If store patronage behavior to a greater extent were contingent upon external factors other than brand choice behavior, it would imply that the store's attributes are of lesser importance for patronage behavior, than product attributes are for brand choice.

However, concerning the discussion on the interpretation of the *concept* of loyalty in marketing theory and how it should be measured, the literature on brand loyalty is considered relevant for this thesis since a large part of the conceptual discussion has taken place in the empirical context of brand choice. Therefore, a number of articles focusing on brand loyalty will be included in the literature review.

2.1.3 Loyalty in marketing theory

The interest in loyalty within the marketing research community is far from new. In Jacoby and Chestnut's (1978) often cited review of the field, the authors date the first appearance of marketing studies on brand loyalty back to Copeland (1923) (although the latter used the term "consumer insistence"). Over the years, a large number of articles and books have been devoted to the subject, but they have not resulted in a coherent picture of the phenomenon. East (1997) lists three components that are frequently used in describing a brand-loyal person: a positive brand attitude; behavioral preference in terms of buying the brand more than others in the category; and buying that brand over extended periods of time, which East calls allegiance. As will be clear from the following literature review, some definitions have encompassed all these factors whereas others have limited the

interpretation of loyalty to one component. The definitions also differ concerning how the dimensions are assumed to be related. To illustrate the development within the area, the review will, for the most part, proceed chronologically.

Copeland (1923) saw consumer insistence as a third stage in which the demand for products is manifested; the first two stages being consumer recognition, and consumer preference. By consumer recognition, Copeland means "an acquaintance with the general standing of the brand." Consumer preference is described as a stage in which the consumer has a preference for a certain brand but accepts alternatives if, for example, the product is out of stock or the retailer suggests another brand. Consumer insistence signifies that the consumer would not accept any substitutes, except in case of emergency. All three stages are described as an attitude with which the consumer ordinarily approaches the purchase of such a product.

In the 50s and early 60s Cunningham published two studies on brand loyalty and store loyalty (1956, 1961). He noted that there was substantial confusion surrounding the concept of loyalty. He argued that "the first step in clarifying concepts was to make a sharp distinction between the record of past consumer purchasing of product brands and the complex or forces which underlie and explain these purchases" (1956, p. 117). Consequently, he studied how households divided their purchases across brands and stores. A similar stance is taken by Tucker (1964), who studied brand loyalty in an experimental setting where respondents had no prior knowledge of the brands available to them. In his paper, he defines brand loyalty as the "biased choice behavior", and argues that degree of brand loyalty can be stated as the relative frequency of which one brand is chosen over others. He states that, "No consideration should be given to what the subject thinks or what goes on in his central nervous system; his behavior is the full statement of what brand loyalty is" (1964, p. 32).

Day (1969) has quite a different approach to loyalty. He opens up his article with the claim that "[t]here is more to brand loyalty than just consistent buying of the same brand – attitudes, for instance" (p. 29). He argues that one cannot infer loyalty from behavioral patterns, as the latter do not necessarily reflect relative brand preference. A similar argument is put forward by Jacoby (1971). Referring to Moulson (1965), Day (1969) points out that behavioral measures do not distinguish between "intentional" and "spurious" loyalty. This distinction is seen as important since spuriously loyal customers are argued to be much more sensitive to competitor activities.

In passing, Day (1969) also notes that when attitudinal criteria are included, loyalty becomes a brand-specific concept rather than a concept describing the overall behavior in the product class. Therefore, a buyer will have a brand loyalty score for all products bought during a specific period, and could be said to have some level of loyalty to all brands used within a product category.

The notion of multi-brand loyalty is further developed by Jacoby (1971). He conceptualizes brand loyalty as consisting of at least two primary facets: brand loyal behavior and brand loyal attitudes. "Brand loyal behavior is defined as the overt act of selective repeat purchasing based on evaluative psychological decision processes, while brand loyal attitudes are the underlying predisposition to behave in such a selective fashion" (p. 26). Drawing on the assimilation-contrast model develop by Sherif and colleagues (Sherif and Hovland 1961, Sherif, Sherif and Nebergall 1965), he suggests that consumers tend to organize the brands they know in a specific product category into regions of acceptance, neutrality and rejection. As noted by the author, the notion of acceptance region is essentially equivalent to the "evoked set" developed by Howard and Sheth (1969). Consumers with only one brand in the acceptance region are uni-brand loyal, whereas consumers with more than one brand in the acceptance region are multi-brand loyal. Thus brand loyalty "serves as an acceptance-rejection function – not only does it select-in certain brands, but it also selects-out certain others" (p. 26).

Jacoby is one of the main contributors to the literature on loyalty and the review written by he and Chestnut belong to the more cited work in the field (1978). They begin their review by comparing two different approaches to understanding what they call Repeat Purchase Buying (RPB): the stochastic approach and the deterministic approach. Advocates of the stochastic approach view RPB as a process which, due to the multitude of its determinants, can be regarded as stochastic. According to a deterministic approach, a limited number of determinants can explain RPB. The authors contend that the deterministic approach has been less successful than the stochastic approach. They consider this understandable, as RPB is multicaused. Instead, they suggest that the deterministic approach could be applicable for a certain type of RPB: "...our position is that a deterministic orientation can be meaningfully applied to a distinct subset of RPB, a subset we refer to as BL [Brand Loyalty]." (Jacoby and Chestnut 1978, p.5). Jacoby and Chestnut thus make a clear distinction between loyalty and repeat purchase in general.

As to loyalty, the authors suggest the following comprehensive definition (previously reported in Jacoby and Kyner 1973) consisting of a set of six necessary and collectively sufficient conditions. According to these conditions, brand loyalty is:

- 1. the biased (i.e., nonrandom)
- 2. behavioral response (i.e., purchase)
- 3. expressed over time
- 4. by some decision-making unit
- 5. with respect to one or more alternative brands out of a set of such brands, and
- 6. is a function of psychological (decision-making, evaluative) processes.

The authors argue that this definition is necessary for delineating loyalty from mere repeat-purchase behavior. However, their definition received severe criticism by Tarpey (1974), one objection being that it does not properly distinguish loyalty from other repeat-purchase behavior. Tarpey contends that if biased behavior is that which is not likely to be the product of chance, and repeat purchasing is by definition biased behavior, only the sixth condition could differentiate repeat-purchase behavior from loyalty. However, he argues that "[t]he sixth condition merely eliminates the possibility of brand loyalty being nothing more than automatic (reflexive) behavior" (p. 214)¹.

Reynolds et al. (1974-75) base their study of store-loyal customers on the following definition: "Consumer loyalty is viewed as the tendency for a person to continue overtime to exhibit similar behaviors in situations similar to those he has previously encountered; e.g., to continue to purchase the same brand and product in the same store each time he needs or wants an identical or similar item." (p.75). They further clarify this definition by stating that this loyalty construct is continuous, multi-dimensional, has a time dimension, a converse, and is applicable at various levels of aggregation.

Two of these aspects are of specific interest in this study. The first is that loyalty is seen as a continuous variable rather than a discrete classification, i.e., there is not a distinction between loyal and non-loyal customers per se, rather individuals should be considered in terms of their degree of loyalty on a continuum from low to high. In theory this would also imply that all individuals to a larger or lesser degree exhibit some degree of loyalty to all the products and services they use. The other aspect is that loyalty is seen as having a converse – consumer switching – which is defined as the tendency overtime to successively choose different alternatives for similar repeat purchase situations. The authors do not, however, discuss how these

¹ The exchange between Jacoby and Tarpey following Tarpey's rather critical comment is an interesting example of eloquent academic mud slinging (Jacoby 1975, Tarpey 1975). However, no synthesis is generated by the exchange; the authors basically maintain their initial standpoints.

two aspects are related. If loyalty is seen as a continuous variable, then a store-switching tendency must also be seen as a continuous tendency. This would also mean that all consumers to a certain extent have a tendency to be loyal and a tendency to switch at the same time.

A more recent view on loyalty, somewhat related to that of Day (1969) and Jacoby and colleagues (Jacoby 1971, Jacoby and Kyner 1973, Jacoby and Chestnut 1978), is provided by Dick and Basu (1994). They also stress the importance of taking into account both attitudinal and behavioral components, but simultaneously acknowledge the difficulties with defining loyalty as a distinct psychological construct. Instead, they view loyalty "...as the strength of the relationship between an individual's relative attitude and repeat patronage" (p.99). A second important difference is the emphasis given to relative attitudes. The authors note that for predictive purposes, it is relevant to take into account consumers' comparisons between brands in a given situation and not only their attitudes, for a positive attitude per se does not automatically translate into behavior. According to the authors, relative attitudes should be based on attitudinal strength and attitudinal differentiation. Thus, if a consumer has strong positive attitudes attributed to several different brands, the relative attitude to each brand is low.

The conceptualization of loyalty as the strength of the relationship between relative attitude and repeat patronage is illustrated in the grid presented below (Figure 2). Loyalty is thus only present when the individual holds a high relative attitude and engages in high repeat patronage behavior. Relative attitude is thus the variable which differentiates "true" loyalty from spurious loyalty. Spurious loyalty could, according to the authors, be caused by situational cues such as familiarity.

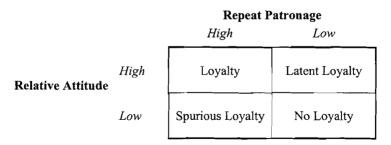


Figure 2. The relative attitude-behavior relationship (Dick and Basu, p. 101)

Dick and Basu (1994) suggest two advantages to defining loyalty as a relationship between relative attitudes and repeat patronage. First, in comparison with distinct psychological conceptualizations of loyalty, the relational definition avoids the problem of poor discriminant validity between loyalty and attitudes. Second, their conceptualization allows for an investigation of antecedents that facilitate consistency. An unclear point of their definition is, however, in what way an individual level concept can be defined as the strength of causality. This would be reflected in difficulties with developing a measure of such a concept. The authors only discuss this in terms of the need for an index, but do not deal with the issue in depth.

The authors also propose a framework for customer loyalty in which antecedents of relative attitudes; non-attitudinal factors that influence repeat patronage behavior; and consequences of loyalty are included (Figure 3). The antecedents of relative attitudes are, in line with general attitude models, structured into three groups: cognitive, affective and conative antecedents. A difference with this approach compared to other research in the area (cf. Fornell 1992) is that switching costs are seen as an antecedent of relative attitude, not as a factor that mediates the effect of attitude on behavior.

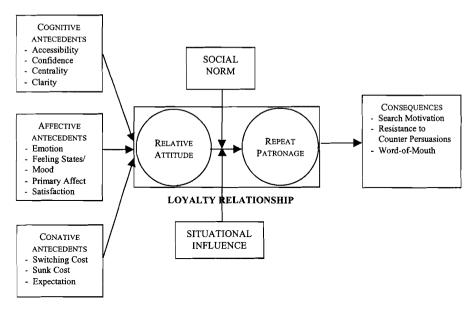


Figure 3. A framework for Customer Loyalty (Dick and Basu 1994, p.101)

Laaksonen (1993) takes a somewhat different view on loyalty. He suggests a "resistance to change" characterization of behavior as the proper expression of loyalty. Only in situations when consumers face pressure from their environment to change their repetitive choice behavior, for example, in the shape of competitive pricing or new entries into the market, will true loyalty to a choice object be re-

vealed. "Loyalty should not be seen as a passive feature like fatigue – rather it reflects the buyer's active resistance to switch the object" (1993, p. 27). That is, in contrast to Dick and Basu's (1994) modeling, resistance to counter persuasion is seen as an aspect of loyalty rather than a consequence of loyalty.

In focusing on service marketing, Gremler and Brown (1996) provide a more recent review of loyalty research and summarize the definitions that have been proposed in the literature. Based on this review they proposed the following definition for service loyalty: "Service loyalty is the degree to which a customer exhibits repeat purchasing behavior for a service provider, possesses a positive disposition toward the provider, and considers using this provider first when a need for this service arises" (1996, p. 173). In comparison with Dick and Basu's (1994) definition, they have added a third dimension called cognitive loyalty. This dimension is described as "what comes up first in the consumer's mind" or a consumer not seriously considering other providers when subsequent purchases are made. The authors do not, however, clearly discuss why this aspect should be seen as a dimension of loyalty rather than a consequence of loyalty.

Zeithaml, Berry and Parasuraman (1996), the influential researchers in the area of perceived service quality, interpret loyalty in the following way: "Loyalty may be manifested in multiple ways; for example, by expressing a preference for a company over others, by continuing to purchase from it, or by increasing business with it in the future" (1996 p. 34). This view implies that "loyalty" is a latent mental construct that is manifested in certain ways.

Oliver (1997), one of the most dominating contributors within the field of customer satisfaction research, contends that although both the Jacoby and Chestnut (1978) and the Dick and Basu (1994) frameworks have advanced our understanding of loyalty, neither of them provides a comprehensive definition. To fill this need, he suggests the following: "Customer Loyalty is a deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior" (1997, p. 392). To further illustrate the meaning of loyalty, he evokes the image of a person who fervently desires to rebuy a specific product and will not accept a substitute. In addition to this definition, he proposes a four-stage loyalty model, which describes the development of loyalty as passing the four stages of cognitive, affective, conative and action loyalty.

Calls have also been made for a more comprehensive view of loyalty. Fournier (1998) argues that a broader, more nuanced perspective on loyalty would be fruitful. She states that "[e]ven well-intentioned attempts to consider loyalty as more than repeat purchase (Jacoby and Chestnut 1978) reduce the process to 'narrowly

cognitive utilitarian decision-making' thus failing to capture 'the talismanic relationships consumers form with that which is consumed' (Belk, Wallendorf and Sherry 1989, p.31)." (1998, p. 343). As an alternative, Fournier proposes brand relationship quality, a construct that allows for a richer interpretation of the strength of the connection between consumers and their brands. Based on findings from an exploratory study, as well as theories from the domain of interpersonal relationships, she specifies six facets of brand relationship quality that in combination affect the strength and duration of brand relationships. These are love/ passion and self-connection (socioemotive attachments), interdependence and commitment (behavioral ties), and intimacy and brand partner quality (supportive cognitive beliefs).

The view of loyalty as a response to a positive evaluation, (as in work by Jacoby or Dick and Basu), may be contrasted with Hirschman's (1970) often cited work. His book discusses how customers, or members, can respond to a decline in quality within an organization or firm by using either exit, that is by leaving the company, or by using voice, that is complaining to the firm. The choice between voice or exit can in some instances be mediated by loyalty: "The importance of loyalty from our point of view is that it can neutralize within certain limits the tendency of the most quality-conscious customers or members to be the first to exit." (p. 79). This view of loyalty implies that loyal customers can stay with a firm despite being dissatisfied, at least for a while.

To summarize, the conceptualization of loyalty has been an issue with which marketing researchers have grappled for quite some time, longer than might be expected given the current emphasis on customer loyalty as a relatively "new" phenomenon. Already in 1973, Jacoby and Kyler contended that marketing academics had been intrigued by brand loyalty for three decades (Jacoby and Kyner 1973). As noted in the introduction, this has not, however, resulted in a coherent view on what should be meant by "loyalty" in marketing contexts. As will be discussed below, there is also diversity concerning how "loyalty" has been operationalized in empirical studies. After the review of measurements of loyalty, a brief summary of both definitions and measurements will be presented.

2.1.4 Loyalty measurement

The issue of loyalty measurement is not only interesting from a methodological perspective, because a discussion of the different types of measurements used is important for interpreting results from previous studies. Loyalty has in many studies been empirically defined on the basis of available measurements, which also warrants a closer look at the measurements themselves.

In their survey on loyalty research mentioned above, Jacoby and Chestnut review a number of measures that have been asserted to capture loyalty (1978). They distinguished between three basic groups of measurements: behavioral, attitudinal and composite measures. To this author's knowledge, no such thorough review has been performed since, and most measures used to date fall into one of these three categories. Moreover, no general agreement has been reached on what measures should be used, and the situation described by Jacoby and Chestnut as "Chaos in Researchland: the sorry status of brand loyalty measurement" (1978, p. 57) still prevails. The current review will be based on the overall classification of Jacoby and Chestnut (J&C). If no specific reference is given, the particular measure is included in their review.

2.1.4.1 Behavioral measures of loyalty

On a general level, behavioral measures of loyalty have been criticized for not distinguishing between "true" and "spurious" loyalty. Such measures have also been criticized for lacking a logical-conceptual basis, which becomes apparent, for example, when trying to define the cut-off point between loyal and non-loyal behavior (Jacoby and Chestnut 1978). On the other hand, as noted by Laaksonen (1993), behavioral measures capture that which many regard as the essence of loyalty.

J&C identify five types of measures based on behavioral data. These are 1) proportion-of-purchase measures, 2) sequence-of-purchase measures, 3) probability-of-purchase measures 4) synthesis measures and 5) miscellaneous measures.

Proportion-of-purchase measures

These measures are basically measures of the share of purchases devoted to a specific brand or store in comparison to overall use, or spending, in the category. Such a measure is, for example, used by Cunningham in his early studies on brand and store loyalty (Cunningham 1956, Cunningham 1961). Cunningham's measure reflects the share of purchase devoted to the brand or store that accounts for the largest, second largest, third largest, share of purchases, etc. Consequently, he refers to these measures as first-store (or brand) loyalty, second-store loyalty. Thus, the way Cunningham uses the measure reflects a degree of behavioral loyalty towards a choice object.

The share of purchase devoted to the main brand, or store, within a category has also been used to classify individuals as loyal- or non-loyal. In these cases a cut-off rule has been used, J&C refer to studies in which these limits have been set to

50 percent, 75 percent or 67 percent, that is customers with a proportion of purchase above the cut-off point are regarded as loyal customers, wheareas, customers with a lower proportion of purchase are regarded as non-loyal customers.

Sequence measures

Another set of measures is based on a sequence of purchases. For instance, Brown ([, 1953 #125]), divided consumers into undivided loyals, divided loyals, and unstable loyals based on sequences of six purchases. A somewhat different approach to studying purchase sequences is the estimation of "number of runs," that is, consecutive sequences of purchases of the same brand or visits to the same store. The lower the number of runs, the higher loyalty is said to be.

A related approach is to measure the number of shifts between brands, or stores. Desmet and Volle (1996), estimate a measure of versatility as:

V= (nT-nS)/nT where nT: number of trips for a given period and nS: number of shifts.

Such a measure is claimed to distinguish between clear conversions from one provider to another, and stable multi-loyalty patterns that would result in a comparatively high number of shifts.

Probability-of-purchase measures

J&C here refer to a number of probability measures such as "First Order (Markov) Probability of Repurchase," which is estimated from a stationary matrix of transition probabilities. Compared to many other suggested measures of loyalty, these measures are mathematically more advanced.

Synthesis measures

One of the measures classified by J&C as a synthesis measure is the index developed by Burford, Enis and Paul (1971) (often referred to as the Enis-Paul index), which is based on three dimensions of behavioral loyalty:

- the budget ratio, i.e., the fraction of total budget for the product class allocated to the loyalty object
- the switching ratio, i.e., the number of opportunities to switch plus one minus number of switches divided by number of intervals in the survey period
- the patronage ratio, i.e., the total number of stores or brands available plus one minus number of stores patronized or brands purchased divided by number of stores or brands in market

Calculating the geometric mean of the three ratios derives the index measure. The authors note that this process could obscure a certain amount of information and that unequal weighing might give a more precise measurement of consumer loyalty. The averaging process also means that consumers with quite different behavioral profiles could end up with the same score. In more recent research, this measure has been used by Denison and Knox (1994), who calculated the index for respondents' primary stores based on purchasing volume. They noted that although the index is not as readily interpreted as proportion of visits, or proportion of spending measures, it offers a more balanced measure of loyalty behavior. Moreover, as their study included a comparison across different types of retailing, they found the index measure to be the most useful for this purpose.

Another type of behavioral index is the *entropy measure* (Carman 1970). This differs from the above-mentioned measures by including the usage of all available brands, or providers, on the market. It is thus explicitly a measure of general category behavior rather than behavior towards a specific store or brand. As an example, the entropy measure would distinguish between two individuals that both place 60 percent of purchases in the first store or on the first brand, but with individual A dividing the remaining 40 percent equally between 4 providers, whereas individual B only uses one provider for these remaining 40 percent. The cross-shopping behavior is much more pronounced for individual A, something that would not be evident from looking at single proportion measures. Carman also noted that the measure seemed to be more sensitive to "shopping around" behavior. The entropy measure is fully explicated in Carman (1970). He suggests the following formula:

$$\theta = -\sum_{i=1}^{k} p_i \log p_i$$

where p_i is the true proportion of purchases going to brand i;

k is the number of brands or stores available on the market.

Miscellaneous measures

Among the behavioral measures that did not fit into the above categories, J&C mention measures that operationalize loyalty as the number of brands bought within a category. This has in other instances been referred to as *repertoire* (Stern 1996). Other miscellaneous measures try to capture loyalty with regression analysis on consistent purchases, in which loyalty is seen as the share of unexplained variance when other factors are taken into account.

2.1.4.2 Attitudinal measures of loyalty

J&C place measures that are strictly based on preference statements or statements of likely behavior in this category. At the time of their review, this type of measure was less prevalent than behaviorally based measures.

Many of the measures in the category are based on the acceptance-rejection view on loyalty as suggested by Jacoby (1971). For instance, brand loyalty has been measured as the distance between acceptance and neutrality regions, and the number (or proportion) of brands in the rejection region. Some studies have used simple questions on preference for assessing brand loyalty. The measure of store loyalty based on psychographic scaling used by Reynolds et al. (1974-75), is also included here.

Among the 12 measures listed by J&C in this category, only one is a measure of intention to behave (more specifically: purchase). However, in many studies published after their review, measures of purchase intentions have been used as operationalizations of loyalty, specifically in studies on customer satisfaction and/or perceived service quality. For example, Cronin and Taylor used the following single item scale: "In the next year, my use of XYZ_____ will be..." measured on a 7-point scale anchored by "not at all" – "very frequent" (1992, p. 67). In a subsequent article, Taylor, together with Baker (1994), used the following three items, measured on 7-point Likert scales, to measure purchase intentions:

a)	The next time I need the services of a	I will choose XYZ.
b)	If I had needed the services of aXYZ.	during the past year, I would have selected
c)	In the next year if I need the services of a	Lwill select XV7

In the Swedish and American Customer Satisfaction Indices, in addition to a repurchase likelihood rating, a measure of price tolerance is included as a reflective indicator of customer loyalty (Fornell 1992, Fornell, Johnson, Anderson, Jaesung and Everitt Bryant 1996). Customers who respond that they are likely to repurchase are asked how much the price could increase before they definitely would not purchase from the provider again, and correspondingly customers indicating a low likelihood of repurchase are asked for the price decrease that would alter their choice. This measure thus reflects Laaksonen's (1993) notion of persistence to switch.

Zeithaml et al. (1996), present a behavioral intentions battery, developed to capture consequences of perceived service quality. Based on factor analysis on 13 items generated from a theoretical discussion, they found that these behavioral intentions could be structured in five dimensions: loyalty, switch, pay more, external

response, and internal response. The loyalty dimension contains the following five items accompanied by a 7-point likelihood scale:

- a) Say positive things about XYZ to other people
- b) Recommend XYZ to someone who seeks your advice
- c) Encourage friends and relatives to do business with XYZ
- d) Consider XYZ your first choice to buy services
- e) Do more business with XYZ in the next few years

The authors note that in the *a priori* four-factor categorization of the battery, items a, b and c were grouped together in a "word-of-mouth" category, whereas items d and e were included in the a priori category on purchases intentions. The latter category also included the item: "Do less business with XYZ in the future" which, however, loaded on the "switch" factor. They found that the factor structure supported the overall classification of favorable and unfavorable responses that they had suggested, so the a posteriori categorization founded the basis for their subsequent analyses. One possible reason for the deviation from the a priori categorization is the use of negatively worded items; in the presented factor solution the two negatively worded items in the battery formed the "switch" factor. As discussed by Babakus and Boller (1992) in their evaluation of the SERVQUAL scale², the use of mixed-item wording can create method factors. Based on the same items battery as used by Zeithaml et al (1996), de Ruyter et al. (1996) found a three-factor structure, which also suggests that some caution should be taken with the interpretation of the dimensionality of behavioral intentions.

A recent example of an attitudinal measure from the retailing sector is provided by Sirohi et al. (1998). They base their study on the following three indicators of store loyalty intentions which were measured on a five-point scale:

- a) likelihood to continue shopping
- b) likelihood to use the store for more of your grocery needs in the next twelve months
- c) likelihood to recommend supermarket to a friend

As in Zeithaml et al. (1996), Sirohi et al. also include a word-of-mouth dimension in their measure of store loyalty intentions.

² The SERVQUAL scale is a multi-item scale for measuring perceived service quality developed by Parasuraman et al. (1988; 1991). It is currently the most widely known measure of perceived service quality and it has been extensively discussed in the research literature; e.g., its dimensionality (cf. Carman 1990, Babakus and Boller 1992, Cronin and Taylor 1992, Dabholkar, Thorpe and Rentz 1996).

2.1.4.3 Composite measures of loyalty

Although several calls have been made for measures that capture the complexity of proposed theoretical models of loyalty, most studies use either attitude-based or behavior-based measures of loyalty. However, as apparent from the J&C review, some composite measures have been presented in the literature; J&C classify 8 of the 53 measures as composite indices of loyalty.

One of the reviewed measures, by Bellenger et al. (1976), is specifically developed for measuring store loyalty. In their study, loyalty was measured by a composite of the following factors (p. 21):

- 1. Percentage of shopping done at the test store. Respondents were asked to provide a subjective estimate of the percentage of their total shopping done at this store.
- 2. Ranking among competitive stores in order of preference, weighing such criteria as product line, distance and time involved in shopping, attitude of store personnel, climate or atmosphere of the store, and availability of parking. Respondents were asked to subjectively rank the test store and each of three competitive stores using these criteria. The order of the ranks was then reversed and the reverse of the rank of the test store was used to weight the percentage from step 1. (Reverse of rank x percentage.)
- 3. The propensity to shop at the test store when the shopper needs an item he thinks the store carries. This factor was measured by the response to the statement, "I shop at (name of test store) when I need an item I think they carry." The respondent was asked to check his level of agreement with the statement as either strongly agree, agree, neutral, disagree, strongly disagree. The answer was then scored one for strongly agree, two for agree, three for neutral, four for disagree, and five for strongly disagree. The order of the scores was then reversed and the reverse of the score was used to weight the index formed in step 2. (Reverse of score x index from step 2.)

One probable result of such a measure is that respondents with quite different profiles on these factors might end up with the same final score on loyalty. Moreover, considering that the factors are measured on different scales that are multiplied without being standardized, they would vary in their influence on the final score.

2.1.4.4 How loyal are shoppers according to various measures?

One way to compare loyalty measurements is to look at the results from studies in which these measures have been applied, i.e., how loyal shoppers are according to these various measures. Data on the distribution of loyalty, or levels of loyalty, is mostly available from studies in which behavioral measures of loyalty have been applied. In studies in which, e.g., measures of purchase intentions have been used, the levels of the degree of purchase intentions, is not usually reported. As these measures in themselves are relatively abstract and not clearly connected to observable behavior, the distribution of such scores is also less easy to interpret.

Several studies have used different versions of proportion-or-purchase measures. For example, Cunningham analyzed store patronage patterns of 50 Chicago families looking at the proportion of food purchases made in particular stores. He found that the households' first-store loyalty varied considerably, from 91.7 to 19.3 percent of total purchases. The average level of first-store loyalty was 48.6 percent. Tate (1961) showed that households generally shopped in at least two stores. During a one-year period, only 10 percent of the members of MRCA's (Market Research Corporation of America) national consumer panel shopped in one store only. Both Cunningham (1961) and Tate (1961) found great variability in patronage, or brand usage patterns across households. Subsequent studies modeling aggregates of store choice behavior across stores have found generalizable patterns of such behavior (cf. Uncles and Hammond 1995)³.

In a previous study on Swedish grocery shoppers (Mägi 1995), customer behavior was compared across four stores. In the study, two behavioral measures of loyalty were used. First, respondents were asked to indicate how many stores they shopped in regularly ("this store only," "two stores," or "several stores"). These answers were combined with the follow-up question on whether or not the focal store was seen as their regular store. Respondents giving an affirmative answer to that question were added to the "one store only" category to form the category "regular customers." Second, a simple share-of-purchase measure was used. The respondents were asked to indicate how often they shopped for groceries and how often they shopped in the focal store (four response categories were presented: 4 times/week or more, 2-3 times/week, 1 time/week, less than 1 time/week). Individuals, who indicated the same number of purchases in the focal store as their weekly purchases, were categorized as loyal. As evident from Figure 4, these approaches give different ideas on how many customers are "loyal."

On average, almost 20 percent indicated that they shopped in the focal store only, but as evident from the chart, this percentage varied by store. Approximately 40 percent shopped in two stores, which means that over a third of the respondents regularly shopped in more than two stores. As evident from the chart, a substantial number of customers considered the focal store their regular store, although this number also varies by store. Based on the share-of-purchase measure, the number of behaviorally loyal customers were fewer. The levels on these figures should be interpreted in the light of the sampling design of the study. Questionnaires were

-

³ These studies are based on the general NBD-Dirichlet model developed in a brand portfolio context (cf. Ehrenberg and Goodhart 1970). This model is used for predicting regular patterns in aggregate measures of buying behavior (Uncles and Hammond 1995).

distributed in-store to randomly selected customers. This means that there is a probable bias towards more frequent shoppers.

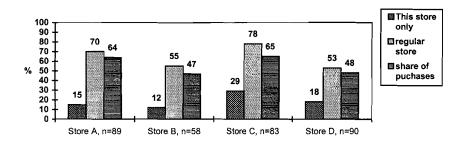


Figure 4. A comparison of different measures of behavioral loyalty (Mägi 1995).

Similarly to Cunningham, East et al. (1997) also measure first-store loyalty. Based on the observation that the term "loyalty" is used to denote different customer behaviors that may have little in common, they study whether first store loyalty and retention are related. They argue that this need not be the case, a shopper might, e.g., spend a relatively small share of his/her budget in a specific store but continue to do so over a long period of time. Their study is based on the responses from a two-wave survey of 551 British households. In their analysis, they divide their sample into a group of high first-store loyals (81 percent or more) and low first-store loyals (less than 81 percent), which yields two groups of almost equal size (52 percent of the sample were high first-store loyals). Defection was measured by comparing which supermarket group was named as the most used in the two waves. This measure was negatively associated with first-store loyalty as measured in the first wave, which indicates that the two loyalty dimensions are positively related. However, correlation analysis showed that these measures of behavioral loyalty shared only two factors that correlated in the same direction: attitude to the store group and brand loyalty. The authors thus conclude that it is necessary to separate different aspects of behavioral loyalty.

Another approach for comparing measures of loyalty is to analyze the extent to which they correlate. Within the sub-group of proportion-of-purchase measures, a close relationship between share of purchases and share of visits has been shown; Tate concludes that the amount of money that a household spends in a store is closely related to the number of visits to that store (1961). Based on panel data, Desmet and Volle (1996) estimated four measures of behavioral loyalty: share-of-store visits, number of stores, a versatility index and the Enis-Paul index. The correlations between these measures (in absolute terms, number of stores was

negatively correlated with the other measures) ranged from .58 to .89. Number of stores was the measure with the lowest correlation to the other measures.

Finally, a few studies have reported data on loyalty levels as measured by attitudinal scales. An example of such data is provided by Day (1969). He found in his study that according to a proportion-of-purchase measure and a 50 percent threshold, 73 percent of the focal brand buyers were regarded as loyal. But when "loyalty" also implied a very or extremely favorable attitude, the brand loyal segment was reduced to 51 percent.

2.1.5 A summary on definitions and measurements of loyalty

This review has illustrated the diversity within the field of defining and operationalizing loyalty. The following section will provide a brief summary of definitions and measurements.

As stated in the beginning, definitions vary according to how different components are related. On a general level, two approaches can be identified: one which treats loyalty as a latent mental construct which is expressed in attitudes and behaviors; and one which refers to loyalty as a description of behavior and does not incorporate possible causes of such behavior into the concept but treats these as separate constructs (Figure 5).

Among the reviewed authors, the *latent mental construct* view is mainly represented by Copeland (1923), Jacoby and colleagues (Jacoby 1971, Jacoby and Kyner 1973, Jacoby and Chestnut 1978), Zeithaml et al. (Zeithaml, Berry and Parasuraman 1996), and Oliver (1997). These authors view "loyalty" as a mental state felt by an individual towards a specific choice object, which is then reflected in the behavior of the individual. The relationship between different indicators is not elaborated upon; an implicit assumption seems to be that if an individual is mentally loyal to a product or firm, he or she will act accordingly. However, it is sometimes admitted that the relationship between different aspects of loyalty is complex. For example, Jacoby and Chestnut (1978, p. 112) acknowledge that attitudinal and behavioral brand loyalty "...must be separated to be properly understood."

The behavioral perspective on loyalty has been taken by Cunningham (1956, 1961), Tate (1961), Tucker (1964) and East (East, Harris, Willson and Lomax 1995, East 1997, East, Harris, Lomax, Wilson and Perkins 1997). These authors are interested in describing behavioral loyalty and understanding its causes and they refute the idea that loyalty should be regarded as anything but behavior.

I. Loyalty as a latent mental construct

Loyalty (latent variable)

Resistance-to-switch

2. Loyalty as a behavioral outcome

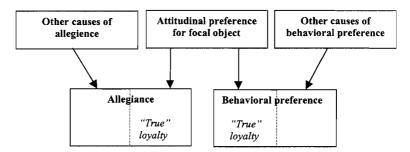


Figure 5. Two approaches to understanding loyalty.

Dick and Basu (1994) present somewhat of a hybrid of these two perspectives. They note that the definition of loyalty as a distinct psychological construct has troubled past investigations. Their conceptualization also differs from the behavioral perspective by stating that not only repeat patronage, but also a relative attitudinal preference is necessary for "true" loyalty to exist. By viewing loyalty as an attitude-behavior relationship they thus do not make any assumptions on the consistency between these two components.

The range of definitions of loyalty makes evaluation of different measures difficult. As eloquently pointed out by Jacoby and Chestnut (1978) the validity of any measurement can only be judged on the basis of an underlying concept or construct. Given that there are alternative conceptualizations of loyalty, a measure of loyalty can be judged both "valid" and "invalid" depending on the conceptualization with which it is compared.

Starting off with Jacoby and Chestnut's evaluation of measures, based on their definition of loyalty, very few of these measures pass the needle's eye (Jacoby and Chestnut 1978). Purely behavioral as well as purely attitudinal measures are refuted since they do not capture the complex nature of loyalty. Behavioral measures are criticized for lacking a conceptual foundation. As argued by other authors as

well, a problem with behavioral measures is that "spurious" loyalty, i.e., continuous patronage of a store or repurchase of a brand, which is not due to a positive attitude towards the object, could be mistaken for "true" loyalty. Although they capture dimensions of loyalty that can not be accounted for by purely behavioral measures, the reviewed attitudinal measures also have their drawbacks, but these are mainly of a technical nature, e.g., low sensitivity. Based on their review, Jacoby and Chestnut conclude that the composite measures would be most promising as they, if properly developed, would capture the complex nature of loyalty. A call for composite indices of loyalty has also been made by, e.g., Laaksonen (1993), and Dick and Basu (1994).

From the *loyalty as behavior* viewpoint, it is clear that both attitudinal and composite measures of loyalty are inappropriate. East et al. (1997) point out that if one wanted to know how different aspects of loyalty are related, then these different aspects of loyalty need to be separately measured. Also, if store attitude is seen as either a cause or result of store loyal behavior, these variables need to be considered separately.

Measures of behavioral (repurchase) intentions, which have developed into the perhaps most common way of measuring loyalty, are problematic for several reasons. From a *loyalty as behavior* perspective, such a measure is only valid to the extent that stated behavioral intentions closely correspond to actual (repurchase) behavior. Since research on the link between intentions and behavior indicate a far from clear-cut relationship⁴, the validity of purchase intentions as a measure of behavioral loyalty can be questioned. Rust et al. (1995), recognizing that repurchase intentions do not necessarily reflect the true probability of repurchase, suggest that measures of intentions could be calibrated by following up on actual repurchase behavior of sample respondents. However, although this approach seems appropriate for continuous measurements within firms, it does not aid in interpreting published results from studies in which repurchase intentions have been the dependent variable, since the relationship between intentions and actual behavior is likely to be very context-dependent.

From the *latent mental construct* perspective of loyalty, the validity of measures of repurchase intentions is difficult to evaluate. On the one hand, if measures of purchase intentions are interpreted as the preferred behavior of the respondent, which would correspond to the attitudinal component of loyalty, the measure could be criticized for not including a behavioral component, and therefore not capturing

_

⁴ Issues concerning the complex attitude-intentions-behavior relationships have been treated by, e.g., Belk (1985) Eagly and Chaiken (1993) Ölander and Thøgersen (1995).

"true" loyalty. On the other hand, one could argue that behavioral intentions could be interpreted as the perceived likely behavior of the respondent and thus do not reflect the attitudinal component of loyalty much in the same way as behavioral measures do not reflect the attitudinal component.

A further comment on measures of intentions concerns the recent development of measures of "loyalty intentions" in which items that have not theoretically been seen as components of loyalty, i.e., word-of-mouth intentions, have been included (Zeithaml, Berry and Parasuraman 1996, Sirohi, McLauglin and Wittink 1998). Although word-of-mouth behavior is believed to have the same antecedents as behavioral loyalty, according to the latent mental construct view, this is not a sufficient reason for including both aspects into one concept. As shown by Söderlund (1998), repurchase intentions and word-of-mouth intentions are affected quite differently by variations in customer satisfaction.

An issue concerning the conceptualization and measurement of loyalty, not specifically related to the two general views outlined above, is whether or not loyalty should be seen as a categorical (loyal – vs. non-loyal individuals) or as a continuous variable. Behavioral measures have been criticized for not providing a logical cut-off point between loyal and non-loyal customers (Jacoby and Chestnut 1978). The same argument should be true for most attitudinal measures as well. However, this should only be considered a problem if the underlying phenomenon is believed to be categorical, i.e., if there are distinct groups of "loyals" and "non-loyals." If this is not believed to be the case, the argument concerning cut-off points should not be considered relevant.

This short summary has attempted to show that there are no clear answers concerning how loyalty should be defined and measured. The question of how to define "loyalty" will be further discussed after a review of some empirical findings concerning determinants of various aspects of loyalty. In this context, it is important to bear in mind the diversity described in the previous section. Studies in which "loyalty" is a dependent variable differ in terms of how this "loyalty" is both conceptualized and measured. Therefore care should be taken when comparing results from such studies. The next two sections cover studies in which asserted loyalty has been the dependent variable. In order to clarify what is meant by loyalty in each instance, the type of measurement used in the study will be specified.

2.2 Studies on "loyalty" as determined by customer evaluations

As customer loyalty has been assumed to be one of the key factors linking perceived service quality (PSQ) and customer satisfaction (CS) to financial gains for

the company, an increasing amount of research has been devoted to investigating the relationship between PSQ, CS and customer loyalty. Many of these studies have been carried out in a service setting, as well as in a retailing context. In many of these studies, the motive has been to show that empirically, such links exist. However, recent years have also provided some arguments against a too simplistic view of these relationships. In the following section, studies that provide support for these links will presented first, and thereafter some arguments against a simplistic linear view will be presented.

2.2.1 Support for an influence of CS and PSQ on asserted loyalty

The past two decades have seen an ever-increasing research interest in CS and PSQ. The main reason for studying CS and/or PSQ is the assumed positive effects on customer responses such as customer loyalty. Much of this work has been devoted to the conceptualization and measurement of both these constructs and of the antecedents of CS and PSQ respectively (cf. Yi 1990, Uusitalo 1993, Mägi 1995 for reviews). This work has, however, yet to result in a coherent picture on how the concepts should be defined and measured or how they are related⁵. There has, for example, been an ongoing discussion about what the appropriate comparison standard should be in the disconfirmation process (cf. Spreng, MacKenzie and Olshavsky 1996). Moreover, customer satisfaction has been conceptualized as a transaction specific judgement (emotion) or a global (cumulative) concept (Anderson, Fornell and Lehman 1994).

Somewhat less attention has been turned towards empirically establishing the effects of CS/PSQ. However, findings have been presented that support a positive link between perceived service quality, or customer satisfaction, and some measure of loyalty, mostly repurchase intentions. For example, Cronin and Taylor (1992) use LISREL to investigate the relationships between PSQ, CS and repurchase intentions, as measured with a single-item scale (see section 2.1.4.2). Their model showed significant path coefficients between CS and repurchase intentions ranging between .36 to .84 across four industries. Based on data from the

⁵ Despite that some confusion surrounds the concepts themselves, PSQ and CS are generally viewed as related, but distinct concepts (cf. [Mägi 1995; Parasuraman, Zeithaml and Berry 1994; Taylor and Baker 1994] for discussions on the differences between CS and PSQ), although it has been argued that it sometimes is not fruitful to distinguish between the two (Liljander and Strandvik 1993). Empirical studies also show that the concepts' relationships to measures of loyalty are similar. For example, in contrast to their conclusions in their 1992 article, Cronin and Taylor (1994) contend that both PSQ and CS have a significant effect on their measure of loyalty. As the present argument focuses on the effects on loyalty, differences between the constructs will not be focused upon.

Swedish customer satisfaction barometer, Fornell (1992) models the relationship between CS and a measure of loyalty based on repurchase intentions and price tolerance. The resulting path-coefficients, estimated with PLS, range from .13 to .66 for the 33 industries that were included in the study. Fornell argues that the differences between industries can be understood by looking at switching barriers. For example, for state monopolies the effect of customer satisfaction on loyalty should be low as customers only have one option, whether or not they feel satisfied with it. A positive relationship between PSQ and/or CS and a measure of repurchase intentions or a more widely defined measure of loyalty intentions have also been found by, among others, Anderson and Sullivan (1990), Boulding et al. (1993), Taylor and Baker (1994) de Ruyter et al. (1996), and Zeithaml et al. (1996).

Many of these studies have been conducted for other services or products than grocery retailing. As the relationship seem to vary between industries, one should be careful about generalizing the findings to the retailing sector. There have, however, also been some specific studies on customer satisfaction in retailing. Based on a structural modeling approach, Sirohi et al. (1998) found that service quality had the largest effect (path coefficient: .67) on store loyalty intentions⁶ for choice of grocery store. Other variables that also had a significant effect on store loyalty intentions were merchandise quality perceptions (.47), sales promotion perceptions (.12), perceived relative price (.08), perceived value (.13) and perceived value of competitors (-.13).

There have also been a few studies relating customer satisfaction to behavioral measures of loyalty. In a previous study on customer satisfaction in retailing (Mägi 1995), customer satisfaction scores were compared between those respondents who saw the focal store as the store in which they did most of their purchases and those respondents who did not. The results showed a significant difference between these two groups concerning satisfaction scores as well as service quality evaluations (Table 1) indicating a relationship between PSQ, CS and behavioral loyalty.

In the study, behaviorally loyal customers were on average more satisfied with the focal store than the non-loyal customers were. However, the scaling of the dependent variable does not allow for analyses on the effect of customer satisfaction on the proportion of expenditure in the primary store. Holmberg (1994), who used an ordinal scale for measuring share of expenditure, found a significant but fairly

⁶ See section 2.1.4.2 for how they operationalized store loyalty intentions.

weak relationship between customer satisfaction and share of spending in the respondents primary grocery store (rank correlation coefficient .19).

Variable	Not regular store		Regular store		p ≤
	means	medians	Means	medians	
Customer satisfaction	7.47	8.00	8.78	9.00	.0001
Check-out speed	6.49	7.00	6.16	6.00	n.s.
Price display correctn.	7.30	8.00	7.94	8.00	.05
Assortment	7.61	7.75	8.41	8.75	.0001
Store ambiance	7.36	7.50	8.08	8.25	.0005
Personnel interaction	7.69	7.75	8.53	9.00	.0001
Personnel promptness	7.54	7.50	8.42	8.50	.0001

Table 1. Differences between behaviorally non-loyal (n=112) and loyal customers (n=204) regarding quality dimensions and customer satisfaction. Customer satisfaction was measured with a single item scale on the overall judgement of the store. Means, medians and p-values (Mägi 1995, p. 53).

2.2.2 Why not a very strong relationship between CS/PSQ and behavioral loyalty?

There are two ways in which the relationship might not hold on the individual customer level. On the one hand, there is a possibility that dissatisfied customers exhibit high behavioral loyalty towards a company by continuing to purchase its products. On the other hand, there is a possibility that satisfied customers exhibit low behavioral loyalty towards a company, for example, by using many competing products and services simultaneously. These two situations will be discussed below. A related issue that also will be discussed here is the functional form of the relationship between satisfaction and loyalty.

As mentioned above, Fornell (1992) suggests that switching-barriers, that is, barriers that make it costly for the customer to switch to another supplier, also can create customer loyalty. He argues that: "[I joyal customers are not necessarily satisfied customers, but satisfied customers tend to be loyal customers" (p. 7)⁷. For example, in a monopoly, a customer has just one supplier to choose from. Thus a customer must continue to use the same provider whether or not s/he is satisfied, or alternatively leave the market all together. Fornell (1992) gives a list of other potential switching barriers: search costs, transaction costs, learning costs, loyal

⁷ Note that this statement implies an interpretation of loyalty as only consisting of behavioral loyalty. Unsatisfied customers that behave loyally towards a firm are not "truly" loyal if loyalty is seen as a consistent behavioral response to a positive behavior.

customer discounts, customer habit, emotional cost, and cognitive effort, coupled with financial, social, and psychological risks on the part of the buyer.

In the case of grocery retailing, several possible switching barriers could be present. It could be assumed that learning costs (it usually takes time and effort to learn to find one's way around in a new store), customer habit, the availability of stores, as well as bonuses for loyal customers and charge or credit cards linked to specific retailers, could constitute barriers to switching. Today, households can deposit a sum of money on their retailer card for their monthly food expenses and gain comparatively high interest rates, which would limit their choice of food stores. However, considering that most households regularly use at least two grocery stores, switching barriers perhaps do not play the dominant role in shaping store patronage behavior. If households were dissatisfied with one of the stores they used, it seems reasonable that they simply would shift their purchases to one of the other stores used on a regular basis. In this author's previous study, perceived switching barriers, as measured by the following item "I do all my grocery shopping in this store because I do not have any others to choose from," was low and did not differ between respondents using one store only, and respondents using several stores (Mägi 1995).

Lessig studied behavioral loyalty and its relation to store image (Lessig 1973). Based on the observation that consumers mostly patronize several stores, he developed a measure to indicate a consumer's loyalty across stores. Based on a fifteen-week purchase panel for 91 households, and factor analysis of the share of purchases for three supermarkets and a group of neighborhood stores, he derived three factors expressing different degrees of loyalty. When again compared with the initial share of purchase measures, the interpretation of the factors suggests that behavioral loyalty may be characterized more as avoidance of a certain store than a strong attraction to a store. Lessig suggests that this might be due to consumers' choice of a certain store is not as a result of a positive attitude toward that store but rather because of dislike of other stores. He finds some support for this argument when comparing the loyalty factors with measures of store image (see 2.5.2).

It is also possible that satisfied customers do not exhibit strong behavioral loyalty. According to Reichheld (1993), between 65 and 85 percent of customers who defect say they were satisfied, or very satisfied, with their former supplier. Dufer and Moulins (1989), in a study on the choice of three FMCGs, found that there was a positive relationship between satisfaction and stated purchase intentions, but not between satisfaction and actual purchase behavior as measured by follow-up interviews. The authors suggest two tentative explanations for these results. One explanation would be that situational factors, such as the preferred brand being out-of-

stock or in-store promotional activities on a competing brand, would induce the consumer to buy another brand. The second explanation would be that consumers, although satisfied with the brand bought at the last occasion, bought other brands as a result of variety-seeking behavior.

In the previous section, results from a study on Swedish grocery shoppers showed that respondents that have the focal store as their main store on average were more satisfied with this store. However, as becomes clear from the chart in Figure 6, the distribution of satisfaction scores within each group was large. There were thus also "non-loyal customers," i.e. customers who responded that the store was not their primary store for grocery purchases, yet who stated that they were very satisfied with the store. Moreover, there were behaviorally loyal customers who did not give high satisfaction scores to the store.

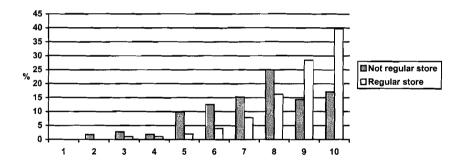


Figure 6. The distribution of satisfaction ratings for loyal vs. non-loyal customers. Satisfaction ratings were based on the agreement in the following statement "I am very satisfied with this store," which was accompanied by a ten-point, disagree (1) - agree scale (10) (Mägi, 1995).

An interesting result from the vantage point of the current study is thus that there are respondents who do not "conform" with the general pattern, i.e., highly satisfied customers who do not seem to be behaviorally loyal, and unsatisfied customers who tend to concentrate their purchases to the focal store. This supports the argument that the relationship between customer satisfaction and behavioral loyalty is likely to be moderated by other factors. This observation was also made by Uusitalo (1998), who studied the perception of stores and shopping behavior of Finnish consumers.

One limitation with analyses such as the one presented above is that the respondents only stated their satisfaction with the focal store for the study, hence their satisfaction with other stores that they might use is not known. The chart clearly illustrates the skewed distribution of satisfaction ratings that distinguish customer satisfaction surveys (Peterson and Wilson 1992); customers in general are quite satisfied with the products and services they use. It would thus not be unlikely that customers who use a set of stores would be equally satisfied with an evoked set of stores. That is, it cannot be concluded from the results that the respondents who "give the store a nine or a ten" also think it is the best store they know. Consumers would then have several products or stores in their consideration sets with which they are equally satisfied, which might thus explain the deviations from a strong linear relationship between satisfaction and behavioral loyalty studied from a one store perspective.

Another explanation of why a clear relationship between satisfaction and loyalty is not always discerned is that this relation might be non-linear. Coyne (1989) suggest that there are two thresholds that moderate this relationship. Above a certain level of satisfaction, repurchase loyalty increases steadily while under another level of satisfaction, repurchase loyalty would decrease steadily. Between these thresholds, however, the degree of loyalty would be relatively unstable.

Building in part on Coyne's (1989) argument, Oliva et al. (1992) apply catastrophe theory for understanding the complexity of the customer satisfaction – loyalty relationship. In addition to taking into consideration possible thresholds, they suggest that the level of customer involvement explains the extent to which the relationship is linear or non-linear. At a low degree of involvement, the relationship between satisfaction and loyalty is linear. The more involved the customer, the more loyal and resistant to change her or she is, and therefore a single or low number of unsatisfactory purchases would thus not be enough to change the beliefs of a loyal customer.

However, when the involved customer becomes very dissatisfied, former loyalty will sharply turn into avoidance. In other words, the more involved the customer, the steeper the thresholds between loyalty and avoidance. As the measure of loyalty used in the empirical assessment of their theory captures the overall evaluation of the service provider rather than "loyalty" according to any proposed

definition, it is hard to draw any conclusions from their study⁸. This does not, however, diminish the plausibility of their initial suggestions.

Zeithaml et al. (1996) also address the issue of a non-linear relationship between perceived service quality and loyalty. However, in contrast to Coyne (1989), they suggest that the effect of perceived service quality on loyalty is stronger between the thresholds, rather than above and below the thresholds. Their operationalization of thresholds is based on a zone-of-tolerance framework, that is, between two levels of expectations — adequate service (lower bound) and desired service (higher bound) — customers perceive service performances to be tolerable. This set of expectations also corresponds to the thresholds in the model. In the analyses reported in the article, in which the dependent variable was the measure of loyalty intentions described in section 2.1.4.2, the authors found partial support for this hypothesis (1996). However, they also note that in spite of an overall large sample, the number of respondents below or above the zone-of-tolerance was relatively small, which diminished the possibilities to detect changes in the slope above and below this zone, as compared to within the zone.

The nature of the relationship between satisfaction and/or perceived service quality and loyalty is also related to the nature of the dependent variable. Zeithaml et al (1996) used a measure of intentions, and in theory there is no limit to how strong the *intention* to repurchase or behave loyally in general could be. In contrast, if loyalty is regarded as behavioral preference, that is, how much or how little of total spending is made at the focal store, the dependent variable is limited in range. Figure 7 presents a schematic illustration as to how thresholds could moderate the relationship between customer satisfaction with one store and behavioral loyalty in terms of behavioral preference towards this store.

As indicated by the figure, the non-linearity in the relationship is due to that there is a limit to how behaviorally loyal, in terms of behavioral preference, customers can be. For consumers who make all their purchases in a specific store, their share-of-purchase cannot increase with increasing satisfaction. Correspondingly, there is a low level of satisfaction after which the customer will cease using the store. Between these levels, behavioral loyalty should increase with increasing satisfaction.

⁸ Brand loyalty was measured with the following item: "GE Supply does a better job than my other suppliers in meeting my electrical supply needs." As the authors themselves point out, it would be more relevant with a measure of loyalty that enables the identification of "key independent variables that drive purchasing behavior" (Oliva, Oliver and MacMillan 1992, p. 92).

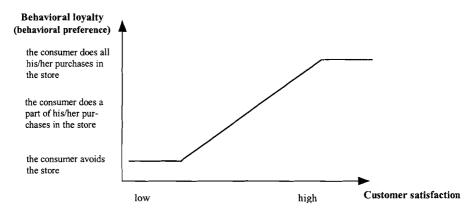


Figure 7. Theoretical threshold effects of customer satisfaction on customer behavior for grocery retailing customers.

The simple threshold model implies that very satisfied customers would be unistore loyal. Taking into consideration that many customers regularly use several stores, this would further imply that most customers are not fully satisfied with the stores they use and therefore spread their purchases across stores. However, this is contradicted by the results from Mägi (1995). It seems that customers can be "promiscuous" even if highly satisfied with a store. In this case, they fall into the shaded area in the figure below (Figure 8).

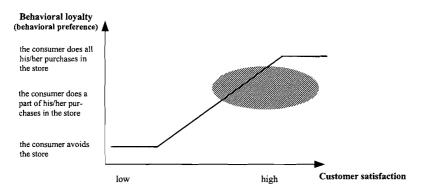


Figure 8. Theoretical threshold effects on customer behavior for grocery retailing customers, II

2.2.3 Summary

A number of studies published to date provide consistent support for a relationship between PSQ, CS and loyalty. However, there are also studies which indicate that there need not always be a strong relationship. Moreover, it should be taken into consideration that most of these studies in which a relationship has been found are based on survey data in which customer loyalty has been operationalized as repurchase intentions, or a wider set of response intentions including, for example, word-of-mouth behavior.

Two consequences of the use of measures of intentions are worth commenting upon. First, as discussed previously, the use of intentions as an indicator of loyalty is problematic. Especially if behavioral loyalty is seen as a necessary component of loyalty, one needs to make the assumption that behavioral intentions are good indicators of behavior. However, this need not always be the case. Second, the behavioral intentions measures are usually framed in abstract terms, such as "continue to buy," "use more," "consider repurchase," etc. This does not take into consideration that the base-rate of usage might be low, or that the service-provider or brand at the time of the survey only accounts for a limited share of the customer's category usage. Whether or not this is an important objection hinges on how "loyalty" is defined. If the behavioral component of interest is whether or not a specific customer continues to use a particular store or service over time, it should be of lesser importance, but if the *extent* to which the store or service is used is of interest, then the findings from most previous studies give little information.

Another consideration is that most studies are made from the perspective of one service provider, or store. Also, satisfaction or perceived service quality with alternative choice objects are not usually taken into account. Therefore, little is known of whether respondents that are more satisfied with the focal store or service provider have strong attitudinal preferences for this store or service provider. If a consumer does not perceive large differences between choice objects, he or she would likely be more or less equally satisfied with them. In such a case, it is plausible that satisfaction per se is not an important antecedent of behavioral loyalty in terms of the extent to which the store or service provider is used.

Furthermore, one issue which should be considered when assessing the effects of PSQ and CS on behavioral loyalty as based on cross-sectional data is the causal order between attitudes and behaviors. As noted by East et al. (1997) a strong correlation between store attitude and first store loyalty cannot automatically be interpreted as a causal effect of attitudes on behavioral loyalty.

To put it strongly, many of the above-reported studies only show that we can consider using or buying things we like again. They do not provide strong support for a theory that customers who are more satisfied with a certain store or service provider use it more extensively than those who are less satisfied. Thus, although a number of studies consistently have shown a significant relationship between CS/PSQ and loyalty as measured by some kind of intentions measure, the link to actual behavior is unclear. The few studies in grocery retailing that more explicitly have looked at behavioral measures of loyalty indicate that this relationship is less straightforward (Holmberg 1994, Mägi 1995).

2.3 Studies on "loyalty" as determined by shopper characteristics

In contrast to the current espoused view according to which customers' loyalties are seen as the result of their evaluation of the service or product, some, mainly earlier research has hypothesized that variations in degree of loyalty are due to shopper characteristics such socio-economic situation or psychological make-up. That is, loyalty – in this context mostly viewed as behavioral loyalty – is more or less regarded as something due to the consumer's personal characteristics, rather than something the firm can affect by performing well. This approach is clearly illustrated by the following quote from Reynolds et al. (1974-75), who segment grocery shoppers after degree of loyalty. They note: "Store loyalty is often postulated to be a useful basis for market segmentation. This raises several questions: should the retailer pursue the store-loyal consumer? If so, can the loyal consumer be identified? If identified, can he be reached?" (p. 73). In their study, the loyal consumer, as assessed with a psychographic scale, was in general a relatively conservative, inactive, time-conscious, hometown oriented person. She tended also to be older, have a lower education, and have a lower family income.

As shown previously, early studies on behavioral loyalty showed great variance across customers in terms of the proportion of expenditure spent in the first store (Cunningham 1961; Tate 1961). These authors did not, however, elaborate on the reasons for this variance. Later studies have tried to explain the variation in this aspect of store choice behavior, i.e., degree of behavioral loyalty. Explanatory variables that have been used are demographic and socio-economic variables – particularly income – and psychological constructs. Moreover, other shopping behavior dimensions such as total spending and frequency of shopping, which in turn have been assumed to be affected by shopper background variables, have also been related to behavioral loyalty.

Overall, these studies give a somewhat mixed picture of the determinants of the degree of behavioral loyalty. One reason might be that many of the studies have looked for correlations with specific variables, such as age or income, without

strong *a priori* hypotheses on how and why they should affect the dependent variable. However, this line of research has also provided theories about what causes behavioral loyalty. East (1997) identifies three such competing theories which will be used for structuring this section. They are 1) behavioral loyalty as a consequence of resource constraints, 2) behavioral loyalty as a result of a non-shopping lifestyle, and 3) discretionary loyalty, which implies a more "positive" approach to loyalty, that is, shoppers are behaviorally loyal out of choice. In addition, the issue of *loyalty proneness* will be briefly discussed.

Resource constraints

East attributes the argument that behavioral store loyalty is due to resource constraints such as lack of financial resources or lack of time, to Charlton (1973). These resource constraints oblige a shopper to only use a limited number of stores.

One such resource constraint would be a low income. As cited above, Reynolds et al. (1974-75) found that family income was negatively related to degree of store loyalty, that is, the lower the income the higher the degree of behavioral loyalty. Other studies have, however, provided mixed evidence on the effect of income on store-loyal behavior. McGoldrick and Andre (1997) compared British shoppers who either were behaviorally loyal to a Tesco store or "promiscuous" shoppers who cross-shopped at a discount store, and found that loyal customers belonged to higher income groups. Similar findings were reported by East et al. (1997), whereas these authors had found no relationship between store loyal behavior and income in an earlier study (East, Harris, Willson and Lomax 1995).

Another possible resource constraint which McGoldrick et al. (1997) found in their study on "loyal" and "promiscuous" shoppers was that loyal shoppers seemed to be more "time poor." Households with limited time due to long working hours, and/or other time-consuming obligations, might not have the time to compare the offers of different stores and find it more time efficient to concentrate purchases to one store.

Non-shopping lifestyle

The theory of a non-shopping lifestyle as a determinant of behavioral loyalty is taken from Carman (1970). He found that more loyal shoppers were busy women less interested in homemaking, shopping and entertaining. Thus, this perspective is to some extent related to the limited-resource perspective, in that limited time for shopping induces shoppers to be more store loyal. In contrast, the non-loyal shopper was a full-time housewife, interested in cooking and shopping.

In their study on a policy-oriented typology of grocery shoppers⁹, Williams et al. (1978) found a significant difference across the four shopper types in the share-of-budget spent in the favorite store. The apathetic shoppers and the convenience shoppers had a higher share of budget in the favorite store, whereas the price shoppers and the involved shoppers (i.e., shoppers that search for both price and quality service) had a somewhat lower share of budget. In their study on "loyal" and "promiscuous" shoppers, McGoldrick and Andre (1997) found the groups to differ on their responses to some of the shopping habit statements included in the study. In general, the promiscuous shoppers were significantly more bargain hunting oriented. East et al. (1997) also found that in the US, although not in Britain, concern for low prices was related to a low degree of loyalty.

Discretionary loyalty

In contrast to the two theories presented above, discretionary loyalty implies that store loyal behavior is a result of the shopper's or household's choice to behave in this fashion. Households with appropriate resources, such as a freezer and a car, can manage the shopping task more efficiently by one-stop shopping at large, out-of-town supermarkets. Households with limited resources, for example, low incomes, will to a greater extent shop around more. This perspective is supported by findings in East et al. (1997) and McGoldrick and Andre (1997).

Loyalty proneness?

One might argue that if personal characteristics were an important antecedent of loyal behavior, one would expect that consumers would show a general tendency to behave in a more or less loyal fashion, i.e., be more or less loyalty prone. Concerning brand loyalty, Cunningham (1956) did not find any indications of loyalty proneness, when comparing the share of purchases divided between brands in seven product categories. However, East (1997) suggests that Cunningham's failure to detect loyalty proneness was due to his exclusion of purchases on deals. East furthermore reports findings of a stronger relationship between loyalty across brands. Concerning store loyalty, Goldman (1977-78), who studied shopping behavior for furniture, ladies' shoes and women's clothing did not find any correlation between store loyalty levels across these three product categories. It should, however, be taken into account that Goldman's operationalization of store loyalty was based on a series of three purchases only, so the results should be interpreted with care.

⁹ This study will be more thoroughly described in section 2.6.1.

To date, research on loyalty proneness does not provide a clear picture of the issue. One explanation for the lack of findings supporting the notion of general loyalty proneness could be that individual consumers have different decision-making processes for different types of products, and would exhibit more loval behavior in certain product categories than in others. Jacoby (1971) suggested a relationship between the importance for the consumer of, or ego-involvement in, a specific product category and the likelihood of brand loyalty in that category. In this case, the consumer is more likely to perceive important differences between available brands, and have stronger preferences and rejection tendencies. Fournier (1998) presents findings from in-depth interviews that are in line with this interpretation. One of her research subjects is strongly brand loyal when it comes to make-up, Classic Coke, and running shoes, which are product categories that reflect her interest in and concern for a youthful appearance, but does not have any special brands in other product categories. In contrast, another subject, who prides herself on being an admired home-maker, has strong brand preferences for product categories related to home-making, such as some food items and detergents.

To summarize, research on how shopper or household characteristics affect store loyal behavior has been, in comparison to the CS/PSQ literature, fairly limited. The results are also less clear-cut. Perhaps this is due to more vague theoretical ideas on how shopper characteristics should be related to store loyalty. Notwith-standing, this line of research has provided some interesting insights. In particular, there seem to be consistent findings that value-orientated shoppers who engage in more price search activities, that is, are more shopping prone, are less behaviorally loyal in terms of preference (Carman 1970, Williams, Painter and Nicholas 1978, East, Harris, Lomax, Wilson and Perkins 1997, McGoldrick and Andre 1997).

2.4 Summarizing research on "loyalty"

It appears that the transfer of an everyday term into marketing research terminology as a theoretical construct has been problematic. We all know the meaning of loyalty in the everyday sense of the word, and it seems that much of the work in the area has tended to look for theoretical definitions that match this meaning. For example, Jacoby and Kyner (1973) support their definition by empirically showing that a measure they constructed based on their definition identified differences between loyal and non-loyal customers. This is further explained by Jacoby in his reply to Tarpey (1975, p. 485) as follows: "...the purpose of Phase II of the experiment was to demonstrate that none of the extant definitions of brand loyalty could discriminate between those individuals who only appeared loyal and those who were truly loyal." Jacoby thus refers to an interpretation of "loyalty" which lies outside the realm of conceptual definitions for validating his definition.

But can we validate a theoretical definition only by referring to the same term's everyday meaning? In his criticism of the Jacoby and Kyner definition, Tarpey (1974) argues that a definition of a theoretical concept must be evaluated within a theoretical context and cannot be made in isolation

As a theoretical argument for his definition, Jacoby (1971) claims that behaviorally based definitions of loyalty are flawed in the sense that they do not provide an explanation of the phenomenon. However, he does not elaborate on the benefits of incorporating the explanation *into* the definition of a phenomenon, over the option of specifying a theoretical framework, which includes both the phenomenon that is to be explained as well as the set of factors that are suggested to explain it.

In contrast, East (1997) argues that composite definitions of loyalty such as the one suggested by Jacoby and colleagues (Jacoby and Kyner 1973, Jacoby and Chestnut 1978) is probably a mistake, partially due to operationalization difficulties, but more importantly because the relationships between different aspects are not taken into consideration.

Although there are exceptions, most definitions of loyalty have this in common: "loyalty" is considered a positive evaluation of, or a felt commitment to, an object – that is, a latent mental state – which is reflected in the behavior towards the object. This allows for discrimination between so-called "intentional" loyalty and "spurious," loyalty. Although this distinction is intuitively appealing, there are two difficulties with the two-dimensional conceptualization of loyalty, which will be discussed below. The first relates to understanding the causes of behavior, and is an elaboration on East's argument above, the second concerns the operationalization of "loyalty" defined in this way.

A drawback to incorporating two or more dimensions into the concept of loyalty is that the interesting and intriguing relationships between these dimensions will be disguised. If one is interested in understanding the variation in behavior, there is an evident misuse of information in incorporating the consumer's evaluation of the focal object into the dependent variable, for this represents one of the interesting explanatory variables of behavior. From a practitioner's point of view, a question of great interest should be: "could I make consumers shop in my store more often by making them like it more?" If "liking" and behavior are regarded as components of the same variable, such a question cannot be handled.

If one regards loyalty as a composite of a positive evaluation and behavior, factors that are often seen as antecedents of loyalty such as perceived service quality (PSQ) and customer satisfaction, should be seen as absolute conditions for loyalty rather than possible determinants of loyalty. Loyal customers, according to this

definition, are those who act in accordance with their preferences. To turn Fornell's often cited statement around (1992), this perspective on loyalty implies that loyal customers are always satisfied (per definition), but satisfied customers need not always be loyal. As discussed in section 2.2, there are studies supporting a relationship between e.g., customer satisfaction and patronage concentration measures, but also other studies showing that satisfied customers still use several suppliers, (grocery stores for example), indicating a certain mismatch between evaluations and behavior.

Most of the recent research on (store) loyalty, is conducted from the perspective of a specific brand, service provider, store or store group. Taking the argument put forward within this perspective to the extreme, shoppers that have had the opportunity to evaluate available alternatives should develop an undivided loyalty to the brand or store which turns out to be the most satisfying. However, since previous studies have shown that the majority of consumers regularly shop for groceries in more than one store (cf. Cunningham 1961; Laaksonen 1993; Mägi 1995), the need to take the whole patronage pattern into account when analyzing store loyalty and store choice behavior is underscored. When taking the whole usage, or patronage, pattern into account, one needs to consider the consumer's or household's evaluations of all available stores. For example, why do some shoppers who are very satisfied with a store still mainly shop in another store? How do consumers, who are equally satisfied with several stores, choose between them? As suggested by previous research, plausible explanations for how households divide their purchases across stores, and more specifically the extent to which purchases are concentrated to a main store, might be found among individual shopper factors rather than store specific factors. Although research on the effects of shopper characteristics on store loyalty is comparatively limited, it has provided some interesting findings, e.g., that price-oriented consumers would be less store loyal in terms of behavior.

In most of the literature, the issue of whether loyalty should be seen as a continuous or a dichotomous variable is seldom discussed. The point is only explicitly raised by Reynolds et al. (1974-75), who suggest a continuous conceptualization. However, other authors have criticized some behavioral measurements of loyalty on the basis that these do not clearly distinguish between loyal and non-loyal individuals (Jacoby and Chestnut 1978, Laaksonen 1993). This criticism implies that these authors view the construct itself as a dichotomous variable. The "regular" use of the concept in marketing also implies a dichotomy: companies strive to gain loyal customers but do not want non-loyal customers, which implies that they see these as two distinct groups of customers. However, judging from empirical investigations on behavioral loyalty, (cf. Cunningham 1961, East, Harris, Lomax,

Wilson and Perkins 1997), it seems clear that behavioral loyalty is continuous. Rarely, consumers use only one store or one brand within a product category and although some stores or brands are used repeatedly over time, undivided behavioral loyalty over time is, in most cases, the exception.

When considering the attitudinal dimension it also seems plausible that consumers differ by degree in their commitment to products and services. If, then, loyalty is seen as the composite of these two dimensions, and consumers can vary in degree along both dimensions, it is not clear how different levels of the composite should be interpreted and how a composite measure of loyalty should be operationalized. Is an individual with high behavioral loyalty and a lower degree of attitudinal loyalty more or less loyal than someone who is very committed (high attitudinal loyalty) but spends a smaller share of budget on the store or product in question (Figure 9)? Conversely, a specific index-value of loyalty that includes these two components might be the result of quite different sets of consumer behaviors and attitudes. Depending on the algorithm for deriving the index, consumer A and consumer B in Figure 9 might end up as being equally "loyal" although their behaviors and attitudes have different implications for the store or service provider in question. Thus, it seems logically difficult or perhaps even impossible to construct a measure of a two-composite loyalty concept that is not dependent on a number of arbitrary decision rules for how observations should be translated into an index. The lack of success concerning unequivocal indices of behavioral loyalty underscores this proposition.

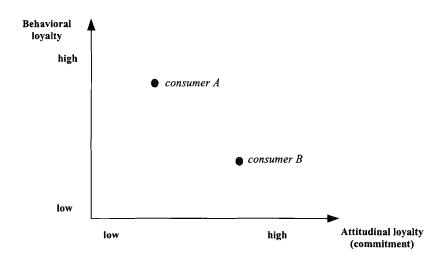


Figure 9. A two-dimensional continuous conceptualization of loyalty.

To return to the conceptual issue, on the one hand, it might be important to qualify the notion of repeat purchasing or repeat patronage by delineating between truly and spuriously loyal customers. If spurious and intentional loyals respond differently to the activities of the firm, it should be necessary to make this distinction (Day 1969). But based on the above discussion, it is questionable whether it is fruitful to define loyalty as a composite of attitudes and behavior, as such an approach does not generate a straightforward way of interpreting empirical observations. Moreover, it is argued that such an approach does not give adequate attention to the relationships between the components.

To summarize, there is to date a range of conceptualizations of "loyalty" in marketing theory. The question of how to validate theoretical concepts in general seems little elaborated upon within the marketing literature (a recent exception is provided by Teas and Palan 1997). In this study, no attempt is made to assess which of the previously presented definitions that is the "correct" definition, nor to provide an alternative to previously presented definitions of "loyalty." The position taken here, which deviates from the currently perhaps dominating view of loyalty as a latent mental construct, is that it is more useful to view the behavior of shoppers or households separately from possible causes. A major reason for this is that previous research suggests that one cannot assume a close correspondence between attitudes and behavior, wherefore the composite definition of loyalty is problematic for the reasons outlined above. Moreover, possible discrepancies between attitudes and behavior are interesting in their own right. This reasoning leads to the selection of two related, but different, phenomena, both of which have been referred to as "loyalty," as the foci of this study. The phenomena are both related to how shoppers, or households, combine the usage of several stores and how these choices are related to the evaluations of available stores as well as other factors that might explain store choice behavior.

The first phenomenon is degree of behavioral loyalty in terms of behavioral preference, that is, the shares-of-purchase devoted to specific stores. It is mainly the share-of-purchase devoted to the first, or primary, store, that has been denoted "store loyalty." Previous studies have shown that this share varies greatly between households, and to some extent this variation has been explained by shopper characteristics such as age and income. The share-of-purchase in the primary store will also be the focus of this study.

Given that households regularly use several grocery stores, one may question the focus on the usage of only one store. However, the share of total spending in the primary store also reflects the usage of other stores. If a household spends a large share of their total grocery spending in one store, it means that the usage of other stores will be limited. On the other hand, if the spending in the main store is as low

as 35 percent of total spending, the household spreads its purchases fairly evenly over a larger number of stores. The least information of the total store usage pattern is obtained for households spending about half of its budget in one store. In these instances it is possible that the household either has two stores which are used almost to the same extent, or predominantly uses the main store and spreads the rest of its purchases over a larger number of stores. Although this aspect needs to be taken into consideration when interpreting figures of share-of-purchase in the main store, it is not considered to be a critical objection against the use of this approach.

The second phenomenon, which could be seen as a sub-set of the first, is behavioral preference combined with attitudinal preference, i.e., "true" loyalty, as opposed to "spurious" loyalty. Previous studies have indicated that there could be a mis-match between attitudinal and behavioral preferences, and that it should not be taken for granted that an attitudinal preference will always lead to a behavioral preference or that a behavioral preference always is a reflection of an attitudinal preference. This phenomenon makes an interesting object of study, as potential differences in the motivation for a high degree of behavioral loyalty could have consequences for marketing. The lack of empirical investigations based on a definition of loyalty as consisting of both a positive attitudinal preference and a behavioral preference, implies that little is known about the extent to which consumers are "truly" loyal.

The perspective taken here is most closely related to that of East (1997), in that behavior should be separated from its causes, and that of Dick and Basu (1994) in the sense that the relationship between relative attitudes to choice objects and behavioral loyalty is of particular interest.

A focus on the behavioral approach to store loyalty justifies a review of general store choice and store patronage literature, as it is assumed that attitudinal preference is not the only determinant of store choice or store patronage behavior. The next two sections review, respectively, research on store characteristics related to store patronage behavior, and household/shopper characteristics related to store patronage behavior.

2.5 Store characteristics affecting store patronage behavior

2.5.1 Salient store characteristics - an overview

Within loyalty literature, the explanation of the choice of specific stores or other services or products is sought in the satisfaction with or perceived service quality of this choice object. However, the question why shoppers chose certain stores over others has also been thoroughly studied outside the context of store loyalty. Since this research might provide a richer picture on why shoppers chose certain stores, it is briefly reviewed here.

The model of store choice by Engel et al. (Figure 10) presented in their textbook on consumer behavior (1995) serves as a good summary of the main determinants that have been investigated within this line of research. In the model, shoppers use a number of salient evaluative criteria as a basis for their store choice. The overall perception of a store is often called *store image*. In this section the literature on store image will be reviewed first. Thereafter, research on the effects of two of the variables included in the model, location and promotions, will be reviewed separately. Finally, research on the effects of loyalty programs will be reviewed.

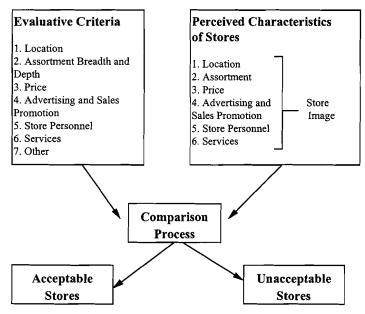


Figure 10. The store choice process as a function of salient variables, (Engel, Blackwell and Miniard 1995, p. 846.)

2.5.2 Store image

Store image has long been considered an important determinant of store choice. Zimmer and Golden (1988) provide the following definition of store image: "The image of a store consists of the way it is perceived by consumers." The authors

note that the difficulties arise when one attempts to describe more specifically what store image is, or when one tries to measure it.

Since Martineau's (1958) seminal article on store personalities, store image research has constituted a major field within retail studies. In this field, one frequently cited article is a review by Lindquist (1974-75) on 19 store image studies. He found that all researchers stressed that store image is complex, consisting of a number of both tangible and intangible factors. On the basis of previous empirical results as well as suggested hypotheses, Lindquist provides a list of nine store image attributes: 1) merchandise, 2) service, 3) clientele, 4) physical facilities, 5) convenience, 6) promotion, 7) store atmosphere, 8) institutional factors, and 9) post-transaction satisfaction.

Almost fifteen years later, Zimmer and Goldman (1988) contend that most of the lists of attributes used in image studies have not been carefully scrutinized. They mention the Lindquist article as one that is used fairly routinely as a basis for selecting attributes, although some attributes were only presented as suggested hypotheses in the article. They find that in surveying consumers' perceptions of attributes only, important parts of the overall image of a store, seen as more than the sum of its parts, are not covered. In their study, they used an open-ended question to survey respondents' images of three different retail-chains. The content analysis performed on the answers resulted in many of the same categories mentioned in earlier studies. However, they also found that respondents used more general comments when describing stores, such as "tackiness," or similarities to other stores.

In line with the findings from Zimmer and Golden and based on a critical assessment on the image literature, Keaveney and Hunt (1992) contend that there is an inconsistency between the common attribute-based measurements of store image and the conceptualization of image as a global impression. However, their discussion mainly concerns how consumers differentiate between types of retail formats, such as, supermarkets, and discounters, and not how consumers differentiate between store within a specific retail format, such as, two competing supermarkets.

A less critical stance toward traditional research in the area is taken by Darden and Babin (1994). However, these authors suggest that a better understanding of consumers' store images could be reached by accounting for both the affective meaning of a store and the more traditional aspects of cognitive-functional meaning such as those associated with assortment, price policy, etc., that are usually assessed in store image studies. In their study, measures of *pleasantness*, *unpleasantness*, *activity* and *sleepiness* significantly contributed to explaining variations in an overall global measure of store image. Furthermore, the functional

and affective components were to some extent related. For example, perceptions of discount prices were negatively related to the affective component pleasantness.

There are apparent similarities between store image and the concept of perceived service quality. Both concern the customer's evaluation of a service offer, but PSQ refers to services in general, and store image relates to evaluations of the store as a service offer. In the influential work on PSQ by Parasuraman, Berry and Zeithaml (Parasuraman, Zeithaml and Berry 1988, Parasuraman, Berry and Zeithaml 1991, Parasuraman, Zeithaml and Berry 1994) a generic dimensionality of perceived service quality and a measurement instrument for services in general is proposed. However, concern has been raised about the generalizability of this dimensionality across service industries. For retailing, an alternative conceptualization and measurement of PSQ have been proposed by Dabholkar et al. (1996). Compared to conceptualizations of store image, their conceptualization focuses mainly on the intangible aspects of the store, whereas the evaluation of assortment is only included as one indicator of the quality dimension "policy."

The above mentioned articles are just a few of the many that concern store image. However, most research in the area is concerned mainly with conceptualization and measurement issues. The relationship to patronage behavior, although seen as one of the justifications for research in the area, has less frequently been the focus of these studies. Summarizing some of the available studies on this issue, Peterson and Kerin (1983) contend that store image has some effect on store choice behavior, explaining 15-20 percent of the variance in patronage decisions, although it typically has been shown to be rather less important than driving time and distance to store.

Lessig (1973) provides some interesting findings on the store image-store patronage relationship. In his study, the choice of a specific store was related to unfavorable images of other stores as well as a positive image of the chosen store. Thus it is not only the perceptions of the chosen store, but rather these perceptions in comparison to perceptions of non-chosen stores that are important for store choices. These findings are in line with Dick and Basu's (1994) argument that relative attitudes, rather than absolute attitudes, are important. This also indicates that a consumer's total choice set needs to be considered when analyzing specific choices.

To summarize, store image research constitutes a dominant area within retailing studies, but has mostly been concerned with determining the definition of store image. Empirical data from this line of research support the argument that the attractiveness of a store is one determinant of consumers' store choices, at least for some consumers. However, one problem lies in causality — do we shop in the

stores we like or do we like the stores we shop in? (East, Harris, Lomax, Wilson and Perkins 1997). There is also a problem with the way we analyze these relationships as we usually have a store or unit perspective and do not fully consider all the choices of the respondents – relative attitudes and evaluations are seldom considered. That is, although some consumers might shop in a store they like, it is not clear whether they shop in it because they have a strong preference for this store, or whether they find it as good as many others but the one most conveniently located.

2.5.3 Store location and its effect on shopping behavior

As shown in the model by Engel et al. (Figure 10) and the discussion in the previous section, store location is sometimes included in the concept of store image. As a separate variable, store location is one of the variables that has received much attention in research on store choice, and it is often seen as the most, or one of the most, important determinants of store choice. For example, Bell et al. (1998) refer to industry research suggesting that location explains up to 70 percent of the variance in the choice of supermarket.

Starting with Huff (1962, 1964), spatial interaction models have been developed to determine how accessibility versus attractiveness affect the choice of retail outlet (cf. Marjanen 1993 for a review). In Huff's model, individuals are assumed to maximize the ratio of utility gained from shopping at a retail outlet to the disutility incurred by the traveling time to the retail outlet. The size of the retail outlet, i.e., the total floor space, is used as a proxy for the size of assortment available, and thereby the utility of using a certain outlet. This type of model has been shown to have good predictive validity concerning trade area estimations.

Stanley and Sewall (1976) pointed out that although size is a good proxy for the utility of shopping centers, it is less useful for understanding the attractiveness of individual stores. They suggested that the inclusion of a measure of store image could increase the predictive validity of spatial interaction models for estimation of the patronage of single stores. In the empirical assessment of their proposition, they used a measure of store image based on similarity-dissimilarity data on the included supermarket chains and an "ideal" chain. This measure significantly contributed to the explanation of the probability of store choice, whereas store size was not related to store choice. However, based on their results, the authors contended that distance remained the major factor in predicting store choice.

A recent contribution to store location research is made by Bell et al. (1998). In their model of store choice, they take into account that each shopping trip incurs both fixed costs, such as traveling time and variable costs due to the basket size and the prices of the items in the basket. That is, a longer traveling distance to a store could be off set by lower prices, but only if the number and type of items at lower prices makes the savings "worth the trip." In their empirical assessment, they find support for this model, although the effect of the variable costs is comparatively small. Their study shows, moreover, that there are segments that respond very differently to these costs. The households differed significantly over their sensitivity to distance, which indicates that location not always is a strong determinant of store choice.

In the previously referred to study on behavioral loyalty to Swedish supermarkets, 40 percent of the respondents indicated that the focal store was the store closest to their home; thus for 60 percent, it was not the closest store (Mägi 1995). This is a further indication that location in itself is an important, but not key determinant of store choice. However, it is plausible that respondents, who did not live by the store, also were the less frequent patrons of the store. Therefore, the study also looked at differences between categories of high and low behavioral loyalty respectively. It would be expected that respondents living close to the store would be highly loyal, whereas others would exhibit a low degree of behavioral loyalty. In Table 2, the share of regular vs. non-regular customers is reported for each category of spatial relationship to the store. As expected, the share of customers for whom the store is their regular choice, is highest for the group for whom the store is the closest store to home. However, 16 percent (19 out of 118) of the respondents for whom the store was the closest to their home, did not have the store as their regular store. Moreover, among the respondents with other stores closer to both work and/or home, there was a significant share that had the focal store as the primary store.

	Not regular store	Regular store
The nearest store to home	13.8%	86.2%
	n=17	n=106
The nearest store to work	69.6%	30.4%
	n=32	n=14
Not nearest to home nor	46.0%	54.0%
work	n=58	n=68
Nearest to both home and	14.3%	85.7%
work	n=2	n=12

Table 2. Store location in relation to home and work, and high, vs. low degree of behavioral loyalty (Mägi 1995).

It should be noted that the four focal stores in the study were located with another store within the range of a few hundred meters, so these results should be interpreted with care. Moreover, the distances between the focal store and other stores were not specified. Thus, respondents might have some stores at almost the same distance from their home, but the focal store is somewhat further away or closer than these stores. Furthermore, traveling convenience might not correspond exactly with the distance between the store/work.

In Holmberg's study (1994) on retail satisfaction with grocery stores, 43 percent of the respondents in the survey found an attractive location very important, and 12 percent found an attractive location to be a decisive factor for grocery store evaluations. Yet in the same study, the correlation between satisfaction with store location and overall satisfaction was weak. The results could be interpreted to mean that a good location is a prerequisite for store choice overall, but other factors affect satisfaction with the store. This suggests that location should be considered separately, rather than as a component of the overall image, as has been suggested in some image research.

Most studies on consumer spatial behavior use the households' residence as the starting point for the estimation of traveling distance to specific stores. This builds on the assumption that shopping trips are mostly performed from home, an assumption which might have been accurate in most cases when most female heads-of-household were housewives, but which may not be the case for today's households where often both spouses work outside the home. As pointed out by Engstrøm and Hartvig Larsen (1987), it is important to consider a household's activity patterns from a temporal and spatial perspective when considering how store location might affect store choices. Households need to fit visits to the grocery store into the general pattern of their daily activities, which could mean that a store conveniently located on the way to work or nearby the children's day-care center might be chosen over the store closest to home.

To summarize, location is an important criterion for consumer store choice. An interpretation of the above results suggests that store location serves as a kind of screening variable: consumers choose between a set of stores that are conveniently located. If the customer is not satisfied with the store that is most conveniently located, he or she will look for another store almost as conveniently located, etc., until a satisfactory trade-off is found between the benefits from shopping at the store and the cost of getting to the store. Taking into consideration that consumers evaluate stores differently – for a specific store some of the households in the vicinity will find it adequate, whereas others will find it unsatisfying in one or several aspects and look for other stores – a straightforward relationship between location and store patronage might not be possible. Moreover, an important factor to take into consideration is that consumers vary in their distance sensitivity and would thus interpret a "convenient location" differently. Furthermore, in different purchase situations, for example, major, versus fill-in trips, different evaluative

criteria could be used; a conveniently located store might be "good enough" for some purchases, but not acceptable for other purchases.

2.5.4 The effects of promotions on shopping behavior

From the store perspective, promotions of different kinds are aimed at influencing store choice behavior. Promotional activities can affect turnover either by inducing customers already visiting the store to spend more, and/or by increasing store traffic. Store traffic could basically be influenced in two ways (Kumar and Leone 1988): if high priced and frequently purchased products such as disposable diapers are promoted, this may lead to cross-shopping due to "cherry-picking" by consumers. Alternatively, the consumers could compare the promotional mix of different retailers and choose the retailer that is perceived to have the best overall offer

How do promotions work in practice? Do they really affect store choice behavior? Unfortunately, most research on the effect of promotions is conducted from the brand perspective and findings on the effect on store choice are thus scant. Many of these studies show a strong effect of promotions on product sales (cf. Walters 1991, Persson 1995, Holmberg 1996). However, sales promotions have been found to have a limited effect on store choice, at least on the aggregate level as reflected in store traffic (see Persson 1995 for a review).

To tentatively explain this lack of significant effect on store traffic, Persson refers to Julander (1984), who argues that the apparent failure of promotional activities to affect store traffic does not necessarily mean that these activities are without effect. Instead, the effects of promotional activities of one store could be overshadowed by activities of competitive stores. If all stores behave similarly when it comes to promotions, the effects might cancel each other out.

Another, at least partial, explanation could be that price advertisements are used by consumers, not always for store choice decisions but for deciding what to purchase within a given store. In Williams et al.'s (1978) study (described on p. 56) there was a variation across shopper types in the usage of advertisements for planning grocery purchases as well as for decisions of store patronage. An interesting aspect of the results of Williams et al.'s study, moreover, is that across all groups, the share of consumers who used advertisements for store choice decisions was lower than the share of respondents utilizing ads for planning of grocery purchases. This indicates that although promotional activities do affect behavior, it is not evident that they determine specific store choices.

A third explanation is that consumers do not usually make store trips for purchasing single items; therefore it should not be expected that a clear relationship between the promotion of a single item, such as pasta in the Walters (1991) study, and store choice could be found. If one takes into consideration that consumers usually buy a list of items, consumers who base their store choice decisions on promotions, would in principle need to compare the prices on all the products on the shopping list. However, considering the effort needed to do such comparisons, it seems plausible that they are nor regularly performed by all shoppers. Another approach would be to base the store choice decision on comparisons of the prices of selected items on the shopping list, such as more expensive meat products. In any case, it seams reasonable that a promotion on one specific item is not usually sufficient to draw customers to a grocery store.

2.5.5 The effect of loyalty programs on store choice behavior

In spite of the proliferation of loyalty programs during recent years, few published studies have investigated the effects of loyalty programs on consumer behavior. One reason for this might be that causal research in this area, that is, the explicit investigation of changes in consumer choice patterns, demands a longitudinal approach. With cross-sectional data, inference about the effect of enrollment in a loyalty program on degree of behavioral loyalty is difficult to make. Even if differences between card-holders and non-card-holders concerning behavioral loyalty are found, this in itself does not provide support for *changes* in consumer behavior induced by such programs. An equally likely explanation is that heavy users of a certain service or brand are more likely to enroll in programs to receive benefits for the large amount of purchases that they are already making.

Dowling and Uncles (1997) provide two skeptic's accounts of the possibilities of loyalty programs for changing customer behavior. Based on research on how individuals react to rewards, they contend that it is difficult to change established behavioral patterns with the type of reward systems that are prevalent today. Moreover, they argue that as established markets have been shown to exhibit regular and generalizable findings – there is a "market norm" for behavioral loyalty – simple add-ons such as loyalty programs are not likely to alter levels of behavioral loyalty. Loyalty programs are most likely to succeed when they enhance the value proposition of the product or service.

In one of the few published evaluations of loyalty programs, Sharp and Sharp (1997) take the "market norms" for loyalty as a basis for evaluating the Australian FlyBuy program. Based on store-choice panel data, they compare actual store-level performance with that expected from Dirchlet estimations. The results provided were somewhat mixed – substantial excess loyalty deviations were only

found for two of the four program participants. However, for these two retailers, Kmart and Shell, these deviations were observed for both customers that were members in the program and customers that were not members in the program. This implies that it is the value of the total offer of these retailers, rather the programs in themselves, that is the cause of these effects.

All in all, surprisingly little is known about the actual effects of loyalty programs on behavioral loyalty, considering the large investments made by retailers in such programs. It should, however, be acknowledged that there are additional benefits for the retailer of launching loyalty/customer membership programs, such as obtaining more detailed customer purchasing data. The effectiveness of such programs thus cannot be judged on the basis of changes in consumer behavior alone. However, it is outside the scope of this study to discuss such benefits.

2.6 Shopper and household characteristics and patronage behavior

2.6.1 Shopper characteristics and patronage behavior

An examination of shopper-related determinants of loyal behavior, has similarities with studies on shopper typologies and shopping orientations. In the seminal work by Stone (1954) it was proposed that different types of shoppers exist, each with a different approach to shopping as an activity. These differences have consequences for how they regard the available stores and, more specifically, their relationship to sales personnel. In a study based on interviews with housewives in the Chicago area, Stone identified four shopper types:

- the economic consumer; a price, quality and assortment-sensitive shopper who valued efficient store personnel
- the personalizing consumer; someone who shopped "where they know my name" and valued strong personal attachments to store personnel
- the ethical consumer; someone who shopped where she "ought to," and supported small, independent merchants but did not have any specific thoughts about store personnel
- the apathetic consumer; someone who shopped because she "had" to, found shopping onerous and who did not have any views on how store personnel should behave

In his sample, the economic consumers constituted 33 percent, the personalizing consumers 28 percent, the ethical 18 percent and the apathetic 17 percent (4 percent could not be classified). Working from a social psychological perspective, Stone's (1954) major interest was in why personalization and moralization was

evident in customer-clerk relationships among urban shoppers, since that finding constituted somewhat of an anomaly from the current urban social psychology viewpoint, i.e., that city life is anonymous¹⁰. Since Stone's article, the idea of shopper typologies has been developed by more marketing-oriented researchers, focusing on other aspects. Some of these studies will be reviewed below.

In 1978, Williams et al. (1978) contended that most prior shopper typologies had been causal, but not policy-oriented, and thus less helpful for retailers in their choices or marketing tools. Consequently, they developed a policy-oriented typology of grocery shoppers. After identifying pricing practices and customer service policies (which they defined broadly, including aspects such as location and shopping convenience), they based their typology on the shopper's level of involvement in either of these practices. Cross-classifying the two dimensions generated the following four shopper types (Figure 11):

		Store or Chain's Pricing Practices	
		High Customer Involvement	Low Customer Involvement
Customer Service Practices Low Custom	High Customer Involvement	Involved Shopper	Convenience Shopper
	Low Customer Involvement	Price Shopper	Apathetic (Uninvolved) Shopper

Figure 11. Grocery Shopping Orientations or Buying Styles (Williams, Painter and Nicholas 1978, p.29)

Empirically, the existence of these shopper types was tested by grouping shoppers according to their evaluations of the store in which they made the largest share of their purchases. In their sample of 298 respondents, 20 percent were classified as apathetic shoppers, 42 percent as convenience shoppers, 27 percent as price shoppers and 11 percent as involved shoppers. Subsequent analyses showed that the

¹⁰ This is an interesting perspective compared to the now embraced view of relationship marketing. In the relationship-marketing paradigm, the implicit view is that most consumers are interested in building and maintaining personal relationships with companies, for example retail firms. That is, rather than being viewed as exceptions, the personalizing consumers are assumed to be numerous.

groups did differ in some interesting ways. It has already been mentioned (see section 2.3) that the groups had different levels of spending in their favorite store. The groups also differed in respect to response to advertisements. A customer's usage of advertisements for both planning grocery purchases and deciding which store to patronize was highest for the involved shoppers group where 79 percent and 70 percent, respectively, claimed to do so. The price shoppers also used advertisements to a high degree, whereas convenience shoppers had a lower share of users and the apathetic shopper the lowest shares, 19 percent and 12 percent respectively.

Based on conjoint analyses of trade-offs between price, distance, assortment and quality made by a sample of Dutch housewives, Verhallen and de Nooij (1982) identified ten retail attribute sensitivity profiles. These were: 1) very price sensitive, 2) service oriented, 3) wide assortment 4) quality good choice, 5) price insensitive, service oriented, 6) nearby quality, 7) distance insensitive, 8) value for money, 9) distance sensitive, and 10) average. In a second stage of their study using survey data on shopping behavior, they identified five different patronage profiles. These were 1) overall discount shoppers, 2) overall supermarket shoppers, 3) once a week discount, rest small retailer, 4) small retail shopper, and 5) once a week supermarket, rest small retailers. They also found an overall correspondence between the sensitivity patterns and the patronage patterns.

Based on a review of a number of studies on shopper typologies and shopping orientations, Laaksonen (1981) contend that the concept of *shopping orientation* is rarely discussed, there is a tendency to increase the number of shopping orientation dimensions, and most studies attempt to classify shoppers according to the most important dimensions into "pure" types. Concerning the last point, he suggests that a profile approach would give a more accurate description of consumers' attitudes towards shopping. In his empirical study, he used factor analysis to derive the four following shopping orientation dimensions, which are used for profiling and cluster analyses:

- ethical support for small local shops
- personal-social relationship to small local shops
- rational-economical relationship to big stores
- recreation relationship

One notable difference with previous work on shopping orientation is the explicit connection to store types, that is, the ethical and personalized dimensions are related to small shops and the rational dimension is related to the perceived usefulness of large stores. This also means that the derived dimensions are dependent on the type of retail structure in which the empirical investigation is conducted. In retail structures with no pronounced differences between available stores, and store formats, e.g., concerning store size, the proposed dimensionality may not be appropriate.

In a study on Swedish households, Tollin (1990) generated a typology of store choice behavior based on focus-group research which generated the following categories. 1) "Price-focusers" – shoppers who planned purchases, and sometimes the weekly menus, on the basis of the advertisements from several stores, and shopped in several stores. 2) "Store loyals" – who had "their own store" and who based their choice on their evaluation and relationship to store personnel and how fresh produce was sold in the store. This group also extensively used price information from the stores. 3) "Flexibles," who shopped regularly and mostly made purchasing decisions in store, not using store advertising to any greater extent.

These categories were subsequently analyzed in a quantitative study. The classification was based on the respondents' level of agreement to two statements: "I shop for groceries in different stores" and "I always read the weekly advertisements from different grocery stores." Individuals who agreed with both statements were classified as "price-focusers" (42 percent), individuals who disagreed with the first statement and agreed with the second were classified as "store loyals" (23 percent), and individuals who had other combinations on these two variables were classified as "flexible" (35 percent). These results indicate a comparatively low level of store loyalty. However, the low figure might to some extent be a result of the classification procedure. According to Tollin's classification, "store loyals" not only shop in few stores, but are also heavy users of advertisements. Those who shop in few stores but do not use advertisements, fall outside the "store loyal" classification. Thus, this operationalization of the category is quite far removed from the more prevalent definitions of loyalty. Moreover, it is not fully congruent with the category descriptions derived from Tollin's qualitative study as the aspects of "own store" and evaluation of the store personnel and fresh produce is not included.

Nevertheless, it is interesting that such a large share of the respondents fall into the price-oriented category, indicating that "bargain-hunting" is an important motivator for choice of grocery store. It should be noted that the quantitative data collection was performed in 1984, when food prices in Sweden were increasing at a higher rate than they are today. It should also be remembered that at that time, the marketing activities of grocery store chains were mostly priced-oriented and relationship-marketing activities, such as loyalty schemes, were unheard of.

The importance of promotions, or "deals," as one of the major marketing tools for grocery retailers has lead to a stream of research that specifically focuses on consumers' response to this type of marketing activity. One issue of study is whether some consumers exhibit a more general tendency to use promotions, i.e., whether there are "deal prone" consumers, and what could explain variations in "deal proneness." Webster (1965), found that deal-prone consumers tended to be older shoppers, and less brand-loyal shoppers. However, income was not related to deal-proneness. One recent study based on self-reported measures concerning usage of different kinds of promotions, found distinct clusters of general promotion sensitive, and promotion insensitive consumers (Lichtenstein, Burton and Netemeyer 1997). These categorizations had significant explanatory effects on shopping behavior as reflected through one purchase occasion (scanner data receipts were collected from the respondents in the study).

In several of the studies on shopping orientation, the price sensitive, or "bargain oriented," consumers come across as an important group. However, this group is not clearly characterized by economic constraints. Thus, it does not seem to be the case that some consumers are more price sensitive than others mainly for economic reasons. Therefore, one should look for additional explanations for why some consumers are more concerned about prices.

Schindler (1989) presents an interesting perspective on why bargain-hunting is an important motivator by introducing the idea of "smart-shopper" feelings. With this term, Schindler refers to "ego-related affect which may be generated in a consumer by a price." (p. 448). By paying a low price for a specific item, a consumer might feel proud, smart, competent or efficient. Thus, there are other positive consequences in addition to getting a "good price" for consumers when buying discounted products. Schindler also notes that it is unlikely that all consumers find these feelings equally important. He suggests that consumers who have less opportunity for expressing competence and efficiency in a work place might be more prone to value "smart-shopper feelings."

Smith and Carsky (1996) also include the notion of "smart shopper" in their study of American women's involvement in grocery shopping activities. They measured the degree of "smart-shopper"-ness by asking respondents to indicate the extent to which the following smart-shopper description fitted them: "I carefully plan my grocery shopping. I like to get the most value for the money. I realize that supermarkets vary their prices over time, so when I see ridiculously low prices on products I want, I stock up on these brands. I also pay attention to grocery store ads and clip coupons for the products I want. This description fits me (1) perfectly; (2) somewhat; (3) uncertain; (4) only slightly; (5) not at all." (Smith and Carsky 1996, p.79). Perhaps not surprisingly, this description was significantly correlated

to reported shopping activities such as use of newspaper ads, coupons and planning shopping trips based on advertisements. More interestingly, those who found the description to be self-descriptive were more involved with grocery shopping in general, as measured with a general involvement scale (Zaichkowsky 1985).

Smith and Carsky's (1996) study also shows that shoppers vary in their involvement in grocery shopping. The authors note that "Because of its ongoing and essential nature, grocery shopping assumes some level of enduring involvement, although the level of enduring involvement would be expected to differ across individuals. To the extent that food and meal preparation are associated with an individual's role within the household and self-concept, involvement with grocery shopping will vary." (p. 74). This argument finds support in Fournier's (1998) case descriptions of how consumers choose brands; one of the author's informants appears to fit the description of a highly involved grocery shopper well. Fournier only looked at relationships to brands and did not specifically cover issues related to grocery shopping in general, but it seems plausible that a high level of involvement in products bought in a grocery store would be related to the level of involvement in the activity of grocery shopping as well.

In an ethnography of North London shoppers, Miller (1998) found thrift to be a central component of shopping, especially when buying provisions for everyday needs. He argues that thrift is not mainly a means of saving money, but rather an end in itself and that this element is as important for wealthy households as for poor. This also means that the experience of saving is more important than actual savings. He found that consumers could justify most purchases as savings when trade-offs between price and quality were made, e.g., through buying larger quantities, buying smaller quantities that reduce waste, buying less expensive items, or more expensive items that represent better value, and so on.

2.6.2 Household characteristics and patronage behavior

The above perspective focuses on how the psychological make-up of the individual shopper affects his or her behavior. However, most models of patronage behavior also include household-level factors as determinants of store choice behavior (cf. Darden and Babin 1994; Falk and Julander 1983; Monroe and Guiltinan 1975). Although an individual shopper might exclusively perform the chore of grocery shopping, the whole household generally consumes the products purchased. For example, household size and number and age of children in the household will thus determine the needs that should be met by the grocery shopping activity.

The household perspective is specifically taken in a model of store choice developed by Engstrøm and Hartvig Larsen (1987; 1990). In their model, which builds on systems theory, the household is seen as a social system consisting of four interrelated structures: demographic structure, resource structure (real assets, financial and time resources), behavioral structure and conceptual structure. The conceptual structure denotes the shared norms and beliefs of the household. Related to grocery shopping, such norms or beliefs could be related to the importance of planning, being economical or "a smart shopper," etc. Norms related to meals could also be important – for example if traditional Swedish cooking is considered valuable, this places certain demands on the assortment offered by stores. The relationships between the four household structures are reflected in usage situations, the organization of shopping, a time/activity pattern, and choice criteria. These four factors do in turn affect store choice behavior (Figure 12).

Usage situations – that is, situations when combinations of purchased products are consumed, e.g., for the weekday dinner, are an important part of the model. When going shopping, households do not buy a list of unrelated products or specific brands, but combinations of products that are needed for one or several specific usage situations. The store/(s) chosen for a specific shopping trip is thus dependent on what needs to be provided for the usage situations in question. Different stores might thus be visited when products for weekday dinners or products for a Sunday dinner with guests are needed. What products are needed for a specific usage situation is an outcome of the family system. Taking the example of the weekday dinner, households have shared beliefs concerning what could be eaten for dinner; what will be served will also be affected by how much time there is for preparation, how many persons will share the dinner, what resources are available, etc.

Available stores are evaluated according to how well they are suited to providing for a certain usage situation. For each specific usage situation there is a set of appropriate stores, called the "store map" by Engstrøm and Hartvig Larsen. The destinations that are possible for a certain shopping trip also depends on the organization of the shopping, that is, what and how many usage situations that will be covered in a specific trip. Furthermore, the time-activity patterns of household members impose restrictions on time available for grocery shopping. When more than one store is appropriate for a specific shopping trip, and the household has to make a selection between stores, choice criteria concerning price and/or quality of specific products will determine the destination for the shopping trip. What products or brands are important is, again, a function of the family system and the needs related to their usage situations. For example, for families who need to buy large quantities of milk for many children, the price of milk might be such a choice criterion.

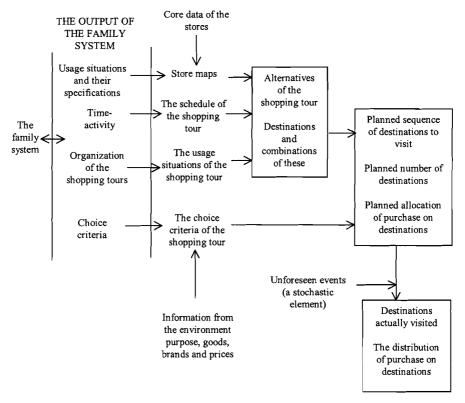


Figure 12. Enstrøm and Hartvig Larsen's model of store choice (Engstrøm and Hartvig Larsen 1990 p. 1048). Details of the family system are not included.

In a study on household grocery purchasing, in part inspired by the Engstrøm and Hartvig Larsen framework, Holmberg (1996) followed ten households during a planning and purchasing occasion for groceries. The purpose of the study was to provide an in-depth description of how households used grocery stores in the decision-making process for "getting food on the table." As could be expected, the studied households had different views on when and what to eat and how to plan their grocery purchases (i.e., the conceptual structure). For some, eating as well as buying food was seen as one of the more boring aspects of everyday life whereas others, in contrast, regarded food and family dinners as one of the joys of life. Their level of planning also differed – some made extensive weekly plans for menus and purchases, in some instances based on leaflets from the stores, others did not decide on the evening meal before coming to the store. Some used the store as a source of inspiration for what to eat; others structured their purchases closely with detailed shopping lists, mainly using the store as a storage place. In

other words, the households used the marketing activities of stores and the stores in themselves quite differently.

The households' store-choice patterns also differed in terms of what and how many stores were used. Involvement and interest in food seemed to be related to how stores were perceived, in that the households with a greater interest in food were also more concerned about, for example, the knowledgability of personnel, the quality of fresh products, etc. This suggests that it would be more likely to find persons that have strong preferences for particular stores among households that are more involved in food-related issues.

Due to the low number of households studied, no specific hypothesis concerning the relationship between the family structures and store patronage can be inferred. However, Holmberg (1996) shows that households do use the store and the instore environment very differently. Although this might not seem a very remarkable observation, how stores are used should have clear implications for how stores are evaluated and chosen – something that is not acknowledged by current models of store choice. As an example, in the study by Bell et al. (1998), store choices are hypothesized to be in part affected by the cost of planned purchases at various outlets; there is thus an implicit assumption that households chose stores after they have decided what products they will buy.

From the above, it can be inferred that household characteristics that are important for understanding patronage behavior not only include traditional socio-demographic variables such as income and household size, but also the households' shared beliefs on how activities concerned with food preparation, consumption and purchasing should be carried out. This perspective implies that households seeming very similar in terms of household size, income, residential area, etc. still might behave very differently. This could be one explanation of the rather modest relationships between socio-demographic variables and store choice behavior that have been found, for example in studies on behavioral store loyalty.

2.7 The shopper/household and store perspectives: a synthesis

In the above literature review, explanatory factors for store choice behavior and store-loyal behavior have been divided into shopper and household-specific versus store-specific factors. However, this division is in a sense forced, since these factors cannot be assumed to function independently of each other. This is clear, for example, when looking at Williams et al.'s shopper typology (Williams, Painter and Nicholas 1978), which divides shoppers into categories based on how they react to store attributes and market activities. The interdependence between shopper and household characteristics on the one hand and store or market characteristics

on the other is also acknowledged in several store-patronage models, e.g., Darden (1979), Falk and Julander (1983), Laaksonen (1993), and Monroe and Guiltinan (1975). Of these, Laaksonen's model is one of the more comprehensive, synthesizing a large body of previous research. The explicit notion of choice tactics is a further reason for why his model is chosen for closer scrutiny.

In a large part of the studies reported above, the focus is mainly on the consumer's internal problem-solving process and, as suggested by Laaksonen (1993) this might constitute a too restrictive view on dynamic behavior such as grocery shopping. "The basic theoretical nature of ongoing behavior is not so much the internal problem solving, than the interaction between a shopper and his environment" (p. 36). Based on this view, as well as an extensive review of the patronage literature, Laaksonen develops a comprehensive model of dynamic patronage behavior (Figure 13).

The model includes several of the factors described in the present literature review, such as household characteristics; shopping orientation; the character and competitive activities of stores; instrumental behavior in terms of information search in, e.g., advertising; and the time pressures imposed by the daily behavioral system. The elements specific to Laaksonen's model are the shopper-perceived pressures and the choice tactics.

The notion of tactical approaches for daily shopping behavior is the central part of Laaksonen's model. Choice tactics are simplifications of a decision problem. This set of "rules of thumb" that lead to habit determined store choice could be seen as the stored experience of past behavior. The set of choice tactics is in turn controlled by attitudes towards shopping (shopping orientations), other constraints imposed by the daily behavioral system, and what type of product is to be purchased.

Choice tactics are similar to the notion of heuristics suggested by e.g., Bettman (cf. Bettman, Johnson and Payne 1991), but the choice-tactics view assumes that for frequently used products, evaluation occurs over a repeated number of trials rather than prior to each choice (Hoyer 1984). The emphasis is therefore on choice tactics as the result of a trial-and-error learning process. For example, as long as a choice tactic such as "buy the cheapest brand for laundry detergent" works satisfyingly, there will be no need to make a new decision in each purchase situation.

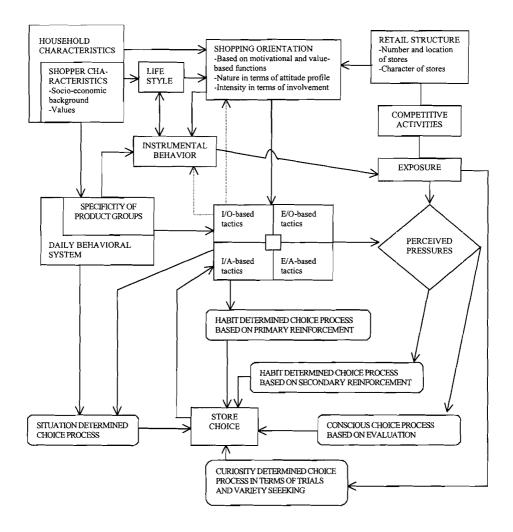


Figure 13. Laaksonen's model of dynamic patronage behavior (Laaksonen 1993, p. 67)

The choice tactics in Laaksonen's model are classified along two dimensions: form of processing and basis of attribution (Figure 14). Form of processing refers to the type of information processing used by the consumer when evaluating choice objects such as stores: either processing by attribute or processing by object. Basis of attribution refers to how the consumer perceives the causes of his/her behavior; to internal, or external (environmental) causes.

Basis of attribution

		Dayle of attribution			
		INTERNAL	EXTERNAL		
		I/O-based tactic	E/O-based tactic		
Form of	By OBJECTS	- the use of a store because of its comprehensive internal approval	- the use of a store or a trait because of their functional suitability within a broader daily behavioral system		
processing		- e.g., affect referral			
			- e.g., distance as an exponent of the spatial system		
	By ATTRIBUTES	I/A-based tactic - the use of a store related trait because of its specific meaning to the shopper	E/A-based tactic - the use of a trait because of a specific reason given by the retail environment		
		- e.g., performance	- e.g., price		

Figure 14. Classification of tactical approaches for daily shopping behavior (Laaksonen 1993, p. 64).

The content of the specific choice tactics is further clarified by looking at the classifications used in Laaksonen's panel study to determine choice tactics. In the study, household members were asked to note, for each purchase occasion, the reason for choosing the particular store. The following rules were used to classify the answers from this open-ended question into the four choice types and a fifth trial category (Laaksonen 1993, p 141-42):

I/O-based choice type: "my own shop," "my favourite shopping place," "familiar store," "store I find suitable/good for me," and other expressions of total value of the store.

E/O-based choice type: "near home/working place," "on my way to home/work," "easy to come near," "the nearest store," and other expressions of spatial behavior.

E/A-based choice type: "special offers," "favorable prices/store," and other expressions of price competition.

I/A-base choice type: "good quality," "good assortment/selection," "fresh products," "suitable hours when store is open," and other special characteristics of the store.

Trial-element: "by accident with another person," "on the spur of the moment," "to see something new," "I needed change," and other expressions of variety seeking and visits done as an experiment.

The dynamic aspect of the model is the interaction between the perceived pressures from the competitive retail structure, and the shopper's reactions to these pressures. Retailers exert constant pressure on consumers to try to change their behavior, but the extent to which the shopper perceives this pressure depends on his/her experiential background, that is, choice tactics, as well as the intensity of competitive activities. The perceived pressure determines which of the five decision processes outlined by Laaksonen will be activated, i.e., if it will be a habit-determined choice process based either on primary or secondary reinforcement, a conscious evaluative process, a situation-determined choice process, or a curiosity-determined choice process.

When comparing the choice tactics with previously discussed definitions of loyalty, the I/O-based choice tactics seems to be the one that mostly resembles the view of loyalty as a latent mental construct. However, when analyzing loyalty, Laaksonen also brings in a "resistance to change" element, i.e., whether households would be committed to a certain behavior despite strong external pressures to change it. In his study, which covered a two-year period in which several changes in the grocery retailing structure occurred, households that kept a particular strategy for a particular store over the period were considered loyal. In the study, 20 percent of the households that participated in all panel waves showed a pattern of commitment during the whole period. The shopping orientation profiles of these households also showed lower-than-average values for the dimension, "rational-economic relationship to big stores," and higher-than-average values on the dimension "personal-social relationship to small local shops."

Developed store-choice models such as the one presented above demonstrate that grocery-shopping behavior can be seen as complex behavior determined by a large number of interrelated factors. The potential variation in grocery shopping behavior in all its detail is enormous. How individual households solve the task of provisioning is continent upon a large number of factors. At the same time, it should be acknowledged that due to the frequent nature of grocery shopping, households are likely to reduce the complexity of the decision task of finding the outlet in which a collection of products will be purchased at the greatest value. Therefore, households are likely to develop a habitual pattern of behavior. The work by Laaksonen (1993) is valuable in that it develops a typology of choice tactics.

However, the Laaksonen model, as well as most models of store choice behavior, is developed for explaining "the store choice." Taking into consideration that most households in different ways combine the usage of several stores for their grocery shopping, an important task would be the development of models that focus on

store choice patterns. This is specifically relevant when store choice patterns, such as degree of behavioral loyalty, is the focus of study.

Extending the notion of choice tactics suggested by Laaksonen, households could be seen as developing and using a combination of choice tactics, that is, a "strategy" for solving the task of grocery shopping. For example, a household might always use a price-related tactic for the choice of store for the stock-up purchases and choose the overall most-liked store for weekly "normal" purchases. From Laaksonen's empirical study it can be inferred that the combination of different choice tactics is quite common. What choice tactics are combined into the strategy should have great implications, not only for what stores are used, but also for the shape of the overall store patronage pattern.

2.8 Theoretical framework for the empirical study

In the review of the literature on the conceptualization of loyalty, two approaches for understanding "loyalty" were identified. One approach is to view loyalty as a latent mental construct reflected in the attitudes, behavioral intentions and behavior of the individual. The other approach views loyalty solely as a type of behavior and consequently separates behavioral loyalty from possible causes of this behavior. The often sited work by Dick and Basu could be seen as a hybrid between these two perspectives in that it acknowledges problems with both perspectives, but circumvents them by defining loyalty as the relationship between a positive relative attitude and behavioral loyalty.

The approach of the present work focuses on behavioral loyalty, but also, in line with Dick and Basu (1994), analyzes the relationship between store evaluations and store loyal behavior. One reason for the choice of approach is the inherent difficulty in interpreting the type of index measures that seem to be most appropriate for measuring loyalty as a latent mental construct, and that incorporate the variation across dimensions that do not necessarily co-vary. The second, and more important, reason is that the conceptualization of loyalty as a latent mental construct reflected in both attitudes and behaviors conceals the relationship between these attitudes and behaviors. Previous studies have shown that there is not always a clear relationship between a positive evaluation (or satisfaction) and subsequent behavioral loyalty. For example, a Swedish study on grocery shopping showed that many shoppers who were very satisfied with a particular store still did not use it as their main store (Mägi 1995).

Behavioral loyalty can in itself also be interpreted in different ways, as made clear by the number of different behavioral loyalty measures available. The approach to behavioral loyalty chosen for this study focuses on what is often referred as "first store loyalty" (cf. Cunningham 1961; East, Harris, Lomax, Wilson and Perkins 1997), that is, the share of purchases (in terms of spending or visits) devoted to the primary store. There are three reasons for choosing this approach. First, the share of total purchases that is devoted to the primary store is a central element of the entire store usage pattern of a household. As discussed previously, the share of purchases in the primary store reflects to a large extent the nature of the overall store usage pattern. Second, the variation in "first store loyalty" has been previously examined and shown to be quite substantial; there is also a body of extant research on possible causes of this variation, to which the results from the present study can be related. Third, one justification for the widespread interest in "loyalty" is that it is assumed profitable for a company to increase its share of a customer's total spending on the type of service or product the company provides. Therefore, it is seen as vital to try to explain variations in this behavior.

The focus on "first store loyalty" means that some alternative ways of viewing behavioral loyalty will not be studied. "Switching patterns", and related sequence-ofpurchase measures, is one aspect of repeated behavior that has been discussed in the loyalty literature, but not extensively studied. The literature is also unclear on how switching patterns for consumers that habitually alternate between a number of providers (stores or brands) should be interpreted, especially in the short term. Taking into consideration the difficulties of interpreting switching patterns and the limited number of studies to which such analyses could be related, the switching dimension will not be included in this study. Neither will the study take into consideration the long-term perspectives of behavioral loyalty (i.e., allegiance or retention). From a theoretical standpoint, retention is an interesting dimension of behavioral loyalty that merits more empirical investigation. However, in this study this omission was made out of practical purposes, as this issue requires longitudinal research designs. The number of stores or brands used, has furthermore been used as a measure of loyalty. Variation in this dimension is a relevant aspect of store choice patterns and it will be included in this study. However, for clarity, the number of stores used is not regarded as an alternative indicator of behavioral loyalty, but as a separate variable that will be referred to as store repertoire.

One objection concerning the focus on first store loyalty that could be made is that it does not fully take into account the complete store usage pattern of households. For example, Cunningham (1961) estimates both first, second, third-, and so on, store loyalty. It has also been suggested that "multi-store loyalty" would be a more appropriate manner in which to regard store loyalty (Laaksonen 1993). Such an approach would involve the development of an index of multi-store loyalty. However, a drawback with such indices is in the difficulties of interpretation. One such measure has been suggested in the literature (the entropy measure, see Carman

1970) but its use has been very limited. In this study, the entropy measure will be examined in an exploratory fashion, although the question of multi-store loyalty will not be covered in-depth.

In addition to the degree of behavioral loyalty and store repertoire, two other related dimensions of patronage behavior are considered to be of interest in this study. These are the question of which store among the set of stores included in the store repertoire is the primary store, and which stores, if any, are avoided. Taken together, these four dimensions give a comprehensive, although not complete, picture of the households' store patronage behavior.

In the literature review, possible determinants of patronage behavior and behavioral loyalty were categorized in two groups: store characteristics and shopper/household characteristics. When taking a store perspective, the share of shopping that a household devotes to a specific store is seen as a function of the store characteristics and the household's evaluations of the same, the convenience of the store's location for this household, and the store's ability to satisfy the needs of this household in comparison with its competitors. The household's choice of stores to include, and perhaps expressly exclude, in its grocery shopping routines is thus seen to be dependent on the stores' relative merits.

In contrast, when taking a shopper/household perspective on store choice, the patronage pattern is determined by the household's needs; restrictions it faces, e.g., in terms of income and time; and attitudes and habits concerning shopping. The share devoted to a specific store is furthermore a result of the shape of the overall shopping pattern. In loyalty research, this perspective is represented by studies in which measures such as first-store loyalty (which is not related to a specific store) are related to household characteristics.

The store versus shopper/household perspective in analyzing store choice is illustrated in Figure 15. In the former, the main focus is on understanding shoppers' behavior towards specific stores and on the variation in aggregated shopper behavior across stores. The latter is concerned with explaining variation in overall behavior across shoppers/households. As an example, looking at the shares of purchase for store B in the diagram below, the store perspective would suggest that household A is least satisfied with this store and household C is most satisfied with this store. In contrast, from a household perspective one would focus on why household A spreads its purchases more evenly across a larger number of stores than do the other households. Factors, such as strong "smart-shopper feelings" could exist that motivate this household to comparison-shop in several stores, although they still might have a strong affinity for store B.

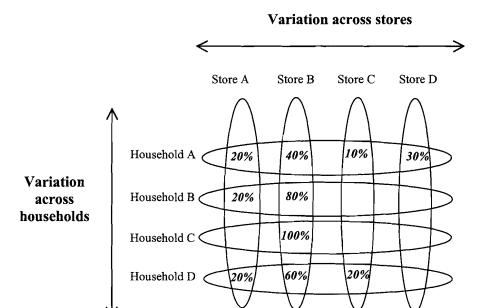


Figure 15. The store versus household perspective in studying store choice behavior. The percentages represent how each household divides its purchases across the four stores.

Both store characteristics and consumer characteristics are here assumed to be important determinants of the way in which households divide their purchases across the stores they regularly use. These two factors are thus included in the model that will be used as a framework for the study (Figure 16).

Shopper/household characteristics affect patronage behavior directly through restrictions that set out what is feasible (e.g., income, availability of car, working hours) and orientations towards grocery shopping and thereby how consumers/households prefer to go about this task (e.g., "one should shop around for good prices," "I prefer to do all my purchases in the same store"). Perceptions and evaluations of available stores and their respective marketing activities also affect patronage behavior.

Based on both these internal and external factors, the household develops a set of tactics for how to go about solving the problem of everyday provisioning. Examples of such tactics could be to "always shop on the way home from work on Mondays," "shop once a week in the store with the best weekly offers on meat," "make big planned purchases every two weeks in store X." In the model, this set of tactics is referred to as the households' *provisioning strategy*. The strategy is

reflected in the household's overt patronage behavior and more specifically, in the four dimensions of patronage behavior that are focused upon in this study.

It should be noted that the shopper/household characteristics also affect patronage behavior indirectly. How a household perceives specific stores is not only a function of the stores' "factual" appearances. Rather, the same stores can be perceived and evaluated differently depending on what benefits a specific household is most concerned with, the household's frame of reference, and interest in grocery stores in general. As indicated by the model, these relationships will not be empirically investigated in this thesis. However, they are included to make the theoretical framework more comprehensive.

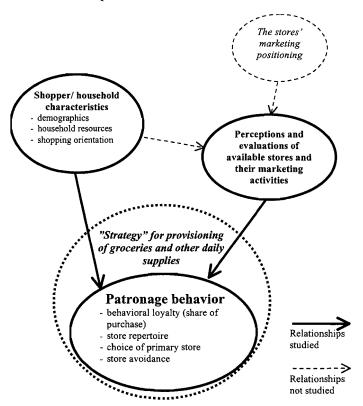


Figure 16. A theoretical framework for the study. The set of dependent variables includes four dimensions of patronage behavior: behavioral loyalty, store repertoire, choice of primary store, and store avoidance. These dimensions are seen as consequences of two sets of determinants: shopper/household variables and store variables. Observed patronage behavior is seen as the outcome of a household's provisioning strategy.

The framework presented above is a model of patronage behavior and more specifically the four dependent variables. The framework is, however, also useful for discussing the relationship between store evaluations (attitudes) and behavioral loyalty, which is the second phenomenon to be investigated in this thesis. One argument put forward with the model is that evaluations of stores are not the only determinants of behavioral loyalty. In instances where a low correspondence between attitudes and behavioral loyalty is at hand, the other set of determinants may be useful in explaining these deviations. It might not always be possible to earn a customer's undivided behavioral loyalty or even a dominant share of his/her budget no matter how hard one attempts to satisfy his or her needs, since satisfaction with a specific store is not the only issue in the store patronage process.

2.9 Research objectives and research questions

To reiterate, the purpose of this study is to explore store loyalty from a store patronage perspective and to investigate the effects of store evaluations and shopper characteristics on store loyalty.

Based on the argument presented in section 2.4, two distinct but related phenomena, both referred to as "loyalty" in the literature, will be studied. These are degree of behavioral loyalty in terms of spending in the primary store (used by e.g., Cunningham 1961, Desmet and Volle 1996, East, Harris, Lomax, Wilson and Perkins 1997), and loyalty as a correspondence between relative attitudes and behavior (Dick and Basu 1994). Furthermore, two related aspects will be examined related to what stores are used: the choice of primary store (i.e., the store in which the largest share of spending is made), and store avoidance. In a more explorative fashion, the provisioning strategies used by households will also be studied.

The following four study objectives have been set up for the study:

- to describe households' store-patronage behavior and, specifically, behavioral loyalty
- to analyze the determinants of the degree of behavioral loyalty, the choice of primary store, and store avoidance
- to compare characteristics of shoppers categorized as "intentional" and "spurious" loyals
- to explore households' overall approach to the task of grocery shopping, that is, their "provisioning strategies"

2.9.1 Patronage behavior

The first study objective is to describe patronage behavior and, more specifically, the three of the four dimensions that are the dependent variables in the model: behavioral loyalty (in terms of share of purchase), store repertoire, and store avoidance. Based on the collected data, alternative measures of behavioral loyalty can be estimated. Two such alternatives will be compared to the share-of-purchase measure: share-of-visits, and Carman's measure of entropy (1970). Furthermore, the relationship between degree of behavioral loyalty, store repertoire and other dimensions of patronage behavior will be examined. The questions that will be pursued are:

- What do store patronage patterns look like in terms of degree of behavioral loyalty and store repertoire?
- Do alternative measures of degree of behavioral loyalty co-vary with the share-of-purchase measure?
- Are there consumers that avoid certain stores?
- Does degree of behavioral loyalty co-vary with other aspects of patronage behavior such as store repertoire and store avoidance?

2.9.2 Determinants of behavioral loyalty, choice of primary store and store avoidance

The second research objective is to analyze the determinants of degree of behavioral loyalty, choice of primary store and store avoidance. Based on prior studies (cf. Cunningham 1961, Desmet and Volle 1996), it is expected that the analyses in the first step will reveal substantial variation in the degree of behavioral loyalty. Previous studies have mainly focused on shopper/household characteristics when attempting to explain variations in this behavior. Such variables will be included in the present analyses as well. In addition, store location, and the relative attitudinal preference for the primary store will be included as possible explanatory variables of degree of behavioral loyalty. The possession of store membership cards will also be included in the analysis.

Concerning choice of primary store, two determinants will be analyzed, store location and store evaluations. Finally, if previous analyses have shown that consumers avoid stores, the reasons for store avoidance will be explored. Moreover, possible differences in the characteristics of store avoiding consumers, and "non-avoiding" consumers, will be examined.

The following questions will be pursued:

- To what extent do socio-demographic variables explain variations in degree of behavioral loyalty?
- To what extent do attitudes to shopping (shopping orientations) explain variations in degree of behavioral loyalty?
- Does the possession of loyalty cards affect the degree of behavioral loyalty?
- How is store location related to the degree of behavioral loyalty, and to which store is chosen as first store?
- How are evaluations of stores related to degree of behavioral loyalty? Is the store that gets the largest share of a consumer's budget (the primary store) also always the most preferred store? Can a higher degree of behavioral loyalty be explained by the strength of preference? Are relative evaluations better predictors of behavior than "normal evaluations?"
- What explains store avoidance? Do "avoiders" differ from "non-avoiders?"

2.9.3 "Intentional" vs. spurious loyals - examining the loyalty grid

The third research objective is to compare the characteristics of households that are categorized as "intentional" and "spurious" loyals. Although the two-dimensional conceptualization of loyalty is seen as problematic, the question of whether or not there are differences between "true" and "spurious" loyals is important – in a sense it concerns differences between consumers who have strong preferences and act accordingly, and those who do not.

The loyalty grid suggested by Dick and Basu (1994) can be helpful for such an investigation. Their classification is based on a company perspective, i.e., it is a way for a company to classify all its customers into loyalty categories. Hypothetically, this grid could imply that a household has a specific relationship to one store, e.g. spurious loyalty, whereas they exhibit latent loyalty from another store's perspective.

Considering grocery store patronage from such a segmentation perspective, a classification that puts each household into one specific category would be more purposeful. Thus an adaptation of the Dick and Basu grid is presented in Figure 17. The aim of this classification is to make the categories mutually exclusive, that is, each household should only fall into one of the categories presented below.

Degree of behavioral loyalty Low - the individual **High** – the individual divides his/her makes all or the majority purchases evenly over of purchases in one store a number of stores. No and only makes a small one store has a share of purchases in dominant share of other stores purchases High - the Latent Loyalty - the Intentional Loyalty shopper/ household has a strong the household makes a household has a preference for one dominant share of its strong preference particular store but purchases in the store it for one store spreads its purchases has a strong preference Relative over a number of stores for Store without anyone Evaluation dominating Low - the No Loyalty - the Spurious Loyalty - the household has no household makes a shopper/ household has no preferred store and dominant share of its specific shops in several stores purchases in one store preferences for without anyone while not having a strong any stores, general dominating preference for this indifference particular store

Figure 17. A classification of households to different loyalty related categories

One aspect of the loyalty classification is *degree of behavioral loyalty*. As has been shown in previous studies, individuals exhibit differences in this respect: some concentrate their purchases on one store whereas others spread their purchases more evenly over a number of stores. However, there are no clear guidelines for what is meant by the majority of purchases or a "high degree of behavioral loyalty." If the empirical results do not provide a clear dividing line, the discretion of the researcher must be used for dividing the households into two groups with high and low degrees of behavioral loyalty.

The other dimension considered here is *relative store evaluations*. An important aspect to be considered here is whether customers perceive any differences at all between the stores available to them. If not, this would diminish the likelihood of loyalty formation as suggested by Dick and Basu (1994). As with degree of behavioral loyalty, the exact theoretical delineation of "high relative store evaluations" is unclear, which is why the cut-off criterion must be based on an empirical judgment.

The research question related to the third objective is:

- Is there a relationship between group affiliation and household/shopper characteristics?

2.9.4 Provisioning strategies

The fourth research objective is to explore households' overall approach to the task of grocery shopping, that is, their "provisioning strategies." This research question takes as a starting-point the idea that households' store choices are interrelated, and that households can combine different store-choice tactics for different types of shopping trips. Moreover, store patronage behavior is related to how the household decides on *what* to buy, e.g., extensive planning versus in-store decision-making and how stores are used in this process. In this thesis, the rather wide term *provisioning strategy* is used to denote this set of related behaviors.

There is relatively little research on store-choice tactics in general, and on how households combine choice tactics into strategies. Therefore, an exploratory approach will be used to investigate households' provisioning strategies.

3. Research approach

3.1 Introduction

The study objective of this thesis is to describe and explain variations in store patronage behavior across consumers. One important assumption for the study is that consumers facing the same competitive environment, i.e., being able to choose between the same stores, will behave differently, both in terms of which stores are chosen and how they are used. It is, for example, assumed that the extent to which individual shoppers spread their purchases across the stores they use will vary; that is, the degree of behavioral loyalty will vary. The focus is thus not mainly on the choice of a specific store, but rather on the store patronage behavior. An important consideration for the research design is therefore to enable a detailed description of patronage behavior in a setting with a fixed set of choices.

In order to have a design in which all available stores could be accounted for, a small Swedish community was chosen as the site for the data collection. The sample is thus not representative for the Swedish population. However, for the purpose of this study, it was seen as important that external explanatory factors, such as differences in retailing supply structure, were controlled to the extent possible.

Three types of data were collected in the study. To enable a detailed description of store choice behavior, a 4-week purchase diary was employed. The data from the diary was thereafter complemented with data from a questionnaire directed to the same households. The questionnaire includes requests for store evaluations and questions on general attitudes to shopping. Finally, follow-up personal interviews were carried out on a small sub-sample of respondents. The purpose of the interviews was to give an in-depth description of typical households that would further clarify the understanding of variations in store patronage behavior.

Often when qualitative studies are combined with survey studies the results from the former are used in an exploratory phase designed to generate concepts and hypotheses that will be tested quantitatively. For this study, five personal consumer interviews were performed before the diary and questionnaire were launched. The purpose of these interviews was to confirm the relevance of the topics derived from the literature review. As there is an abundance of research literature on store choice, the need for an extensive exploratory study concerning store choice was not considered essential. Instead, the primary value of qualitative data in this study is to deepen the understanding of the phenomenon; "...the contribution of the fieldwork to the formulation of the theoretical structure underlying a survey study requires that the fieldwork be performed prior to designing the survey study. But if the purpose of the fieldwork is to clarify or extend a survey finding, then it must be conducted after the survey" (Sieber 1973).

Thus, the in-depth interviews in this study are used as a means to further the interpretation of the results from the survey study. Moreover, the interviews are also used in an exploratory fashion to describe possible *provisioning strategies*, a theoretical notion not covered in the survey.

The remainder of this chapter gives, first, a description of the research setting — that is, of the community in which data was collected and of the stores in this market. Thereafter follows a description of the data-collection procedure for the quantitative-data collection, the diary and the questionnaire. Finally, the approach for the in-depth interviews is described.

3.2 The setting

Ludvika, the chosen community, is a small industrial town of 15,000 inhabitants situated in the middle of Sweden. This local market had, at the time of the data collection, five supermarkets and a few smaller convenience stores, as well as several gas stations with a limited assortment of grocery items. Moreover, the community was fairly self-contained and not located close to a larger metropolitan area, so the share of commuters was judged to be low. The supermarkets were located within a radius of approximately four kilometers. The approximate locations of the stores are depicted in Figure 18. As shown in the map, there are three clusters of stores, the two Marnäs stores, located only a couple of hundred meters apart; one store in the major shopping area; and two stores located fairly closely to one another in the southern part of Ludvika.

The five supermarkets were of fairly equal size and service level, with all the stores having some manual service. All the stores had a full range assortment of food items (fresh food as well as staples) and other daily supplies. Furthermore, they did to a limited extent have non-food items such as kitchenware, in their assortment. One of the stores, Matmagasinet, had a low-price profile.

The stores represented three of the four major Swedish grocery retailers, *Hemköp* (two stores in this area), *Konsum* (one store) and *ICA* (two stores: ICA Matmäster and Matmagasinet). All three chains have had customer membership programs for some time. These programs provide benefits such as special offers to the members. Consumers also have the possibility to deposit money on accounts linked to the membership cards that are used for payment in the stores. The interest rate on these accounts is higher than that of most banks' checking accounts. The Konsum membership program was the only one with a bonus point system at the time of the study.

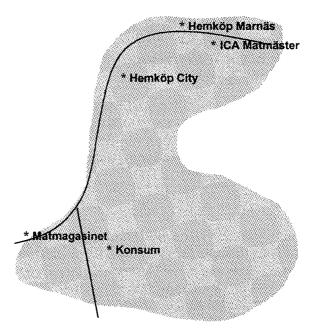


Figure 18. An overview map of the stores in Ludvika.

3.3 The data collection phase (diary and questionnaire)

The diary and survey data were collected in the fall of 1997. A sample of 800 individuals living in the chosen community was obtained from the Swedish Census Bureau. The preferred sampling frame would have been "all households", but as households are not the registration unit in the available data base, the following sampling frame was used to obtain an approximate sample of households: married women, unmarried women and unmarried men, all in the age group 20 - 75. For married households, the woman was chosen since it was assumed that women are primarily responsible for grocery shopping. This will be discussed further in section 3.5.5.

In the first stage, a letter was sent to the 800 individuals, explaining the purpose of the study and notifying them of a follow-up telephone call to come. Thereafter, all individuals for whom telephone numbers could be obtained were called. The purpose of the telephone call was to ask the respondents if they would like to participate in the study. It was also used for screening out individuals that did not belong to the sample. The categories excluded from the study were individuals working in a grocery store (or living with someone who worked in a grocery store), individuals no longer living in Ludvika, and individuals still living with their parents. The telephone calls also revealed that some co-habiting couples had been included

twice in the sample. From these households, one person was chosen to participate in the study.

The diary, together with an instruction sheet, was then mailed out to those who complied with the request. There was quite a large number of respondents who were not reached by phone or who did not have a listed phone number, and the diary was sent to these individuals as well. The mailing also contained a small gift: a small magnet with a "reminder" symbol. This gift was chosen as it clearly related to the design of the study – the cover letter suggested that the magnet be used to keep the diary in a handy place, such as on the refrigerator door. A large number of respondents were also contacted by phone after they had received the diaries to answer any questions concerning the procedure for filling out the diary. These telephone calls indicated that the task of filling out the diary was considered to be easy. To further encourage participation, a reminder postcard was sent after two weeks.

At the end of the four-week period, the questionnaire and a pre-paid envelope for returning the completed diary and the questionnaire were sent out. The cover letter also reminded about the Red-Cross lottery ticket (value 25 SEK) which would be sent to all participants who returned completed diaries. In addition, the package contained a request for participating in the follow-up interview study and a simple form on which the respondent could notify whether he or she was interested in participating in such an interview.

The data-collection procedure gave a response rate of 49 percent (Table 3). In the initial round of telephone calls, 357 households agreed to participate in the study, and 150 declined participation. Fifty-two persons were also identified as not being part of the sample. 235 persons were not reached by phone, for the most part because their telephone number was not listed. However, as mentioned above, these individuals were also approached with the second mailing. Of these individuals, 29 percent returned completed diaries and questionnaires.

Initial sampling frame	800
- Not part of the sampling frame:	-58
Adjusted sampling frame:	742
-"non-response":	
Reached, participation declined	150
Participation accepted, D/Q not returned	50
Not reached, D/Q not returned	166
Uncompleted sets of D/Q returned	8
Total:	-374
Final sample	368
Response rate	50%

Table 3. The response rate.

The reasons given for not participating were either a dislike towards participating in surveys in general, or pressing family matters, such as illness. Some elderly people also believed that their behavior would not be of interest for the study, since they did not spend much on groceries. The lists from the Census Bureau contained data on the age and sex of all persons in the initial sampling frame. There was no significant difference in age between those who participated in the study and those who did not. However, the share of women was significantly higher among the participants (79 percent women in the participant group as compared to 61 percent women among those who declined participation). This suggests that single men are underrepresented in the final sample.

3.4 The diary

3.4.1 Design

For the purpose of this study, it was necessary to obtain a detailed description of store choice behavior. To obtain behavioral data on the household level of high validity, a purchase dairy was decided upon (Wind and Lerner 1979). With a diary, there is less risk that smaller purchases are not accounted for or that usage of major stores will be overestimated. A possible source of error due to respondents' computation errors when aggregating behavior is also avoided, since the researcher does these tasks after the data collection. Diary data also makes possible the estimation of several different measures, which otherwise would have to be measured by several questions in a questionnaire.

Respondents were asked to fill in a purchase diary for a period of four weeks. For each purchase made by anyone in the household, the specific store shopped, the amount paid, and the household member/s making the purchase were registered. To reduce the bulk of and lessen the inconvenience in handling the diary, it was printed on both sides of one sheet of paper. For each date, there were printed columns for the five major stores in the area. One column was provided for purchases in other stores. The design of the diary was pre-tested on a small sample of consumers for ease of use and understanding. A part of the diary with hypothetical data entries is reproduced in Figure 19.

Store A		Store B		Store C	
amount	buyer	amount	buyer	amount	buyer
175	Kr Anna	Kı	r	160 K	Lars
	Kr	Kı	r	Kı	
	Kr	215 Kı	Lars	Kı	
	Kr	569 Kı	Anna, Lars	Kı	
	Kr	Kı	r	Kı	•
	Kr	Kı	r	290 Kı	Lars
	Kr	Kı	T	Kı	-
	amount	amount buyer 175 Kr Anna Kr Kr Kr Kr Kr Kr	amount buyer amount 175 Kr Anna Kr Kr 215 Kr Kr 569 Kr Kr Kr Kr Kr Kr Kr	amount buyer amount buyer 175 Kr Anna Kr Kr Kr Kr Kr 215 Kr Lars Kr 569 Kr Anna, Lars Kr Kr Kr	amount buyer amount buyer amount 175 Kr Anna Kr 160 Kr Kr<

Figure 19. A sample of how a section of a completed diary would look.

The length of the diary-keeping period was determined out of two contradictory constraints. On one hand, a long period is better from a patronage-measurement perspective as each specific purchase will not carry too large an affect on the different proportional measures. A shorter period would yield lower reliability in, e.g., share-of-purchase measures. As noted by East et al. (1997), the total number of visits included in the measurement period affects share-of-purchase measures such as first-store loyalty. In the extreme case of only one visit, first-store loyalty would automatically be 100 percent. Based on an assumption of an average of two purchase trips per week, the authors suggest that a two-month period would suffice to account for extreme purchases. As it is plausible that patronage patterns might vary over the month, with for instance bi-weekly major purchases for some households, a longer period would also have a better chance at capturing these variances. On the other hand, a longer period would most probably decrease respondents' willingness to participate in the study and their thoroughness in registering all their purchases.

The chosen period of four weeks was considered a good balance between these two opposing requirements. This may be compared with Laaksonen's study (1993) in which three two-week measurements taken over a period of two years were used with satisfactory results.

3.4.2 Variables derived from the diary data

The diary provided a rich database on the behavior of the households, and several options are available for aggregating and describing this data. Although part of this background data is provided, the main purpose of the diary is to provide data for the calculation of a limited number of variables. The variables extracted from the diary database follow in Table 4. All measures are estimated for the household.

Concept	Operationalization
Degree of behavioral loyalty (share-of-purchase in primary store)	The share of spending (in SEK), out of the total amount of spending, in the store in which the largest sum is spent. This is a commonly used measure of behavioral loyalty. Based on Cunningham (1961), this measure is often called <i>First store loyalty</i> . To avoid the confusion whether or not this measure captures "true" loyalty, a more descriptive term is used here.
Share-of-visits in the primary store	The share of visits, out of the total number of store visits, in the store in which the largest sum is spent. This is a less commonly used measure of behavioral loyalty.
Entropy	This is the alternative measure of behavioral measure suggested by Carman (1970), and described in section 2.1.4.1. In this study, it was based on the share-of-purchase allocated to each store. The measure was standardized to range from 0 to 1. Low values indicate high loyalty, i.e., low dispersion of purchases across stores.
Store repertoire	The number of stores used by the household.
Primary store	The store in which the household spends the highest share of the monthly budget.

Table 4. The main variables derived from the diary data.

In this study, degree of behavioral loyalty is mainly operationalized as the share-of-purchase in the primary store. In addition, a share-of-visits measure is derived from the data. The entropy measure has not been extensively used, but it was seen as an interesting addition to the list of behavioral loyalty measures as it takes into account the use of several stores. Store repertoire is the second dimension of patronage behavior that will be highlighted in this study. Primary store indicates the store to which the household is behaviorally most loyal in terms of spending the largest share of the monthly budget in the store.

The reliability of these measures, i.e., the extent to which they are free from random error, could, as recognized above, be adversely effected by respondent mistakes in reporting their purchases, and, perhaps more importantly, by the time period of the measurement. Although the diary period was set to one month, it should be noted that both random and non-random fluctuations in behavior between months could affect the different proportional measures. Non-random fluctuations, i.e., fluctuations affected by grocery purchasing planning and shopping cycles of over one month, were believed to be less probable. There is, however, a slight risk that the responding households' shopping behavior could deviate from normal routines during the measurement period due to unexpected circumstances, such as illness. Random fluctuations are especially sensitive for the estimation of

primary store for households with a low primary-store share-of-purchase. If a household divides its purchases equally between stores, one store might inappropriately be singled out as the primary store.

3.5 The questionnaire

The purpose of the questionnaire was to measure possible explanatory factors for degree of behavioral loyalty and store-choice behavior. The main part of the questionnaire concerns the evaluations of the stores. Other areas covered in the questionnaire are general shopping-related attitudes and behavior, store avoidance, membership in loyalty programs, and demographic background data about the household (See appendix 1 for a full version of the questionnaire).

3.5.1 Evaluation of stores

For the purpose of the investigation, evaluations of specific stores as well as an overall measure of whether or not respondents differentiated between stores were needed. The way in which this data was transformed into the necessary variables is further explained in section 4.2 of the analyses. However, the general nature of these questions is described here. Two sections of questions were concerned with these issues. The introductory section of the questionnaire contains a block of questions in which respondents are asked to indicate whether they found any store to outperform the others on a number of dimensions, and if so, the name of that store (question 1 in the questionnaire). The results were used to indicate the extent to which respondents perceived differentiation between stores and on what dimensions the stores were most differentiated.

Second, the items in Table 5 were used for measuring the evaluations of specific stores. Respondents were asked to rate all the stores about which they were knowledgeable, including stores they were not using at the moment, on 7-point Likert scales anchored in strongly disagree - strongly agree.

Store X is overall a very good store ... carries high-quality fresh produce ... carries high-quality fruits and vegetables ... gives value for the money ... is well organized ... has nice personnel ... is clean and neat ... has a spacious layout ... has a good variety of goods ... has high availability of staff for handling queries

Table 5. Items used for measuring evaluations of stores.

These items, with a slight change of wording, were drawn from a larger pool of 24 items previously used in a Swedish setting for capturing grocery store evaluations (Mägi 1995). In that study, the items provided an adequate measure of store evaluations which behaved as expected, i.e., dimensions based on the items were highly correlated with customer satisfaction, and they also differed between behaviorally loyal and non-loyal groups (as defined in that study). The list of items was designed to cover the main aspects of dimensions derived from the store image literature. However, one important difference is that spatial convenience was not included as a dimension. As discussed in the literature review, it is considered more fruitful to regard location as a separate variable.

The overall evaluation of each store was the main interest of this study, so the number of items was reduced in order to shorten the length of the questionnaire. As further described in section 4.2, analyses were based on indices of the 10 items for each store. The choice to aggregate all items into one overall measure was supported by factor analysis, as only one factor had an eigen value higher than one. The internal consistency reliability of the items was also high across all stores, with Cronbach's Alpha between .92 - .93. This summary measure will be referred to as *store evaluation*, and it will be the basis for developing a measure of *relative store evaluation*.

3.5.2 General shopping attitudes and behaviors

A number of items were included in the questionnaire for capturing general shopping attitudes and behavior. The development of this list of items was to a large extent inspired by previously used shopping orientation items, mainly those used by Laaksonen (1993). However, as discussed in the theoretical review, this shopping orientation profile was based on specific market-structure characteristics, such as personal contact with local independent retailers, versus an economicrational relationship to "big" stores. As the market structure in Sweden today, especially in small towns such as Ludvika, is more homogeneous, more generic shopping attitude statements were deemed more appropriate. The battery of items also included statements on grocery shopping-related behavior such as usage of coupons and purchase planning. Items on planning behavior were included since exploratory research has indicated variation in this behavior which might be relevant for explaining variation in store patronage behavior (Holmberg 1996). In contrast to other studies, items concerned with the ethical dimension of shopping were not included. The reason for this exclusion, was again, that this dimension seemed substantially related to specific market-structure relationships, more specifically the relationship to small, independent shoppers. As this type of retailer is now almost extinct in Sweden, this dimension was not seen to be meaningful for

this particular study. In the process of developing the questionnaire, the content and clarity of the items were tested with both academics and "regular" shoppers.

The purpose of the items was to use them for describing shopping orientation dimensions. Therefore, they were made subject to factor analysis. Descriptives for the variables are presented in Appendix 1, Table 49. All items were included in the preliminary unrotated factor analysis, however, one item ("I always bring a shopping list") came out as unrelated to the other items. As it was not considered to be a type of behavior central to shopping orientation, the item was deleted and a new factor analysis was performed Hair, Anderson, Tatham and Black 1998). There were some missing values on all items, and list-wise deletion resulted in 331 usable cases. It was judged that the initial factor analyses should be made on these cases.

The principal components method was used for the factor analysis. KMO and Bartlett's tests indicated that factor analysis was meaningful for the material (KMO = .72). The initial unrotated analysis had four components with eigen values higher than one, a preliminary four-factor solution was thus chosen. The four factors explained 63 percent of the total variance. VARIMAX rotation was then used in order to get a more interpretable solution. A satisfactory interpretation of the four-factor solution was found, so the four factors were retained. The rotated factor-loading matrix is presented in Table 6.

The pattern of factor loadings presented a clear and interpretable structure. The majority of items produced loadings above .2 on one factor only, and based on the items, the interpretation was fairly straightforward. There was, however, some overlap between factors, especially between the factors "price" and "contact." The positive loadings of items 3 to 5 on the second factor indicate that activities related to price search are to some extent related to a personal-contact dimension. However, as these loadings were modest in size compared to the loadings on factor one, they were not considered to be central to the second factor.

The four factors were named as follows:

- 1 Price orientation factor
- 2 Personal contact factor
- 3 Indifference factor
- 4 Planning behavior factor

	Component			
	Price	Contact	Indifference	Planning
1.One profits from comparing prices between stores	.77			100 0 000 000 00 0 0 0 0 0 0 0 0 0 0 0
2.I shop in the store which has the best offers	.72	25		
3.I read the ad leaflets sent to my home	.75	.26		
4.I read the stores' advertisements in the newspaper	.70	.29		
5.I use coupons when possible	.64	.38		.23
6.I think it is important to have personal contact with the store's staff		.86		
7.I think it is important that the store personnel recognizes me		.87		
8. The stores in Ludvika have the same variety of goods			.74	
9.I think all grocery stores in Ludvika are the same			.81	
10.I think it is important that shopping takes little time			.53	
11. We do a major purchase about once a month	.16			.79
12.We plan our purchases for a week at a time or a longer period				.85

Table 6. The chosen rotated factor solution. Factor loadings higher than .15 are reported in the table. The highest factor loadings for each item is marked in bold.

Although newly developed items were used, three of the derived factors are clearly related to shopping orientation structures presented in previous studies. The price orientation factor can be interpreted as the economic/rational shopper, the personal contact factor is similar to the personalized shopper, and the indifference factor is similar to the apathetic shopper, although "importance of shopping taking little time" has been previously included in a rational-shopper factor. The degree of planning behavior has not been included in previous studies on shopping orientation but was judged to be a salient addition to the notion of shopping orientation and was included here for exploratory purposes.

Factor scores were retained for subsequent analyses. Although the use of indices built on multiple-item scales as suggested by Churchill (1979) is the dominant practice today within marketing for measuring constructs, the use of factor scores provides an alternative with certain advantages and has increased in use. It has, for example, been used for measuring shopping orientations (Laaksonen 1993). In this study, factor scores were chosen over using a summated scale mainly since factor scores based on orthogonal rotation are uncorrelated, which is advantageous when

regression analysis will be used (Hair, Anderson, Tatham and Black 1998). One drawback with using factor scores is that results will not be as directly comparably across studies as with developed multiple item scales. However, this drawback was considered outweighed by the above-mentioned advantage with factor scores.

To account for missing values, a new factor analysis was performed in which missing data was replaced with variable means. Cases with more than two missing observations on the variables were excluded from this analysis. The emerging factor structure, with the same rotation principle, did not differ noticeably from the original factor solution structure (Appendix 2, Table 50). This practice resulted in factor scores for 358 observations. The interpretation and range of factor scores is found in Table 7.

Factor	Interpretation
Price orientation factor	high values indicate strong interest in price comparisons and price orientated advertisements (range -2.5 to 2.0).
Personal contact factor	high values indicate strong interest in a personalized contact with store personnel (range -2.5 to 2.1).
Indifference factor	high values indicate that the individual does not perceive large differences between stores and finds it important that shopping
Planning behavior factor	takes little time (range -2.8 to 2.8). high values indicate that the households use a high degree of planning for grocery purchasing (range -1.7 to 2.3).

Table 7. Interpretation of factors and range of factor scores.

When using factor scores, there is no clear alternative to Cronbach's Alpha measures to assess the internal consistency of the measure. To some extent, this information is provided by the factor loadings pattern. A clearly interpretable pattern in which some items have the same pattern of loadings across factors would indicate that the items measure the same underlying construct. As a rough comparison, summated indices on the same variables have the following Alphas; price: .79, contact: .79, indifference: .52, and planning .56. This indicates that the last two dimensions are not as consistently measured, which, in turn might be a result of less clearly defined dimensions.

3.5.3 Store avoidance

Although the stores that are not included in a household's store repertoire can be deduced from the diary, it cannot be inferred that those stores not used are purposefully avoided. There are several possible reasons why a specific household might not patronize a specific store, among them that it is in an inconvenient location. Therefore, for measuring store avoidance intentions, the following question was asked:

"Imagine a situation in which all stores in Ludvika are the same as they are now, but they are all located in the same place. It would thus be as easy for you to get to all stores. Everything else – personnel, price level, and assortment – would be exactly as it is today. Are there any stores you would absolutely **not** shop in although they had the same location as the other stores?"

The response alternatives where "Yes, I would **not** shop in..." followed by a list of the supermarkets in the area, and "No, there are no stores I would avoid." Those respondents indicating that they would avoid a store were also asked, with an open-ended question, to state their reasons for doing so.

3.5.4 Other household background data and miscellaneous

The questionnaire also included some additional background data on the households.

Concerning shopping related issues, the respondents were asked to indicate whether or not they had enrolled in any of the chains' loyalty programs, and if so, whether they have deposited money on such accounts. They were also asked whether they perceived that they have a main store for grocery shopping, and if so, the name of that store. This question is used as a validity check on the measures derived from the diary. Following this question, questions on resistance to switch were posed to those having the main store as their closest store. This measure will, however, not be developed further in this study. The respondent was also asked to indicate whether he or she went shopping by car or not. The respondent was further asked about the share of the household shopping he or she did. Although the cover letter for the questionnaire stated that the person mainly responsible for the shopping fill out the questionnaire, this was seen as necessary control question.

Finally, the questionnaire also contained the following demographic data about the households: household income, household size, respondent's age and sex. At the end of the questionnaire, respondents were also asked to indicate their place of residence on a map covering the larger part of the town of Ludvika. The distance as the crow flies between the households' home and each store was measured. This does not take into account the exact traveling distances, which are, of course, dependent upon the road network. However, it was seen as a proxy sufficient for this study; a similar procedure was also used by Bell et al. (1998).

3.5.5 Level of analysis - the household or the individual?

As suggested by Engstrøm and Hartvig Larsen (1987) there are good reasons for viewing the household as the relevant unit of analysis for grocery shopping. Gro-

cery shopping is affected by the needs and consumption patterns of a household, as well as household level restrictions and resources, e.g., income, car ownership, residence, working hours of spouses, etc. To the extent that different persons in a household take turns shopping for groceries, these purchases are still interdependent.

This does not necessarily mean that grocery-shopping behavior normally is a joint activity for the household members. On the contrary, it is often assumed that the female head-of-household is responsible for grocery shopping. Although gender roles in general are changing, it is no bold assumption that this is still largely the case in many parts of Sweden, especially outside the larger cities. In this study, it is assumed that although the chore of shopping is shared to some extent, one person, usually the female head-of-household, is overall responsible for decisions concerning when and where to shop for groceries, and that person also carries out most of the shopping. Therefore, although behavior is measured on the household level, the attitudinal measures of the person responsible for grocery shopping are seen as relevant explanatory factors for this behavior.

As described earlier, the sampling frame included married women, unmarried women and unmarried men. In households with married couples, the woman was thus the addressee of the diary and survey. Unmarried women and unmarried men were included to cover single person households. However, since some of these respondents are most likely cohabiting, some of the unmarried men might not be the person responsible for shopping in their household. To avoid that, for any reason, the "wrong" person in the household filled in the questionnaire, the cover letter indicated that the person primarily responsible for grocery shopping should be the respondent. A question about share of shopping was included in the questionnaire to check the share of grocery purchasing carried out by the respondent (Table 8).

	Frequency	Percent
Respondent makes all of the household's purchases	152	41.3
Respondent makes the largest share of the household's purchases	147	39.9
Respondent makes about half of the household's purchases	57	15.5
Respondent makes a minor share of the household's purchases	11	3.0
Missing value	1	.3
Total	368	100.0

Table 8. The share of shopping made by the respondent

Although the chore of grocery shopping is shared to some extent in more than half of the households of more than one person, the majority of respondents make the largest share of the household's shopping. Another 15 percent of the respondents make approximately half of the household's purchases, and it was decided that their responses to the attitudinal questions were sufficient proxies for the household. The eleven households in which the respondent (women in eight of the cases) made a smaller share of purchases were excluded in the analyses where attitudinal data were compared to shopping behavior. In the one questionnaire that represents the missing value, the respondent (a woman) indicated that they planned purchases together, but the man in the household carried out the shopping task. Her answers were thus regarded as reflective of the household's opinions and the responses were used in subsequent analyses.

In all, almost 80 percent of the respondents of the questionnaire were women (Table 9). The male respondents mostly represented single person households. In total, about 25 percent of the respondents constitute single person households.

household size	Male	Female	Total
	respondents	respondents	
1 person	39	52	91
	42.9%	57.1%	100%
2 persons	28	115	143
	19.6%	80.4%	100%
3 persons	5	57	62
	8.1%	91.9%	100%
4 persons	3	56	59
	5.1%	<u>94.</u> 9%	100%
5 persons	1	7	8
	12.5%	<u>87.5%</u>	100%
6 persons	1	4	5
	20.0%	80.0%	100%
Total	77	291	368
	20.9%	79.1%	100%

Table 9. Distribution of households. Percentages (row percentages) indicate the share of male and female respondents in each household category.

3.6 The interviews

The purpose of the interviews was to analyze in-depth households' store patronage behavior and to explore their provisioning strategies. The interviews will hopefully also expand on the results from the survey by covering largely the same issues, and by contributing consumers' own explanations for why they behave the way they do.

A semi-structured interview approach was used in order to cover the topics central to the study. To structure the interview, a short interview guide was used which included the following topics: a) a description of the household's store patronage behavior, b) opinions about the stores in the Ludvika market they currently use, c) opinions about stores they currently do not use, d) the household's use of market information, e.g., coupons, and leaflets, and loyalty programs, e) relationships to specific stores. However, respondents were allowed to, and did, talk freely, and therefore some issues were raised without being prompted. For example, some respondents directly mentioned the store/stores in which they shopped when asked about their general shopping behavior.

The interviewees were recruited among the respondents of the survey. An approach similar to that of Fournier and Yao was used (1997). In order to get a deeper understanding of the loyal consumer-brand relations, Fournier and Yao interviewed individuals who qualified as coffee brand loyals, according to traditional criteria. These interviews revealed significant differences in the interviewees' relationships to the brands they used. In the present study, interviewees were chosen from the four loyalty categories derived from the quantitative analysis. This sampling was believed to provide a large variation in behavior as well as in opinions about stores and approaches to shopping in general. Although it cannot be excluded that another sampling procedure would provide a similar variation, the results from the interviews suggest that the sampling fulfilled its goals.

About half of the respondents in the survey had indicated an interest in participating in a follow-up study. Initially, three respondents in every quadrant were chosen, with care taken that they would exhibit extreme values on the measures that made up the dimensions for the categorization. Moreover, an additional criterion was that the respondent would belong to a household with at least three individuals, in order to obtain a continuity between the households' living conditions. In the first step, the first two people in every group were contacted. As all eight persons accepted to participate in an interview, no further contacts were made.

The interviews were completed in October – November 1998. All but one of the interviews took place in the home of the respondent. One interview took place in a centrally located coffee shop at the request of the interviewee. All interviews were tape-recorded and later transcribed verbatim, in order to allow the interviewer to concentrate on the interview and to ensure a detailed account of the interviewee's narrative. The average time of the interviews was 40 minutes.

4. Results

The presentation of the analyses and results will follow the structure of the research questions proposed in section 2.9. In the first section, the behavior of the households is described and in the second section the shoppers' evaluations of the available stores is examined. Thereafter determinants of three aspects of behavior are analyzed: the degree of behavioral loyalty, the choice of primary store and store avoidance. The fourth step is to compare different consumer segments as based on the loyalty grid. In-depth descriptions of eight households are then presented and discussed in terms of their provisioning strategies. The outline of the chapter is illustrated in Figure 20.

Although the purpose of the thesis is to study variations in household behavior, the data also allows for comparisons between the stores. Apart from being of interest in itself, such comparisons complement the household-level analyses. For reasons of clarity, these analyses are put into a separate appendix (Appendix 3). When a comparison with store-level analyses is considered especially interesting, a reference to the appropriate section in Appendix 3 is made in the text.

- 4.1 How do households behave?
- Store repertoire
- Degree of behavioral lovalty
- Store avoidance
- **4.2** How do the shoppers evaluate available stores?
- **4.3** What determines the degree of behavioral loyalty?
- 4.4 What affects the choice of primary store?
- Store evaluations
- Store location
- 4.5 Determinants of store avoidance
- 4.6 The loyalty grid
- 4.7 In-depth descriptions of eight households' shopping behavior and their provisioning strategies

Figure 20. The structure of chapter four.

4.1 How do households behave?

In the theoretical framework, the set of dependent variables relates to household store patronage behavior. However, before analyzing its causes, a thorough description of this behavior is warranted. In this section, three of the variables, *store repertoire*, *degree of behavioral loyalty*, and *store avoidance*, will be described. Data on the fourth aspect, *choice of primary store*, is presented in Appendix 3 together with data on how the stores in the survey are used on an aggregate level by shoppers (Table 55).

The share-of-purchase in the primary store is the main measure of the degree of behavioral loyalty used in this study. The data collected does, however, allow for the estimation of other measures of behavioral loyalty and for comparisons between different such measures. Here, two other measures will be analyzed: share-of-visits in the primary store, and the measure of entropy suggested by Carman (1970), which, in contrast to the other two measures, captures the household's usage of its entire store repertoire. The primary store, as determined by the two proportional measures of loyalty, will also be compared to the respondent's assessment of which store is their main store.

Apart from the four patronage variables highlighted in the theoretical framework, the rich diary data provides a comprehensive description of the household's grocery-shopping behavior. These dimensions can also be related to the main variables of interest. In the final part of this section, store repertoire and degree of behavioral loyalty are compared to three other dimensions of patronage behavior: shopping frequency, purchase volume and variation in purchase size.

4.1.1 Store repertoire - how many stores are used?

The first step is to look at the number of stores the households have used during the survey period. A variation across households in this dimension is a precondition for meaningful variation in the degree of behavioral loyalty. Based on previous research, such variation is expected.

Recall that there are five supermarkets available to the Ludvika market. These stores account for 90 percent of the purchases in the panel (Appendix 3, Table 54). In addition, there are some smaller outlets, such as gas-stations, that carry a limited assortment of grocery items. It is therefore possible that the households have shopped for groceries in more than the five supermarkets.

Table 10, below, reports the distribution of the total number of stores used during the period. The average number of stores used was 4.0 (median: 4). Ergo, the households in general use several stores to cover their grocery needs. Considering

that there are five supermarkets on the market, the households in general make good use of the stores available on this particular market. Only four percent of the households used just one store during the surveyed period, so only these fifteen households are undividedly loyal from a behavioral perspective.

The variation across households is large. This indicates that even in the same market, consumers seem to go about the task of grocery purchasing quite differently. Thus it is meaningful to continue the analysis of the research questions set up for the study.

Total number of food stores used	Frequency	Percent	Cumulative
100d stores used			percent
1	15	4.1	4.4
2	67	18.2	22.3
3	82	22.3	44.6
4	74	20.1	64.7
5	55	14.9	79.6
6	48	13.0	92.7
7	18	4.9	97.6
8	7	1.9	99.5
9	2	.5	100.0
Total	368	100.0	

Table 10. The store repertoire

The finding that about 20 percent of the households use more than five stores is accounted for by purchases in any of the gas-stations or convenience stores. Moreover, a limited number of respondents had also indicated purchases in supermarkets in nearby towns. Table 11 reports how many of the supermarkets in Ludvika the respondents have used. The number of respondents that have used only one of the supermarkets in Ludvika during the period is somewhat larger than the number of respondents that have used just one food store. The average number of Ludvika supermarkets used is 2.9 (median 3).

Number of Ludvika supermarkets used	Frequency	Percent	Cumulative percent
1	41	11.1	11.1
2	100	27.2	38.3
3	121	32.9	71.2
4	78	21.2	92.4
5	28	7.6	100.1
Total	368	100.0	

Table 11. The average use of Ludvika supermarkets

In all, these results concerning store repertoire are comparable with those presented in other studies. In a recent Danish study of a market with nine stores, the

average store repertoire during a one-month period was 3.7 stores (Olsen, Stenvinkel Nilsson and Lind 1998). Desmet and Volle (1996) report findings from two market areas in France: in one area with six super/hypermarkets, the average store repertoire was 3.8 stores and 3.7 percent of the respondents were "monoloyal," that is, they used one store only. In a market with five stores, the average store repertoire was 2.4 stores, and 14.1 percent were "mono-loyal." This data was based on a one-year measurement period. The authors conclude that this dimension of patronage behavior is clearly related to the spatial arrangement of stores on the market. Therefore, the exact figures are not generalizable, but the findings across these studies indicate that households, having a choice, tend to use several stores and that "mono-loyals" usually are in the minority.

4.1.2 How much is spent in the main store?

Above, it was shown that only 4 percent of the surveyed households spent their whole budget in the same food store, whereas the others divide their purchases over at least two stores. It is likely that these other households differ in the proportion of expenditure devoted to the store used the most (in terms of spending), i.e., differ in how behaviorally loyal they are according to the share-of-purchase measure. The estimation of this figure from the current data shows that this is clearly the case. Table 12 illustrates the large variation in the proportion of purchases devoted to the primary store.

Primary-store share-of-purchase	Frequency	Percent	Cumulative percent
100%	15	4.1	4.1
90-99%	35	9.5	13.6
80-89%	55	14.9	28.5
70-79%	45	12.2	40.7
60-69%	57	15.5	56.2
50-59%	61	16.6	72.8
40-49%	47	12.8	85.6
30-39%	42	11.4	97.0
20-29%	11	3.0	100.0
Total	368	_ 100.0	

Table 12. Primary store share-of-purchase

Primary-store share-of-purchase was on average 64 percent. However, again, the more interesting aspect of these results is the large variation across households. About 25 percent of the respondents spend 80 percent or more of their grocery budget in a single store. On the other hand, there are also a number of respondents that spend less than half of the food budget in a particular store. Taking into consideration that this data was collected over a period of one month, it is not unlikely

that for households with a low share-of-purchase, the primary store, according to this measure, will vary from period to period.

The distribution is, moreover, uni-modal, showing no apparent clustering around two groups. Thus, as discussed previously, there is no clear way to divide the respondents into "loyal" and "non-loyal" customers based on a behavioral measure such as share-of-purchase. These results confirm findings from previous studies that behavioral loyalty is a matter of degree.

Again, a comparison with other studies indicates that the findings here of the level of primary-store share-of-purchase are in a reasonable range. East (1997) reports findings from two recent surveys of British consumers, in which primary store share-of-purchase ranged from 65 to 75 percent. In two French markets, Desmet and Volle (1996) found primary-store share-of-purchase levels of 69 percent and 78 percent, respectively.

4.1.3 Primary-store share-of-visits

An alternative to the share-of-purchase measure is the share-of-visits measure, that is, the proportion of shopping trips, out of the total number of trips during the period, that is devoted to a store in terms of visits. The average share-of-visits for the primary store is 57 percent, 7 percentage points lower than the average share-of-purchase. That the general level for the share-of-visits measures is somewhat lower is also clear when comparing the distribution of this measure (Table 13) with those reported in Table 12.

Primary store	Frequency	Percent	Cumulative
share-of-visits			percent
100%	15	4.1	4.1
90-99%	11	3.0	7.1
80-89%	33	9.0	16.1
70-79%	35	9.5	25.6
60-69%	56	15.2	40.8
50-59%	78	21.2	62.0
40-49%	64	17.4	79.4
30-39%	56	15.2	94.6
20-29%	20	5.4	100.0
<u>Total</u>	368	100.0	

Table 13. First store share-of-visits

One reason why the share-of-visits measure indicates a lower degree of behavioral loyalty to the primary store might be that as it does not discriminate between purchase sizes, it is to a larger extent than the share-of-purchase measure affected by smaller fill-in purchases. If such purchases frequently are made in stores other than

the primary store, the share-of-visits in the primary store becomes lower, although the primary store might still represent a large share-of-purchases.

Another issue when using a share-of-visits measure for the current data-set, which only covers a limited time period, is that there are a number of ties between stores. That is, as the number of visits during a four-week period is relatively low, it is quite possible that some stores will get the same number of visits. In this sample, there were thirty ties, that is, cases where no store had been visited more frequently than any other store, and consequently no store was singled out as primary store based on the measure.

4.1.4 Carman's measure of entropy

The entropy measure is interesting in that it, in contrast to the above-presented measures, accounts for the usage of all available stores. Although some households devote the same purchase amount to their primary store, they might differ in how they divide their remaining purchases in other stores.

In this study the entropy measure was based on the shares-of-purchase allocated to each store (see page 17 for a description of the measure). The entropy measure was standardized to range from 0 to 1. Low values on the measure indicate high purchase concentration in one or a few stores, and high values indicate that purchases are evenly divided across a large number of stores.

In this study, the standardized measure of entropy ranged from 0 to .80, with an average level of entropy of .40. However, without benchmarks from other studies, the level on this measure is difficult to interpret. Unfortunately, Carman (1970) does not provide descriptive data on the level of entropy for the store chains in his study. The interpretation of the measure will become clearer in comparison with the other measures of behavioral loyalty presented below.

4.1.5 Comparing measures of behavioral loyalty

Previous studies have shown different measures of behavioral loyalty to be highly correlated. In this section, the two proportion measures will be compared by analyzing the correlation between the two and by estimating the extent to which the same store will come out as the primary store when utilizing the different measures. Moreover, the measures will be compared to the Carman measure of entropy and with store repertoire.

The correlations in Table 14 show that the two proportional measures of behavioral loyalty are highly correlated, and that both of them are related to store repertoire and to the entropy measure.

	Store repertoire	Primary store share- of-purchase	Primary store share- of-visits
Primary-store share-of- purchase	66 **		, , , , , , , , , , , , , , , , , , , ,
Primary-store share-of- visits	71 **	.78**	
Entropy measure	.78**	93**	82 **

Table 14. Zero-order correlations (Pearson) between three measures of behavioral loyalty and store repertoire. " = Correlation is significant at the .01-level (2-tailed).

The correlations reported above indicate that the two proportional measures of the degree of behavioral loyalty are closely related. Does this mean that the households will have the same store as primary store independent of the measure used? A cross-tabulation showed that 78.5 percent of the respondents have the same first store when the two proportion measures are used (appendix 2, Table 51). Thus, almost 25 percent of these households *are not* classified as loyal to the same store when the different measures are used. Although the measures are highly correlated, they show that these two aspects of behavioral loyalty can differ in the respect that some households would not be considered loyal to the same stores if one used one measure rather than another. This suggests that the measures are not fully interchangeable.

Although the share-of-purchase measure and the entropy measure are highly correlated, a closer examination shows that they reflect different phenomena. To illustrate the difference between the entropy measure and the share-of-purchase measure, the two variables are plotted against each other (Figure 21). For households with a high primary-store share-of-purchase there is, as expected, little or no variation in the entropy measure. However, as the primary-store share-of-purchase measure decreases, the variation in the entropy measure increases. This indicates that although some households devote the same share-of-purchase to their primary store, they can differ significantly in their overall purchase pattern. As the number of stores used affects the entropy measure, this measure appears better at capturing more pronounced multi-store usage. On the other hand, it is less suited for understanding usage of a specific store. As an example, households with an entropy level of .4 vary in their primary-store share-of-purchase between approximately 35 and 75 percent.

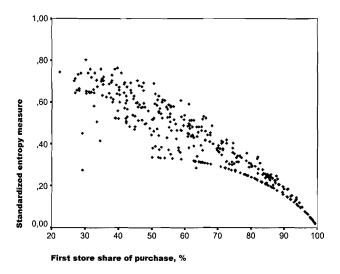


Figure 21. Comparing the standardized measure of entropy with the share-ofpurchase measure for the first store

4.1.6 Comparing behavioral measures with respondents' own assessment of main store

A question that touched on the issue of behavioral loyalty was also asked in the questionnaire. Respondents were asked whether they had a "main store," that is, a store they knew well and in which they made the majority of their purchases. Respondents giving an affirmative answer were also asked to indicate the name of the store. 325 respondents indicated that they did have a main store. However, twenty-one of these indicated two specific stores, and as a result were not included in the analysis below. Although this question also contained an evaluative component, it is interesting to compare the extent to which the households' perceptions of which store they consider to be their main store corresponds to their behavior as recorded in the diary.

Cross-tabulation shows that the respondents' assessment of their own main store is the same as the primary store, as measured by *share-of-purchase*, in 85 percent of the cases. The overlap between the primary store according to the *share-of-visits* measure and self-assessed main store is somewhat lower: 79 percent (appendix 2, Table 52 and Table 53). In general, the overlap between self-perceived behavior toward stores and observed behavior is large. As noted above, the primary store, according to the two proportional measures, was not always the same store. In these cases, the respondent's self-assessed main store more often coincides with

the store in which the respondent spends the most money, rather than the store in which she or he makes the largest number of visits (Table 15).

	Frequency	Percent
Main store = primary store (purchase) and primary store (visits)	213	70.1
Main store = primary store (purchase)	46	15.1
Main store = primary store (visits)	9	3.0
Main store not the same as the primary store according to any of the proportional measures	36	11.8
Total	304	100.0

Table 15. Congruence between perceived main store and primary store according to the two proportional measures of behavioral loyalty.

Curiously, in approximately every tenth case the perceived main store is neither the one in which the majority of spending is made nor the store that gets the most visits (Table 15). This deviation could possibly be due to small shares in several stores, including the store that is perceived to be the main store. Another explanation could be that for these households, the behavior during the period was atypical. Furthermore, the question concerning the perceived main store was loosely formulated and also included the descriptive "store you know well." Therefore, a store that might not be the most frequently used could still be considered the main store.

	Main store = primary store (p&v)	Main store = primary store (p)	Main store = primary store (v)	Main store ≠ primary store (p&v)	Two main stores	No main store
Primary-store share-of-purchase	.75	.56ª	.47ª	.47ª	.53ª	.47ª
Primary-store share-of-visits	.66	.41ª	.50	.44ª	.48ª	.47ª
Store repertoire	3.6	4.4	4.9	4.7ª	3.8	4.8ª

Table 16. Comparisons of degree of behavioral loyalty and store repertoire between households for which the main store is, and is not, the same as the primary store. Significant differences between groups on all three variables (One-way ANOVA significant at the .01-level). "Scheffe's post hoc test indicates a significant difference (at the .05-level) between this group and the group for which main store = primary store p&v.

Finally, about ten percent of the respondents answered in the negative to the question "Do you have a main store?" A likely reason for this is that these respondents would have a low degree of behavioral loyalty to any store. Table 16 presents comparisons on the proportional measures of behavioral loyalty and store reper-

toire between the different groups described in this section. Respondents whose self-assessed main store is the same as the primary store, according to both measures, have overall significantly higher levels of behavioral loyalty.

4.1.7 Store avoidance

Store avoidance is an important aspect of the store-choice process, since whether or not, and why, a store is chosen "out" of the store repertoire may help in understanding why other stores are chosen. Store avoidance is not overt behavior, but as it could be seen as the consequence of the same kind of store evaluations made by consumers as when they choose "in" a specific store to patronize, it is regarded here as an aspect of the households' patronage behavior.

As previously shown, most households do not use all stores, however, it cannot be concluded that stores not used are specifically avoided. Therefore, a hypothetical question on store avoidance was included in the questionnaire, probing whether respondents think they would avoid stores if they had equal access to the major stores on the market. As reported in Table 17, a little more than a third of the respondents would do so.

	Frequency	Percentage
No store avoided	237	64.4
1 store avoided	69	18.8
2 stores avoided	45	12.2
3 stores avoided	16	4.3
4 stores avoided	1	.3
Total	<u>368</u>	100.0

Table 17. Number of stores that respondents would avoid if they had equal access to the major stores on the market.

Is store avoidance related to the other dimensions of patronage behavior? Table 18 reports differences between store "avoiders" and "non-avoiders" concerning the patronage dimensions presented previously.

	Store "avoiders"	Non- avoiders
Store repertoire	3.74	4.06*
No. of Ludvika s-markets used	2.70	2.96**
Primary-store share-of-purchase (%)	66.0	63.6
Primary-store share-of-visits (%)	60.5	55.3 **

Table 18. Differences between store "avoiders" and "non-avoiders" concerning patronage behavior, "=significant at the .05-level (t-test),

*= difference significant at the .10 level (t-test),

The analysis shows that avoiders differ slightly but significantly concerning store repertoire and share-of-visits in the primary store. It is likely that most households restrict their store repertoire for several reasons, however, these results indicate that store avoidance in some instances can contribute to our understanding of store-choice patterns. As an extreme example, the person who would avoid four of the five supermarkets in Ludvika currently only uses one supermarket. However, shoppers that only exclude one store from the set of possible stores, still have several stores to choose from and can therefore have a large store repertoire. Therefore it seems reasonable that store avoidance would be more important for understanding *what* stores the households include in their store repertoires rather than the *size* of the store repertoire. Reasons for avoiding specific stores are examined in section 4.5.

4.1.8 Behavioral loyalty and store repertoire as related to other patronage dimensions

In this study, behavioral loyalty is seen as a dimension of overall patronage behavior. Previous studies have found some evidence, albeit mixed, for the link between behavioral loyalty and total spending. Moreover, it is possible that behavioral loyalty is related to shopping frequency – households making a larger number of purchases have more occasions to use stores – as well as to variations in purchase size. This section will report data on purchase frequency, shopping size variability, and how these variables and purchase volume are related to the degree of behavioral loyalty and to store repertoire.

The plot in Figure 22 illustrates the variance in the number of shopping trips made during the surveyed period. During this period, the households made on average 14.6 purchase trips (median 14). Since the study covered four weeks, i.e., twenty-eight days, this means that on average one purchase was made every other day. However, the number of purchases ranged from three purchases to thirty-nine purchases.

Differing purchasing strategies can to some extent be reflected in the variation in the size of purchases. Although most households make at least some very small purchases, there is a large variation in the size of the largest purchase. The size of a household's smallest purchase ranges from .05 percent to 26 percent (mean 1.9 percent) of the total spending during the period, and the size of the largest purchase ranges from 7 percent to 65 percent (mean 21 percent). This indicates that there are fairly large differences in how the households split up their purchasing volume over the purchasing trips made during the period. The variation in pur-

chase size was estimated as the standard deviation in the proportional size of the household's purchases over the studied period.

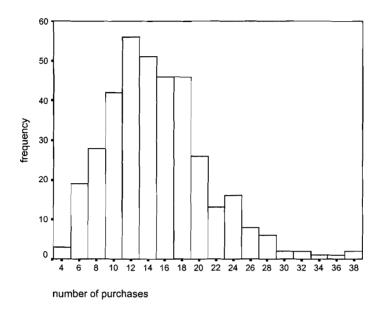


Figure 22. Number of purchases during the period, n=368.

The variation between households in frequency of shopping could be due to different needs as well as to different strategies for solving the task of food purchasing. Households that buy more groceries (e.g., families with children) might go the store more often to cover this need. On the other hand, making either many small purchases or some major shopping trips and small fill-in trips could serve the same shopping needs, in terms of volume. Thus, purchasing frequency could also be related to variation in purchase size. Households that carry out a greater number of purchasing trips during the period of study could be expected to have a more even purchasing pattern. The upper half of Table 19 reports correlations between these three variables, and the lower half reports correlations between these measures and measures of behavioral loyalty and store repertoire.

	Shopping frequency	Total purchase volume (SEK)	Variation in purchase size
Total purchase volume (SEK)	.30**		
Variation in purchase size	56 **	10	
Store repertoire	.52**	.13*	21 **
Primary store share-of- purchase	32 **	.02	.19**
Primary store share-of-visits	27 **	07	.02
Entropy measure	.41**	.03	24 **

Table 19. Zero-order correlations (Pearson) between measures of behavioral loyalty and three other dimensions of patronage behavior. " = Correlation is significant at the .01-level (2-tailed). = Correlation is significant at the .05-level (2-tailed).

There is a significant correlation between the number of purchasing trips and total purchase volume, which suggests that shopping frequency to some extent is induced by a greater need for groceries. However, shopping frequency is also related to variation in purchase size: households that make fewer shopping trips have a more uneven pattern in the size of their purchases. It is likely that large major purchases decrease the need for frequent fill-in trips. Thus, shopping frequency is related to both total needs for groceries as well as the approach the household has to covering these needs.

Shopping frequency and variation in purchase size is also clearly related to the behavioral loyalty dimensions. The more shopping trips reported during the period, the more stores are used, and the lower are both primary-store share-of-purchase and primary-store share-of-visits. The causal order between shopping frequency and degree of behavioral loyalty is not clear-cut. East et al. (1995) also find a relatively high correlation (-.37) between shopping frequency and behavioral loyalty. They interpret this finding to mean that shopping frequency is a reflection of behavioral loyalty. On the other hand, the other causal direction is also plausible; a high shopping-frequency strategy, induced, e.g., by a lower level of planning, will provide more occasions to use several stores.

The correlation with the entropy measure indicates that the number of shopping trips not only is related to a decrease in the share of purchases in the first store, but also increases the general tendency to spread purchases across a number of stores. Variation in purchase size is negatively related to store repertoire and positively related to primary-store share-of-purchase but not to primary-store share-of-visits. The reason is probably that the share-of-purchase measure is more sensitive to large purchases. Households that make some very large purchases are more likely to have a high share of spending in a single store.

In contrast to the finding presented by Denison and Knox (1994), total purchase volume is not related to any of the measures of the degree of behavioral loyalty, although it is somewhat related to store repertoire. Since no strong theoretical argument has been put forth in the literature for a relationship between total purchase volume and degree of behavioral loyalty, it is not unlikely that the finding in Denison and Knox (1994) was limited to the context of that study. An alternative explanation to this discrepancy could be that these authors use the Enis-Paul index as the measure of the degree of behavioral loyalty. However, since this measure has been shown to be highly correlated to the two proportional measures of degree of behavioral loyalty used here (Desmet and Volle 1996), this explanation seems less plausible.

As noted in the previous chapter, the number of purchases made can affect the range of the behavioral loyalty measure – when very few purchases are made there are few possibilities to distribute purchases across stores, and in the extreme case of one purchase, proportion measures would indicate 100 percent loyalty. This would be reflected in the correlation between shopping frequency and degree of behavioral loyalty. In order to check whether the correlations between shopping frequency and the measures of behavioral loyalty reported in Table 19 are mainly due to this phenomenon, these correlations were also estimated for a sub-sample of 298 households having made ten or more purchases during the survey period. For this sub-sample, the correlations between shopping frequency and the following dimensions were: .41 (.52) for store repertoire, -.29 (-.32) for first store share-ofpurchase, -.20 (-.27) for first store share-of-visits, and .34 (.41) for the entropy measure (full sample correlations in parenthesis, all correlations significant at the .01-level). Although these correlations are slightly lower in magnitude, the correlation between shopping frequency and behavioral loyalty seems not mainly to be a method artifact.

4.1.9 A summary of the analyses of patronage behavior

To conclude this section, most households in the study have used several of the stores available to them. Moreover, both proportional measures of behavioral loyalty clearly indicate that there is a large variation in degree of behavioral loyalty towards the primary store. On the basis of these measures it is not possible, without a great deal of arbitrariness, to classify consumers into loyal and non-loyal customers. Complexity is added when the number of stores used is entered into the equation. A comparison of the entropy measure – which considers not only the amount spent in the primary store, but also how spending is divided across all stores used by the household – with the share-of-purchase measure shows that households with the same degree of behavioral loyalty can differ in terms of the

shape of the rest of the pattern. The heterogeneity increases as the share-ofpurchase in the primary store decreases. However, the correlation between the share-of-purchase measure and the measure of entropy is high, indicating that the effect of this increasing heterogeneity is limited.

The correlation between the two proportional measures of behavioral loyalty was also high. Yet a comparison of the two proportional measures, for which store is the primary store shows that for almost 25 percent of the sample, different stores were pointed out as the primary store. The measures derived from the diary-data were compared to the respondents' assessments of their perceived main store. In many of the cases where respondents had a perceived main store, this store was the same as the primary store as observed from the diary data. However, there were also cases where respondents named a third store as their main store. In general, the degree of behavioral loyalty was higher in cases where the perceived main store was the same as the primary store according to both proportional measures of behavioral loyalty.

The measures of behavioral loyalty were also related to other aspects of patronage behavior. Store repertoire, a dimension that in some contexts has been used as a measure of behavioral loyalty, is strongly correlated to all three measures of behavioral loyalty used here. Purchase frequency is negatively correlated to the two proportional measures of loyalty. The variation in purchase size is positively related to share-of-purchase, and negatively to the entropy measure. That is, the more the household combines small and large purchases, the higher the degree of behavioral loyalty. Store avoidance was somewhat related to store repertoire and share-of-visits. One reason for a low relationship is that the structure of the overall pattern is not affected by the avoidance of one store, as there are several others on the market. Store avoidance is thus probably more important for understanding what stores are included in the households' store usage pattern, rather than how many stores are used, and how.

In all, the different patronage dimensions studied here are clearly related. However, the causal nature of these relationships is difficult to determine. It seems reasonable to regard them as structurally related dimensions that constitute facets of a complex behavior. Therefore, although some of the variables are highly correlated to the degree of behavioral loyalty, they will not be used as explanatory variables in this study.

In subsequent analyses, the share-of-purchase will be the main dependent variable of the three measures of behavioral loyalty. As discussed previously, the way in which shopper and store characteristics determine how households divide their purchases across stores is a key question in this thesis. Although the entropy

measure captures more of the complexity of store choice behavior, it does not reflect the usage of a specific store. Moreover, its complexity makes results more difficult to interpret. In contrast, the two proportion measures are both indicators of store loyal behavior as such and of usage of a specific store. The empirical analysis shows, however, that for a shorter measurement period, as in this study, the measure based on spending more clearly discriminates between stores, i.e., there are few stores with equal shares as is the case for the share-of-visits measure. Furthermore, previous studies have to a great extent used the share-of-purchase measure, so the comparability of the results from this study increases if the same measure is used here. However, where possible, all three measures of behavioral loyalty will be included in the analyses.

In the remaining part of the thesis, factors that might contribute to our understanding of why households vary in degree of behavioral loyalty, why some households avoid some stores, and what determines their choice of primary store based on purchases will be studied. First, however, a closer look at *store evaluations*, one suggested explanatory factor, will be taken.

4.2 How do shoppers evaluate stores?

How shoppers evaluate available stores, has been shown to have some effect on their store-choice behavior. Evaluations of stores or the perceived quality of stores is often included in surveys on store choice and store loyalty. As suggested by Dick and Basu (1994), it is reasonable that not only what shoppers think about a specific store, but also the perception of this store in comparison to other available stores is important for understanding store choice. If a consumer thinks that many of the available alternatives are good, then the evaluation of a specific store might be of less interest.

This section will examine the evaluation of stores and the extent to which respondents differentiate between the stores in the Ludvika market place. Based on the evaluations of stores, measures of relative store evaluations will be estimated, as well as a measure of the *strength of preference* for the store to which the respondent gives the highest evaluation score.

4.2.1 Are there any perceived differences between stores?

In the first part of the questionnaire, respondents were asked to indicate whether they perceived any major differences on a number of dimensions, between stores, and if so, what store they perceived to be the best. When comparing across respondents, a first indication of the extent to which they perceive differences between stores is to sum up the number of dimensions for which the respondents have stated that one store performs better than the others (Table 20).

No. of dimensions	Frequency	Percent
no dimension	44	12.0
1 dimension	41	11.1
2 dimensions	52	14.1
3 dimensions	68	18.5
4 dimensions	73	19.8
5 dimensions	38	10.3
6 dimensions	30	8.2
7 dimensions	10	2.7
8 dimensions	12	3.3
Total	368	100.0

Table 20. The number of dimensions on which the respondent has indicated a better performing store

Only a minor share of the respondents, 12 percent, has not mentioned a better store in at least one aspect. Most respondents perceive some differences between stores on the included dimensions, but they vary in the number of dimensions in which a "better" store is perceived and consequently in which dimensions. The next question asked is whether there are dimensions that are seen to differ between stores more often than others. In Table 21, the share of respondents indicating that one store outperforms the others is reported for each dimension.

	Share of respondents indicating a better store
The overall price level	67 %
Quality on fruits and vegetables	49 %
Orderliness of the store	44 %
The assortment	44 %
Price promotions	44 %
Quality on fresh produce	43 %
The personnel encounter	32 %
Opening hours	18 %

Table 21. The share of respondents indicating one better performing store

There is a large variation between the dimensions concerned with the number of respondents who find that one store outperforms others. Few respondents indicate a perceived difference between stores concerning opening hours whereas two-thirds of the respondents indicate that a store is better than others on overall price levels. One reason for this divergence is that the objective differences between stores on these dimensions differ. For example, concerning opening hours, the stores are all open seven days a week with fairly similar hours, but there are larger differences in price levels among them. However, it is plausible that these results

also reflect that the dimensions are not equally important to each other in comparing stores. The quality of fruits and vegetables could in this way be interpreted to be more important to customers than the personnel encounter. Also, the low importance of opening hours might be due to the fact that for many shoppers, all stores have satisfactory opening hours.

4.2.2 Evaluations of stores and the development of a measure of strength of preference

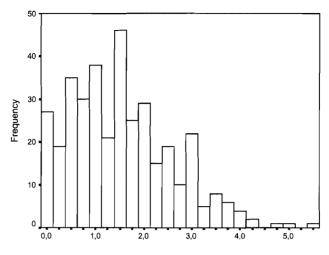
As described in the previous section on study design, respondents were asked to give a separate evaluation of each store with which they were familiar on a 10-item store evaluation scale. This measure will be used to develop measures of relative evaluations and a measure of strength of preference.

The first step is to look at the number of stores that respondents have evaluated, since relative evaluations should only be estimated for respondents who have rated more than one store. There was some internal non-response for the evaluative items. Hence, a respondent was considered to have evaluated a specific store if at least seven of the ten items had been marked. Table 22 reports the number of stores rated. For the purpose of the study it is encouraging that the majority of respondents have rated several stores. Each store was rated by approximately two-thirds of the respondents, or more. For a more detailed description of how the stores were rated, see Appendix 3, Table 58.

Number of stores rated	frequency	percent
no store rated	4	1.1
1 store rated	15	4.1
2 stores rated	41	11.1
3 stores rated	77	20.9
4 stores rated	86	23.3
5 stores rated	122	33.2
6 stores rated	23	6.3
Total	368	100.0

Table 22. Number of stores rated

Based on the summated index of the scale, each respondent thus had one evaluation score for each store she or he was familiar with. A first step was to examine the extent to which respondents differentiated between stores on the basis of this summated measure. To this end, the difference between the highest rating and the lowest rating was calculated for each respondent. The distribution of this measure is presented in Figure 23.



The difference between the highest and the lowest rating

Figure 23. A chart of the difference between each respondent's highest and lowest rating across stores

As is apparent from the chart, the range of this difference score is .01 - 5.4 (mean 1.5), with the maximum score possible being 6 (if the highest-rated store gets a "7" on all the items and the lowest-rated store gets a "1" on all items). Thus, according to these results, there are several respondents that perceive clear differences between stores, but also respondents that perceive no large differences between stores.

The next step is to determine if the respondent has an attitudinally preferred store, and if so, what store this is. The most-preferred store was determined by comparing the ratings between the stores. In all instances when one of the stores had a relatively higher rating, this store was noted as the most preferred store. Based on this estimation, 81 percent of the respondents had an attitudinally preferred store (Table 23, see Table 58 in Appendix 3 for how preferences are distributed across stores).

Store evaluations	Frequency	Percent
Some store preferred	298	81.0
Perceived difference between stores, no store preferred	42	11.4
Two or more stores evaluated, no difference between stores	9	2.4
One store evaluated	15	4.1
No store evaluated	4	1.1
Total	368	100.0

Table 23. Store preference

Thus most respondents have an attitudinally preferred store. However, it should be noted that the strength of the relative evaluation is not taken into consideration here. It is not unlikely that respondents would vary in the degree of how much better the "better" store is perceived to be. Therefore, a measure of *strength of preference* was developed. For respondents with an attitudinally preferred store, this measure was estimated as the difference between the most-preferred and the second most-preferred store. The reason for this is that if the score for the most-preferred store were compared with the scores for all other evaluated stores, the measure of strength of preference would be sensitive to whether or not consumers have a store they really dislike. The strength of preference ranged from .01 to 5.40 (mean .55) The distribution of this score is represented in Figure 24. In comparison to the measure of overall difference, it is rather less dispersed.

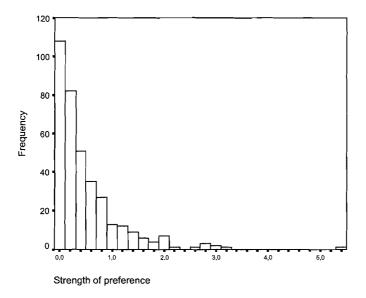


Figure 24. The distribution of the measure of strength of preference for the attitudinally preferred store.

To summarize, the results suggest that shoppers do tend to perceive differences between stores. However, the aspects in which they perceive stores to be different vary, as does the size of the perceived differences between stores, and which, if any, store is the overall "better" store. The data suggests that although most shoppers think that stores are different, the extent to which one store is considered "outstanding" in comparison to other stores is limited. The measure of strength of preference indicates that the difference between the highest-rated and second-highest rated store in many cases is small. Table 24 reports the correlations be-

tween the different measures of store evaluations used in this section and the shopping orientation factor *indifference*, which is conceptually related to how stores are evaluated.

	No. of differentiated store dimensions	Difference between highest and lowest rating	Strength of preference
Difference between	.34**		
highest and lowest rating			
Strength of preference	.13*	.56**	
Indifference factor	<u> </u>	31**	18 **

Table 24. Zero-order correlations (Pearson) between aspects of respondents' store evaluations. ** = Correlation is significant at the .01-level (2-tailed), * = Correlation is significant at the .05-level (2-tailed).

Although of moderate strength, the correlations are in the expected direction. The relatively low correlation between the measure of strength of preference, the number of differentiated store dimensions and the indifference factor support the argument made above; although most respondents perceived stores to be different from one another, it is not necessarily related to how much better the "best" store is perceived to be.

4.2.3 Relative evaluations versus evaluations per se

The use of relative evaluation scores is based on the assumption that these would differ from "normal" evaluations scores, that is, they would give a substantially different picture of how stores are evaluated. To illustrate this point, the measure of relative evaluation will be compared to the "normal" score.

In the figures below, the evaluation of Hemköp Marnäs is used as an example. In general, Hemköp Marnäs received overall high ratings (Appendix 3, Table 57). The first figure (Figure 25) shows that among the respondents who have rated Hemköp as well as ICA Matmäster, the store on the other side of the road, some of the respondents who gave Hemköp a high score have also given ICA a high score. This indicates that although they consider Hemköp Marnäs to be a good store, they do not think that it is a comparatively better store, that is, they make a low *relative* evaluation of Hemköp Marnäs. But by contrast, there are also respondents who have given Hemköp Marnäs a much higher overall rating than ICA Matmäster.

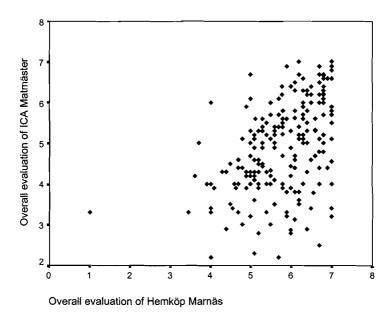


Figure 25. A comparison between the overall evaluations of Hemköp Marnäs and ICA Matmäster.

The above suggests that there is not necessarily a strong relationship between store evaluations per se and relative store evaluations. Figure 26 compares the evaluation of Hemköp Marnäs and the relative evaluation of Hemköp Marnäs. The relative evaluation measure is estimated for all respondents who have evaluated this store including those who have a preference for another store. Therefore this measure also exhibits negative values. Among those who have a positive opinion of Hemköp Marnäs, there is a clear variation in whether or not they perceive the store to be as good as or much better than the other stores.

The scatter-plots in this figure and the next illustrate that it makes a difference to use evaluations per se or relative evaluations, as these can be quite divergent. Table 25 reports correlations between the evaluation of each store, and the relative evaluation of the same store. There are deviations between these two measures for all stores, although they are more closely related for the other stores than for Hemköp Marnäs.

	Evaluation of the respective store
Relative evaluation of Hemköp Marnäs	.48**
Relative evaluation of ICA Matmäster	.77**
Relative evaluation of Hemköp City	.64 **
Relative evaluation of Konsum	.76**
Relative evaluation of Matmagasinet	.77**

Table 25. Zero-order correlations (Pearson) between evaluations and relative evaluations, ** = Correlation is significant at the .01-level (2-tailed)

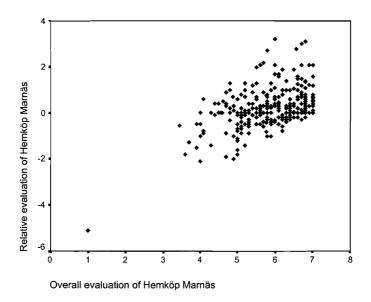


Figure 26. A comparison between the evaluation of Hemköp Marnäs and the relative evaluation of Hemköp Marnäs.

4.3 What determines the degree of behavioral loyalty?

Previous analyses have shown that the degree of behavioral loyalty as reflected in both share-of-purchase and share-of-visits measures varies greatly across households. Then what explains why some households only spend a fourth of their budget in the store in which they make the largest share of their purchases, whereas others spend almost their entire budget in the primary store? The explanatory factors investigated are shopper characteristics, preference for the primary store, and relative proximity to the primary store. First, bivariate analyses are presented, and at the end of the section, multivariate analyses are presented.

Data on membership in customer programs will also be included in the analyses. As discussed earlier in this thesis cross-sectional data such as this is not well-suited for analyzing the effects of loyalty schemes on patronage behavior, as differences between card-holders and non-card holders in behavioral loyalty cannot be directly attributed to the card. However, in a multivariate analysis, where other influences on behavioral loyalty are accounted for, a possible significant effect of card-ownership should provide at least circumstantial evidence for the effect of loyalty cards on behavior.

4.3.1 Household/shopper characteristics

Household and shopper characteristics that have been suggested as determinants of the degree of behavioral loyalty in previous studies include both socio-economic variables, demographic variables, and psychographic variables, although the former have been more extensively used. As reported in the theoretical section of this thesis, these analyses have provided mixed evidence. Correlations between the loyalty measures used in this study and a set of household/shopper indicators are provided in Table 26.

		Primary store share- of-purchase	Primary store share- of-visits	Entropy measure
Demographics/	Respondent's age (n=368)	08	.01	.08
socio-economics	Household size (n=368)	.05	08	01
	Income category (n=352)	.01	04	.00
	Income/household size (n=352)	01	.03	.00
Shopping	Price orientation factor (n=347)	29**	29**	.30**
orientation	Contact orientation factor (n=347)	.21**	.22**	23 **
factors	Indifference factor (n=347)	03	.01	.04
-	Planning behavior factor (n=347)	.06	04	08

Table 26. Zero-order correlations (Pearson) between measures of behavioral loyalty and household/shopper characteristics. ** = Correlation is significant at the .01-level (2-tailed).

In contrast to findings from some previous studies, neither age, household size, nor household income, are significantly related to the degree of behavioral loyalty. To examine the possibility that there are non-linear relationships undetectable by correlation analysis, curve estimations based on various non-linear relationships were run with share-of-purchase as the dependent variable and the socio-demographic

variables as independent variables. These analyses showed no significant contribution of these variables on the degree of behavioral loyalty.

Among the shopping-orientation factors, price orientation and contact orientation are significantly correlated to the degree of behavioral loyalty (note again that the entropy measure ranges from 0 for a high degree of behavioral loyalty to 1 for a low degree of behavioral loyalty). The correlations also have the intuitively expected directions. It is plausible that activities related to price comparisons and the belief that it is worthwhile to compare prices are negatively correlated with behavioral loyalty. It is also intuitively appealing that shoppers that are more interested in personal contact with store personnel would tend to concentrate purchases to a particular store.

In the theoretical section of this thesis, it was argued that grocery shopping is most appropriately analyzed on the household level, therefore the measure of behavioral loyalty is measured on the household level for this study. As described in section 3.5.5, in some households the spouses share the chore of grocery shopping, whereas in other households one of the spouses does all, or most, of the grocery shopping. It is possible that households in which more than one person does the shopping, would have a lower degree of behavioral loyalty, and such an effect might distort the relationships of interest in this study. This was investigated with a one-way ANOVA analysis. This analysis did not indicate significant differences in the degree of behavioral loyalty between households with one person doing all the shopping, households in which the spouses shared shopping unequally, and households that shared the task of shopping equally.

A puzzling aspect of the above results is that the price-orientation factor is significantly related to the degree of behavioral loyalty, whereas income, as well as income per household member, is not. A conceivable assumption is that price search and comparison-shopping would be more important for low-income households with more restricted food budgets. Based on that assumption, the correlation between price orientation and the degree of behavioral loyalty would be reflected in a corresponding, negative, correlation between income and behavioral loyalty – a theory that is not supported by this study. This suggests that there is no clear relationship between the price-orientation dimension, and socio-demographic variables. To shed light on this issue, Table 27 reports correlations between the shopping orientation factors and the socio-demographic variables of income, as well as age.

	Respondent's s age (n=347)	Income category (n=335)	Household size (n=347)	Income/ household size (n=335)
Price orientation factor	.09	12*	.09	18 ^{**}
Contact orientation factor	.33**	.06	.01	02
Indifference factor	.23**	19 **	21 **	.02
Planning behavior factor	19**	.11*	.23**	13 *

Table 27. Zero-order correlations (Pearson) between shopping orientations factors and socio-demographics. ** = correlation is significant at the .01-level (2-tailed). * =correlation is significant at the .05-level (2-tailed).

As expected, the price-orientation factor is negatively correlated to the income factor, however, the correlation is relatively low. The correlation is somewhat stronger when household size is taken into account. Age is related to finding personal contact important, and older people also seem to perceive fewer differences between stores and want shopping to be expedient. These results indicate that shopping orientations, especially the price-orientation factor, are to a low degree explained by socio-demographic background variables. This is especially noteworthy concerning the price-orientation variable. Varying economic situations would be a reasonable explanation to why some consumers are more price conscious, with the assumption that the less money one has, the higher the need for saving and the larger the pay-off for being price conscious. However, as discussed previously, other factors related to the attitudes towards price-search behavior, such as smart-shopper feelings and overall attitudes to thrift, perhaps gained in childhood, could be more important for understanding this behavior.

4.3.2 The relationship between attitudinal preference and degree of behavioral loyalty

Two questions to be examined are: do households that have an attitudinal preference for the store in which they make most of their purchases use their primary store more extensively than others; and does the strength of preference explain the degree of behavioral loyalty? In Table 28, the degree of behavioral loyalty is compared for households for whom the attitudinally preferred store is, and is not, their primary store. A first observation is that a larger number of households do not have an attitudinal preference for their primary store, according to the measure used in this study. This group also has a significantly lower degree of behavioral loyalty.

	No attitudinal preference for primary store	Attitudinal preference for primary store
Average share-of-purchase in	59%	71%
primary store		
n	205	159

Table 28. Degree of behavioral loyalty for households with and without the same store as primary store and attitudinally preferred store. Independent sample t-test significant at the .01-level (2-tailed).

One could, furthermore, assume that for respondents for whom the attitudinally preferred store and primary store coincide, it would be the case that the stronger the relative attitude, the higher the degree of behavioral loyalty. For the sub-sample of respondents with an attitudinal preference for their primary store, the correlation between strength of preference and degree of behavioral loyalty is .17 (Pearson, p < .05). That is, for respondents shopping in their preferred store, the strength of preference also affects how much they spend in the store in the store. However, this relationship is fairly weak. It is plausible that to the extent that attitudinal preference explains the variance in degree of behavioral loyalty, the variance is captured by whether or not the primary store is the attitudinally preferred store, and the strength of the preference is less important. The results could also be due to the highly skewed distribution of the measure of strength of preference (see Figure 24). According to the measurement used, most respondents have a fairly low degree of preference, and consequently there is little variance in the variable that could contribute to the understanding of the variance in the degree of behavioral loyalty.

4.3.3 Location and degree of behavioral loyalty

Location has been one of the more prominent explanatory factors used in store choice research and it has been shown that store location in relation to the households' residence significantly contributes to the explanation of whether or not a household uses as specific store. However, location is seldom included as an explanatory variable for understanding *how* a store is used, for example, whether location affects the degree of behavioral loyalty. If traveling to the store is regarded as a disutility by the shopper, it is reasonable to assume that proximity to the store should affect how much the store is used. If the primary store is very conveniently located, there would be no disutility involved with making all purchases, including fill-in purchases, in this store. If the primary store is inconveniently located, the shopper might to a greater extent use other stores. On the other hand, if a household takes the trouble to travel to a less conveniently located store, they might

make larger purchases while there, to "make up" for the longer traveling time (East, Harris, Willson and Lomax 1995).

The studied community is fairly small, and among those living within the city limits, few households live further away than three kilometers from any of the stores. There are also some households living in surrounding residential areas who have to travel a somewhat longer distance to get to any of the stores. Information about the location of each household's residence was collected in the survey (see section 3.5.4). Based on this information, the distance from each household's home to each of the five supermarkets in Ludvika was estimated. As the focus here is on the usage of the primary store, the distance to the primary store was used in the analysis. The fourteen households having a store other than one of the five supermarkets as the primary store were excluded from the analysis, as data on the location of other stores was not available. Moreover, there were forty-six households for which only the direction in which they lived was obtained and so distance to the stores could not be estimated.

The distance from the household's residence to the store does not, however, take into consideration the relative accessibility of each store, that is, the store's location compared to that of other stores. Therefore, a *relative distance* measure was computed for each household's primary store. This measure represents the difference between the distance to the primary store and the distance to the closest of the other four supermarkets. Positive values on this measure indicate that the primary store is the closest supermarket, whereas negative values indicate that another supermarket is located closer to the household's residence. This measure was also computed for the households for which exact location was not known, but for which the access road into Ludvika was known. One household for which directional data was ambiguous was excluded from the analysis.

	Frequency	Percent
The primary store is the closest supermarket	143	40.5
The primary store is up to 500 meters	133	37.7
further away than the closest supermarket		
The primary store is 501 to 1,500 meters	26	7.4
further away than the closest supermarket		
The primary store is more than 1,500 meters	51	14.4
further away than the closest supermarket		
Total	353	100.0

Table 29. The share of households for which the primary store was the closest, or not the closest store, respectively

The range of the relative distance measure was 675 to -2,730 meters. For a large share of households, the primary store was the store closest to the household's

residence but there are also many households for whom the closest store is not the primary store (Table 29). Correlations between the distance measures and primary store share-of-purchase are reported in Table 30.

	Primary store share-of- purchase	Distance to primary store
Distance to primary store (n=308)	06	
Relative distance to primary store (n=353)	.22**	38**

Table 30. Zero-order correlations (Pearson) between the two distance measures and first store share-of-purchase. **= correlation is significant at the .01-level (2-tailed).

Distance to store is not significantly correlated to degree of behavioral loyalty. In contrast, the relative distance to primary store is significantly correlated to behavioral loyalty. The correlation is in the expected direction; the degree of behavioral loyalty is higher the closer the store is relative the location of other stores. It makes sense that households for whom the primary store is more conveniently located, in relative terms, would use that store more extensively than households who make most of their purchases in a less conveniently located store.

4.3.4 Degree of behavioral loyalty and customer membership cards

In Ludvika, the three major retail chains present have all launched customer membership cards with the added possibility to deposit money on an account connected to the card. At the time of the study, only one of the chains, KF (Konsum), rewarded the amount of purchases through a bonus system. Consequently, two of the customer membership cards did not, at the time of the study, include direct incentives for increased purchasing. However, incentives to visit the stores in terms of, for example, information on membership promotions, are regularly sent out by all three retail chains to their member customers.

It is, of course, possible for a household to apply for a card at several chains, as well as deposit money on several cards. For households that possess several loyalty cards, any effects that a membership might have on behavior could therefore be diminished. The first step is, therefore, to examine the frequency of possession of loyalty cards.

	Frequency	Percent
No cards	102	27.7
1 card	117	31.8
2 cards	93	25.3
3 cards	56	15.2
Total	368	100.0

Table 31. The number of retail cards held by the households

Table 31 reports the number of households possessing none, one, two or three loyalty cards. More than two-thirds of the households in the sample have at least one card. The relatively large share of households claiming to have more than one card is unexpected. A substantial number of households even have all three of the cards available in the Ludvika market.

Depositing money on accounts connected to the cards is voluntary; about a third of the households with cards have done so (Table 32). Again, there are households who have deposited money on more than one card.

	Frequency	Percent
No money deposited	164	61.7
Money deposited on one card	73	27.4
Money deposited on two cards	22	8.3
Money deposited on three cards	7	2.6
Total	266	100.0

Table 32. The frequency of depositing money on accounts connected to the cards

The question of whether membership cards influence the degree of behavioral loyalty cannot be assessed with bivariate analysis of cross-sectional data, but an analysis of whether there are differences between card-holders and non-card-holders can at least signal if it is worthwhile to pursue the issue. However, as the loyalty schemes differ in content, and, as households differ concerning the number of cards they have, such comparisons are not straightforward. Below, some comparisons between different groups of respondents are presented.

The analyses presented in Table 33 show that the number of cards held by the household is significantly related to the degree of behavioral loyalty. However, the difference seems to be between, on the one hand households that have none, or one card, and on the other, households with more than one card. Households with more than one card have a lower average level of behavioral loyalty, both in terms of purchase amounts, number of visits, and general dispersion tendency. In Table 34 households with and without money deposited on their cards are likewise compared. As expected, households that have deposited money on one card have a higher level of behavioral loyalty.

	Number of cards in household		
	No cards One card		More than one card
Primary store share-of-purchase	66%	70%	59%
Primary store share-of-visits	60%	61%	53%
Entropy measure	.38	.35	.45

Table 33. A comparison of the degree of behavioral loyalty for non-card holders, and card-holders. Significant differences between the groups for all three variables (One-way ANOVA, significant at the .01-level). Scheffe's post hoc test indicates that the third category (more than one card) is significantly different from the two other groups at the .05-level for all three variables.

	Number of cards with deposits				
	No cards with deposits	One card with deposit	Two or more cards with deposits		
Primary store share-of-purchase	62%	71%	57%		
Primary store share-of-visits	55%	61%	52%		
Entropy measure	.43	.34	.46		

Table 34. A comparison of degree of behavioral loyalty for card-holders with and without deposits on the accounts, n=266. Significant differences between the groups for share-of-purchase and the entropy measure (Oneway ANOVA, significant at the .01-level). Scheffe's post hoc test indicates that the second category (deposit on one card) is significantly different from the two other groups at the .05-level.

In the theoretical part of the thesis, it was discussed that both causal directions between behavior and card-ownership is possible, that is, households might decide whether or not to enroll in programs on the basis of their established patronage patterns. In that case, one would expect card ownership to be related to the same variables as the degree of behavioral loyalty. Above, two of the shopping orientation variables were significantly related to degree of behavioral loyalty. Table 35 presents a comparison between card, and non-card-holders which lends some support to the interpretation that shopper-level variables also affect the enrollment in loyalty programs.

	Number of cards in household					
	No cards (n=94)	One card (n=111)	More than one card $(n=142)$			
Price orientation ^a	30	16	.34			
Contact orientation ^b	27	.18	.06			
Indifference factor	.01	.01	03			
Planning behavior factor		.06	04			

Table 35. A comparison between card-holders and non-card-holders on the shopping orientation dimensions, n=347, Significant differences between the groups on the price orientation and contact orientation dimensions (One-way ANOVA, significant at the .01-level). "Scheffe's post hoc test indicates that the third category (more than one card) is significantly different from the two other groups at the .05-level, bthe first category (no cards) is significantly different from the other groups at the .05-level

To summarize this section, there are relationships between both card ownership and the degree of behavioral loyalty as well as between depositing money and the degree of behavioral loyalty, but since the analysis is based on cross-sectional data, the results should be interpreted with care. The results that some shopper characteristics contribute, although modestly, to the explanation of enrollment in programs suggest that the causal nature of the relationship could be reciprocal¹¹.

4.3.5 Multivariate analyses of factors potentially explaining degree of behavioral loyalty

The above bivariate analyses have shown that several factors are related to the degree of behavioral loyalty. These are price orientation, contact orientation, preference for primary store, relative distance to primary store, and ownership of customer cards. In this section, regression analysis will be used to explain the variation in the degree of behavioral loyalty. Although purchase frequency and variation in purchase size are positively related to degree of behavioral loyalty, they are omitted from the present analyses as the causal nature of the relationships between these variables and degree of behavioral loyalty is unclear.

¹¹ A discriminant analysis was performed with number of cards as the dependent variable ("no cards," "one card" and "more than one card") and price orientation and contact orientation as independent variables. Both discriminant functions were statistically significant, but an assessment of group membership prediction accuracy shows that the functions had a limited ability to discriminate between groups. The classification rate was 51 percent overall, and for the three groups 40 percent, 32 percent and 75 percent, respectively.

In the first stage of the analysis, all independent variables examined in the bivariate analyses, including those with insignificant correlations, were entered in a hierarchical model. For reasons of clarity, variables that did not have a significant contribution to the model are excluded from the results presented here. The exception is insignificant dummy variables that together with significant dummy variables, represent a theoretical dimension.

In the first set of regression analyses, five models are estimated by means of hierarchical regression analysis. The models are presented in steps to display the increase in explanatory power obtained by adding different types of variables¹². In the last model, possible effects of stores are taken into account; that is, that the degree of behavioral loyalty among primary customers might differ between stores when other explanatory factors are accounted for. For the store dummy variables, effects coding was used, as indicator-coded dummy variables are sensitive to the group that is the omitted reference group, and in this case there was no logical reference group¹³.

A dummy variable was chosen for indicating differences in evaluations of the primary store (0 = no preference for primary store, 1 = preference for primary store). This choice was mainly due to a larger number of valid observations for this variable than for the measure of strength of preference. Analyses on sub-samples indicated that a dummy variable provided much the same results as the continuous variable. Ownership of a card in the primary store was modeled with two dummy variables to take into consideration that households with one card only and households possessing several cards might behave differently.

The final model was examined for multicollinearity and for violations of the assumptions of homoscedasticity and normality of the error term. These analyses in-

 $^{^{12}}$ It should be noted that the increase in R^2 between the models is to some extent dependent on the order in which the sets of variables are introduced. In order to examine such effects, the analyses were remade with the reversed order of entry for the variables. This procedure showed that the rank order of the effects is similar but the effects of the shopper characteristics decreased somewhat (from a change in R^2 of .15 to a change in R^2 of .10) whereas the contribution of all others increased.

¹³ Effects coding is an alternative way of coding dummy variables. The difference from the normal procedure of indicator coding is that the omitted group is assigned the value –1 in the dummy variables. With this procedure, the coefficients represent the difference from the mean of all groups instead of the mean of the omitted group. The choice of coding method does, however, not affect predictive results, the coefficient of determination, or the coefficients for the continuous variables (Hair, Anderson, Tatham and Black 1998).

dicated a slight problem of heteroscedasticity attributed to the relative distance variable. Examining the residual plot with this variable on the X-axis indicated a decrease in the variance of the error term for high negative values. The Spearman rank correlation between the absolute value of the residual and the relative distance variable showed a small but significant correlation (r = .16, p< .01). This effect can be attributed to the skewed nature of this variable with most values clustered around 0 and a tail of relatively large negative values that represent households for whom the primary store seems to be the least conveniently located store. Heteroscedasticity does not affect the estimation of the coefficients, but entails that tests of significance become unreliable. Therefore, t-tests were performed based on heteroscedasticity-consistent standard errors estimated with White's procedure (Gujarati 1995). All coefficients were significant at the same level of significance as in the regular t-test procedure, indicating that the effects of heteroscedasticity are negligible in this case.

Results

The regression models (with standardized beta coefficients) are presented in Table 36.

Variable in equation	model 1	model 2	model 3	model 4	model 5
Shopper characteristics					
Price orientation	29 **	28**	24 **	23 **	27 **
Contact orientation	.26**	.25**	.21**	.19**	.21**
Age	15 **	14 **	14 **	15 **	14 **
Relative distance to primary store		.17**	.17**	.17**	.18**
Store evaluations					
Preference for primary store (D)			.24**	.22**	.26**
Card in primary store				ĺ	
Card in primary store only (D1)				.19**	.16**
Card in primary + other store (D ²)			l	.01	.01
Primary store				ĺ	
ICA Matmäster (D)					07
Hemköp Marnäs (D)					12°
Konsum (D)					11
Matmagasinet (D)					13*
R ² (adjusted R ²)	.15 (.14)	.18 (.17)	.24 (.22)	.27 (.25)	.29 (.27)
Model significance	F=19.8	F=18.1	F=22.0	F=16.8	F=12.1
	p<.01	<i>p</i> <.01	_p<.01	p<.01	<i>p</i> <.01

Table 36. Beta (standardized) coefficients from hierarchical regression analyses.

Dependent variable: first store share-of-purchase. n=332. ** beta coefficient is significant at the .01-level. * beta coefficient is significant at the .05-level.

The two shopping orientation variables both contribute significantly to the explanation of the degree of behavioral loyalty. The coefficients have also the expected signs. Price orientation affects the degree of behavioral loyalty negatively, that is, the more shoppers find it worthwhile to comparison-shop, and the more they use price-oriented marketing activities, the lower the degree of behavioral loyalty to the primary store. As expected, contact orientation has a positive effect on behavioral loyalty; the more the shopper values personal contact with store personnel, the higher the degree of behavioral loyalty. In contrast to the indications of the bivariate analyses, age does have a (negative) effect on the degree of behavioral loyalty. One explanation to why this relationship did not appear in the bivariate analysis is the positive correlation between age and contact orientation (r=.33, see Table 27) which could cancel out the negative effect of age on behavioral loyalty in a bivariate analysis. That age has a negative association with the degree of behavioral loyalty is in line with findings presented by East et al. (1997).

The sign of the beta coefficient for relative distance is somewhat less straight-forward to interpret. Recall that this variable indicates the distance between the primary store and the store that is the (second) closest store from the household's residence. Positive values indicate that the primary store is the closest store, as well as how much longer the household must travel to reach the next closest store. Negative values indicate that the primary store is not the closest store, and also indicate how much further away than the closest store the primary store is located. The positive beta coefficient thus indicates that the closer the primary store is located as compared to other stores, the higher the degree of behavioral loyalty.

As expected, the store-preference dummy variable also has a significant positive effect on degree of behavioral loyalty. An important implication of the results from the regression analyses is, however, that store preference, although important, only contributes to a part of the explanation of the variation in degree of behavioral loyalty.

Ownership of a card in the primary store only, contributes significantly to explaining the degree of behavioral loyalty, whereas ownership of a card in the primary store *in combination* with ownership of at least one other card does not affect the degree of behavioral loyalty. The finding suggests that membership cards do have some effect on the degree of behavioral loyalty, and the bivariate relationship between these variables is thus not only an effect of customers with high degree of behavioral loyalty acquiring cards. Again, caution should, however, be taken with the interpretation since the analysis is based on cross-sectional data. That there only is a significant effect for households with just one card underscores the need

to investigate shoppers' or households' "card-portfolios" when analyzing the effect of card ownership.

The inclusion of store-dummy variables contribute somewhat to the explanation of variation, suggesting that there is a variance in the degree of behavioral loyalty depending on what store is the primary store. For Matmagasinet, there is a significant positive effect, that is, when the other independent variables are taken into account, households that have Matmagasinet as their primary store have a significantly higher level of degree of behavioral loyalty. In contrast, households that have Hemköp Marnäs as their primary store, have, when other factors are taken into account, a lower degree of behavioral loyalty.

The amount of explained variance by the model, with an adjusted R^2 of .27 (model 5), might seem modest. However, in comparison with previous comparable analyses, the contribution could be regarded as a considerable improvement. East et al. (1995) model share-of-purchase with an adjusted R^2 of .07 for their full sample, and an adjusted R^2 . of 15 for a sub-sample of out-of-town supermarket shoppers. In comparison to their study, several additional variables have been included, notably the shopping orientation dimensions and store preference, which could be the reason for the increase in the share of explained variance in the degree of behavioral loyalty.

4.3.6 Explaining the share-of-purchase on the store level

The above analyses have shown that both shopper characteristics and store characteristics affect the general level of the degree of behavioral loyalty. Stated differently, they suggest that it is not sufficient to take into consideration customers' evaluations of a store when attempting to explain the extent to which the store is used. On a store level, this would imply that the share-of-purchase a specific customer devotes to the store is not only contingent upon how the store is evaluated and its location, but also on shopper characteristics.

To examine this proposition, store-level regression analyses were run. In these analyses, all households having used the store during the period were included, and the dependent variable is the share-of-purchase made in respective store. Thus the dependent variable deviates somewhat from that in the previous analyses in that it represent the households' behavior towards a specific store, whether or not it is the primary store.

In the analyses, the effects of *store evaluations* and *relative store evaluations* are also compared. The assumption is that the relative store evaluations will contribute more to the explanation of the shares-of-purchase made in each store. Recall that

the relative store evaluation is estimated for all respondents who have rated the store and at least one other store. The variable can take both positive and negative values; negative values indicate that another store is preferred over the store for which the value is estimated. For each store, two regression models are estimated; one model in which store evaluation is one of the independent variables, and one model in which relative store evaluation is included instead.

The results from the analyses are presented in Table 37 (HM = Hemköp Marnäs, MM = Matmagasinet, and HC = Hemköp City) and Table 38 (KON = Konsum, and ICA = ICA Matmäster)¹⁴.

Results

A first observation is that shopper characteristics have an effect on share-of-purchase throughout most of the models, although what characteristics and the magnitude of the effects differs between stores. Taking into consideration the differences between these stores, these differences are reasonable. For example, it is reasonable that the share-of-purchase made in Matmagasinet, the store with a low-price profile, is not affected by the price-orientation factor, whereas the price-orientation factor is significant for the models for Hemköp Marnäs, Konsum, and one of the Hemköp City models.

The effect of membership cards also differs between stores. For the variation in the share-of-purchase made in Konsum, card membership has a large effect, which is reasonable since there only is one store of the Konsum chain in Ludvika, and Konsum's membership program at the time of the data collection was the only one in which members received purchases received rewards for their purchases.

The second observation is that, as expected, the relative store evaluation does have a larger effect on share-of-purchase than store evaluation per se. With this, too, there is a difference between stores. For Hemköp Marnäs and Matmagasinet, the difference in the size of the coefficients, as well as the explanatory power of the

¹⁴ All regression models were examined for multicollinearity and for violations of the assumptions of homoscedasticity and normality of the error term. Similarly to the previous analysis, Spearman rank correlation tests revealed significant heterscedasticity. Therefore, tests of significance of the beta-coefficients were based on White's procedure in all models. The results of these tests did, however, not deviate from the *t*-tests based on standard errors estimated with the normal procedure. Moreover, the analyses revealed that the error term deviated from the normal distribution in models 3, 5 and 6 (that is the first model for Matmagasinet and both models for Hemköp City). In all cases, the distribution of the residual was skewed towards negative values. The consequence of non-normality in the error term is that tests of significance are less reliable.

respective model is large, whereas for ICA Matmäster there hardly is any difference. The findings are in line with Dick and Basu's (1994) reasoning that an individual's evaluation of a choice object in *comparison* to alternative choice objects should predict choice behavior better than non-comparative evaluations.

The third observation is that the explanatory power of the store-level models for three of the stores (Hemköp Marnäs, Matmagasinet and Konsum) are higher than for the model of overall degree of behavioral loyalty. That is, the data collected perform better when predicting the usage of specific stores rather than the overall degree of behavioral loyalty, that is, a facet of the household's patronage pattern.

Variable in equation	model 1	model 2	model 3	model 4	model 5	model 6
	HM1	HM2	_MM1	MM2	HC1	HC2
Shopper characteristics						
Price orientation	34 **	19 **	.03	.07	19 [*]	13
Contact orientation	.20*	.21**	03	.06	02	.07
Indifference	17 *	10	12	12	.04	.05
Planning behavior	.08	.05	.24**	.21**	19 **	~.19 **
Age	16 *	11	13	14°	09	10
Store evaluations		l				
Store evaluation	.25**	-	.31 **	-	.24**	-
Relative store evaluation	_	.42**	-	.46**	-	.32**
Relative distance to store	.23**	.20**	.20**	.16*	.29**	.28**
Card in store						
Card in store only (D1)	.08	00	.16*	.09	.10	.12
Card in store + other	01	06	.14	.09	.06	.03
store (D ²)						
R ² (adjusted R ²)	.35 (.31)	.44 (.40)	.28 (.24)	.39 (.36)	.25 (.21)	.30 (.26)
Model significance	F = 8.6	F = 12.6	F = 7.8	F = 12.8	F = 6.5	F = 8.3
	p<.01	p<.01	p<.01	p<.01	p<.01	p<.01
n	158	158	191	191	187	187

Table 37. Beta (standardized) coefficient from hierarchical regression analyses. Dependent variables: share of purchase in respective store. * beta coefficient is significant at the .05-level. ** beta coefficient is significant at the .01-level.

Variable in equation	model 7	model 8	model 9	model 10
	KON1	KON2	ICA1	ICA2_
Shopper characteristics				
Price orientation	25**	22 **	.03	.05
Contact orientation	08	01	.03	.07
Indifference	08	04	.09	.10
Planning behavior	03	05	11	12
Age	.13	.11	.08	.08
Store evaluations				1
Store evaluation	.37**	-	.16	-
Relative store evaluation	-	.44**	-	.18*
Relative distance to store	.25**	.22**	.22**	.22**
Card in primary store	.23	.22	.22	.22
Card in store only (D ¹)	.43**	.32**	.34**	.32**
Card in store + other store (D ²)	.06	.04	.06	.06
R ² (adjusted R ²)	.47 (.43)	.51 (.48)	.24 (.19)	.25 (.19)
Model significance	F = 12.5	F = 14.9	F=4.4	F = 4.6
3 7	p<.01	p<.01	p<.01	p<.01
n	137	137	133	133

Table 38. Beta (standardized) coefficient from hierarchical regression analyses. Dependent variables: share of purchase in respective store. * beta coefficient is significant at the .05-level. ** beta coefficient is significant at the .01-level.

4.4 What affects the choice of primary store?

The purpose of the above analyses was to explain the degree of behavioral loyalty, that is, *how* the primary store was used. But what determines why a specific store is the store the household uses the most? In this section, the effect of store evaluations and store location on choice of primary store is examined.

The approach chosen here for examining the effect of store evaluations on choice of primary store is to compare in how many cases the preferred store also is the primary store according to behavioral measures. This analysis is performed for the 287 households who have a preferred store and in which the respondent makes half or more of the households' purchases (see Table 58 in appendix 3 for the extent to which the stores were preferred).

A cross-comparison between the attitudinally preferred store and the primary store is reported in Table 39. For each cell, the column percent is shown indicating the share of consumers, among the total group of consumers who prefer a specific store, that have a particular store as primary store. As an example, among the twenty-seven shoppers for whom ICA Matmäster is the attitudinally preferred store, 48 percent also make most of their purchases in this store, whereas about 4

percent make most of their purchases in Hemköp Marnäs, and 26 percent make most of their purchases in Matmagasinet. On the diagonal, the total percentage is presented (in bold) indicating how many of the total number of shoppers have the same store as both attitudinally preferred store and primary store.

			The	attitudinall	y preferred s	store	
		ICA	Hemköp	Hemköp	Konsum	Mat-	Other
		Matmäster	Marnäs	City		magasinet	store
	ICA	13	16	3	4	1	1
	Matmäster	48%	11%	9%	11%	2%	20%
Primary		5%					
store	Hemköp	1	62	3	1	1	2
	Marnäs	4%	43%	9%	3%	2%	40%
			22%				
	Hemköp	3	16	16			1
	City	11%	11%	48%			20%
				6%			
	Konsum	2	8	3	27	3	
		7%	6%	9%	71%	7%	
					9%		
	Mat-	7	36	7	5	33	1
	magasinet	26%	25%	21%	13%	80%	20%
						11%	
	Other	1	5	1	1	3	
	_store _	4%	3%	3%	3%	7%	

Table 39. The extent to which the attitudinally preferred store is the same store as the primary store. n=287. Households without an attitudinally preferred store, as well as households in which the respondent was responsible for a minor share of purchases are excluded. Column percents – when columns do not add up, this is due to rounding. Total percents in the diagonal cells indicated with bold.

About half of the households, 53 percent, have the same preferred store and primary store (that is, the sum of the percentages on the diagonal). When comparing across stores, the share of shoppers who prefer the store and also use it for the largest share of their purchase volume varies. For ICA Matmäster this share represents 48 percent whereas for Konsum, this share represents 71 percent and for Matmagasinet, this share represents 80 percent. For the latter store, a much larger share of respondents has the store as primary store than the number who have it as attitudinally preferred store. This is in stark contrast with the results for Hemköp Marnäs; almost half of the respondents prefer this store whereas only one fourth use it for the largest part of their purchases.

These results indicate that attitudinal store preference in terms of the summated evaluation only to some extent explains the choice of store in which the household makes the largest share of purchases. One possible reason for this finding is that some households have positive attitudes toward several stores, in which case the most preferred store is only marginally better. In such a case, other choice criteria such as a store location, or as in the case of Matmagasinet, competitive pricing, affect which store will be used the most.

A similar analysis was made for store location. In Table 40 a cross comparison between the closest located store to respondents' homes and the primary store is presented.

		The stor	e located clo	sest to the he	ousehold's r	esidence
		ICA	Hemköp	Hemköp	Konsum	Mat-
		Matmäster	Marnäs	City		magasinet
	ICA	20	5	4	9	
	Matmäster	33%	16%	5%	9%	
Primary		6%				
store	Hemköp	19		18	8	6
	Marnäs	32%	65%	24%	8%	13%
			6%			
	Hemköp City	3	1	22	12	
		5%	3%	29%	12%	6%
				7%		
	Konsum	5		5	31	10
		8%		7%	31%	21%
					10%	
	Mat-magasinet	9	5	23	36	27
		15%	16%	30%	36%	57%
						9%
	Other	4		4	4	1
	store	7%		5%	4%	2%

Table 40. The extent to which the nearest store is the same store as the primary store. n=314. Households for which data on location is not available are excluded. Column percents – when columns do not add up, this is due to rounding. Total percents in the diagonal cells indicated with bold.

The closest store is the primary store for 38 percent of these households. Thus, households to a limited extent use the store closest to their residence as their primary store. To some degree, the results could be attributed to the geographical size of the market and that the stores are relatively closely located to each other. Moreover, the analysis only takes into consideration the location of each store in relationship to the respondent's residence, and it is likely that some of the respondents for which the store closest to home is not the primary store, use the store closest to, e.g., the work-place as the primary store. However, again, there are apparent differences between the stores. Of the households having Hemköp Marnäs

as the closest store, 65 percent also have it as their primary store, whereas the corresponding figure for Konsum is 31 percent.

One reason as to why households would not use the closest store as their primary store is that they find another store to be so much better that it merits a longer journey to the store. A cross-classification of the two aspects examine above — whether or not the primary store is the attitudinally preferred store, and whether or not the primary store is the store closest to the respondent's residence is presented below (Table 41).

- Annual		A comparison of closest store and primary store		
		Not the same store	The same store	
A comparison of	Not the same	73	41	
attitudinally	store	48%	45%	
preferred store and	The same	80	51	
primary store	store	53%	55%	

Table 41. A. cross-classification of whether or not the primary store is the attitudinally preferred store, and whether or not the primary store is the store closest to the respondent's residence. Column percents.

The cross-classification does not indicate that households that have another store than their closest store as their primary store, to a greater extent have their attitudinally preferred store as their primary store. Hence, there does not seem to be a trade-off between the utility of a close location and the utility of an overall highly evaluated store for these households. However, there is a group of households that shop in the most conveniently located store, although it is not the attitudinally preferred store, which suggests that location, for these households, perhaps is the most important determinant of where to shop.

Comparing the shopper orientation factors across groups provides more information on these four different groups (Table 42). Although the differences between groups are small, they are in agreement with what could be expected. For example, households for whom the primary store is neither the closest store nor the "best" store, are more price orientated than others, and not unexpectedly, Matmagasinet is the primary store for 50 percent of these households.

	Primary store both the "best" and the closest (n=49)	Primary store the closest but not the "best" (n=41)	Primary store the "best" but not the closest (n=80)	Primary store neither the closest nor the "best" (n=71)
Price orientation a	24	.06	12	.24
Contact orientation a	.28	16	.17	21
Indifference factor	04	.21	09	19
Planning behavior factor	07	13	07	.08

Table 42. A comparison between the four groups on the shopping orientation dimensions, n=241, a=Significant differences between groups (One-way ANOVA, significant at the .01-level). Scheffe's post hoc test indicates no differences between groups.

4.5 What determines store avoidance?

Previously, it was shown that about a third of the sample said that they would avoid certain stores. Furthermore, store avoidance was somewhat related to other dimensions of patronage behavior, specifically store repertoire. As discussed earlier, store avoidance is probably not a major reason for why some households have a smaller store repertoire, although it might have a marginal effect. Nevertheless, store avoidance is in itself a phenomenon worth investigating. This section begins with a comparison of "avoiders" and "non-avoiders" with the purpose of examining the extent to which shopper characteristics determine store avoidance. The respondents' stated reasons for avoiding specific stores are then discussed. Table 43 present comparisons between avoiders and non-avoiders and results from a logistic regression with avoidance as the dependent variable.

These analyses show that shopper characteristics, specifically the shopping orientation dimensions, are related to store avoidance as well. Those who would avoid stores are less deal-prone, find personal contact more important, and have a lower score on the indifference factor, indicating that they perceive stores to be different. Age is also related to store avoidance; those who stated that they would avoid stores tend to be somewhat younger than those who would not. Household size was significantly different between the two groups, but this difference was not significant in the multivariate analysis. It should, however, be noted that predictive validity of the logistic model is fairly low. Thus, although the shopper characteristics measured in this study significantly contribute to the understanding of store avoidance, clearly other factors appear to be more important.

	Mean comparisons		Coefficients , logistic regression
	Avoiders	Non- avoiders	В
Shopper orientations			
Price orientation	16	.09*	30*
Contact orientation	.15	07*	.40**
Indifference factor	31	.15**	43**
Planning behavior factor	02	.05	04
Other shopper/househ. characteristics	}		
Age	42.7	48.0**	02*
Sex (share of women)	82%	78%	.10
Household size	2.3	2.5*	.17
Income	23 900	24 100	.00
(constant)			.39

Table 43. Mean comparisons between avoiders and non avoiders. Coefficients from logistic regression with avoidance as dependent variable. n=335.

-2LL=396.4, Nagelkerke R²=.15, classification rate: 71 percent overall (91 percent for non-avoiders and 36 percent for avoiders, respectively).

**mean comparison/coefficient significant at the .01-level, *mean comparison/coefficient significant at the .05-level.

Additional information on why stores are avoided is gained by looking at the answer to the open-ended question: "why would you avoid these stores?" This question was answered by almost all of the respondents having indicated one or several stores they would avoid. Altogether 172 negative comments about a specific store were provided by this question. These comments ranged from being very specific (two respondents commented on the type of floor in ICA Matmäster) to general statements of dislike of, or uneasiness with, a store. The large variation in types or reasons for store avoidance might also explain why shopper characteristics were of low predictive value for store avoidance. The comments were organized in seven categories, which are presented below together with sample comments (Table 44).

The first two categories concern utility-based unemotional evaluations of two store attributes, price and assortment, which do not match the preferences of the respondents. The following three categories also concern store attributes but are more negatively phrased. Such single complaints as a basis for avoidance were, however, quite uncommon. Much more common was that the respondent had identified several different flaws with a specific store. This was, in fact, the dominant category. There were also a group of respondents that avoided stores out of general dislike, or, uneasiness with shopping in the store. Finally, in the "other" category there were statements concerning reputation, a lack of knowledge about

specific stores, and, as exemplified with the sample statement, five respondents avoiding Konsum, the co-op store, from ideological reasons.

Type of complaint	No.	Sample statements
Price	31	"Too high prices" woman, 62, about ICA Matmäster, Hemköp city
Assortment	16	"Their assortment does not match our preferences, e.g., for bread and delicatessen brands" woman, 33, about Konsum
Store layout and orderliness	18	"Disorganized, cannot find my way around from one time to another" women, 58, about ICA Matmäster
Product quality	3	"Have at several occasions gotten moldy bread, moldy cheese. Have not shopped there during the past years" woman, 43, about ICA Matmäster
Personnel encounter	4	"Unfriendly personnel. In one instance there was a discussion on the amount of change. Clear evidence. I was proven right at the cashaudit after closing hours. Very unfriendly treatment by two cashiers and a manager. No apology!!!" man, 55, about Konsum
Several complaints	53	"It is crowded and there are often long lines, moreover, do not trust meat and delicatessen from the store" woman, 54, about Matmagasinet
		"Bad assortment, bad quality fruits and vegetables, disorganized, cramped stores" woman 40 about ICA Matmäster, Konsum and Matmagasinet
General dislike	24	"I do not like the atmosphere. Difficult to pin-point what makes me not like the store" woman, 30, about Hemköp Marnäs
		"I do not like these stores" man, 20, about ICA Matmäster and Konsum
Other	23	"I want to promote private business interests, have never shopped at Konsum," woman, 67, about Konsum

Table 44. Reasons for store avoidance

The negative evaluations of stores give additional information on the determinants of households' store choice patterns. From a managerial perspective, comments such as these should be useful for evaluating store performance. This is particularly interesting since the stores, on an aggregate level, tend to be avoided each to a different extent (Appendix 3, Table 56). For stores with higher avoidance rates, a thorough analysis of avoidance reasons should point to areas that are the store's "cold buttons."

4.6 Loyalty categorization based on behavioral and attitudinal data

To conclude the analyses presented so far, households vary, as expected, in their degree of behavioral loyalty to their primary store. Several variables contributed to the explanation of this variance, among them whether or not the primary store was also the attitudinally preferred store. It has also been shown that for a fairly large number of households, the attitudinally preferred store according to the measure used in this study, is not the same as the primary store. That is, for some households an overall attitudinal preference to a store does not seem to be the most important determinant for the choice of primary store. In an attempt to explore why there is a close correspondence between attitudinal and behavioral preference for some, but not for other, households, a comparative analysis between groups with and without such a correspondence will be performed. This analysis will be based on the modified Dick and Basu (1994) categorization.

The classification described in section 2.9.3 is based on the variables degree of behavioral loyalty and relative store evaluation. As discussed in the theoretical section and also shown in the previous analyses, these variables are most appropriately viewed as continuous variables. However, for classification purposes a dichotomization of the variables is necessary. Evidently, this will entail that the value on the new variable is dependent on the dichotomization rule rather than on observed differences between two distinct groups. However, the shortcomings associated with the dichotomization were considered to be outweighed by possible insights gained from the analyses. It should, however, be underscored that the classification is performed for analytical reasons, not for uncovering distinct groups among the surveyed households.

As shown in previous analyses, degree of behavioral loyalty exhibits a uni-modal distribution, with no distinct groups. The cut-off point chosen to connote a high degree of behavioral loyalty is 65 percent. This is based on the average share-of-purchase (64.6, the closest even percentage was chosen) as this would split the sample into two groups of fairly equal size. For relative attitudes, the categorization was based on whether or not the household had an attitudinal preference for a store, and, for households with a high degree of behavioral loyalty, whether this preference was for the primary store.

The categorization was thus made as follows: For households having a share-of-purchase of 65 percent or higher, the primary store according to share-of-purchase was checked against the most preferred store according to the attitudinal measure. Households that have the same store according to both the attitudinal and the behavioral measure were categorized as *intentional loyals*. Households with no, or

another, attitudinally preferred store were categorized as *spurious loyals*. It should be noted that this group does include some households with preference for one store, that is, for the group with high behavioral loyalty the cut-off point is not absence or presence of relative attitudinal preference, but whether or not this preference concern the primary store. Households with a share-of-purchase of less than 65 percent and an attitudinally preferred store, were categorized as *latent loyals*, whereas those with no store preferences were classified as *no loyals*. The results from the categorization are presented in Figure 27.

Low - less than 65 % in High - 65% or more in any single store one store The individual 148 99 has a preference (41.9%) (28.0%)"Latent loyals" for a store "Intentional lovals" Relative (Preference for any one (Preference for the same Store store). store as the one most Evaluation frequently patronized). The individual 38 68 (10.8%) has no specific (19.3%)"Non-loyals" "Spurious loyals" preferences (or preference for (No preference for any (No preference or

store).

Degree of behavioral lovalty

preference for other than

the most frequently patronized store).

Figure 27. The loyalty categories, n=353.

another store

primary store)

than the

Although the cut-off point for the degree of behavioral loyalty is set at a moderate level, intentional loyals represent a relatively small share of the sample. Approximately every fourth household belongs to this group. This group would, of course, decrease with a higher cut-off value for behavioral loyalty. With a cut-off level of 81 percent, as in East et al.'s studies (East, Harris, Willson and Lomax 1995, East, Harris, Lomax, Wilson and Perkins 1997), this group would consist of 58 households.

Among those having a high degree of behavioral loyalty, i.e., the right column of the matrix, the intentional loyals constitutes the larger group. In the sample, every fifth household is categorized into the spurious loyal group, i.e., their primary store is not their attitudinally most preferred store. This does not necessarily mean

that they do not have a preferred store; as noted above, some of the spurious loyals have a preference for an store other than the one in which they make their largest share of purchases. However, the categorization indicates that high behavioral loyalty is more often than not coupled with attitudinal preference for the focal object.

As indicated above, the categorization is not based on empirically derived clusters of cases but on cut-off rules imposed on the material. Therefore, some cases in each matrix-cell will be located near the cut-off lines. Figure 28 provides a closer look at the cell in the upper right corner, i.e. the intentional loyals, to illustrate this point.

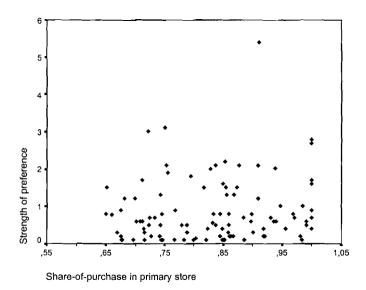


Figure 28. A closer look at the upper right corner of the 4 by 4 matrix above. First store preference = the score for the most preferred store minus score for the second most preferred store.

The graph illustrates that there are several observations located near the cut-off lines. Specifically, the degree of attitudinal preference for the first store is low in general, many observations are close to the cut-off line between intentional and spurious loyals. This indicates that there is no clear-cut difference between these two groups. The purpose here, however, is to explore whether there are major differences between the groups, and therefore, the categorization, although somewhat crude, serves an analytical purpose. However, the implication for the comparative analyses is that any differences between groups will likely be less distinct.

Significant differences can be seen when comparing the frequency of the loyalty categories across stores. As an example, a comparatively large share of the households that have Hemköp Marnäs or Konsum as their primary store are classified as intentional loyals (Appendix 3, Table 59).

4.6.1 A comparison of respondents in the loyalty categories

The next step is to compare the groups derived from the categorization procedure. More specifically, the groups will be compared in terms of household/shopper characteristics to explore whether group membership is related to such characteristics. In addition, the relative distance measure to the primary store, which could be interpreted as an indicator of distance sensitivity, is included. Table 45 presents summary statistics on these shopper characteristics for the groups. To give a description of the aggregate behavior in these groups, means for patronage-dimension variables are also included. Data on the second type of variable implicit in the categorization, strength of preference, is also included in the table. ANOVA-analyses are performed for the shopper/household characteristics.

			Cate	egory	
		Intentional	Spurious	Latent	Non-
		loyals	loyals	loyals	loyals
Patronage	Store repertoire	3.0	3.0	4.8	4.4
dimensions and	Primary store share-of-p.	.83	.83	.47	.50
relative attitude	Primary store share-of-v.	.70	.69	.45	.48
	Entropy measure	.24	.24	.55	.51
	Share of store avoiders	.42	.34	.33	26
	Strength of preference (for	.87	.29	.55	.00
	attitudinally preferred				
	store)				
Shopper/	Age	45.2	44.5	46.0	49.1
household	Share of women	.78	.78	.81	.79
characteristics	respondents				
	Household size	2.4	2.6	2.3	2.2
	Income/household size	12,000	10,300	12,200	10,900
	Price orientation a	32	15	.29	03
	Contact orientation a	.22	.11	13	29
	Indifference factor	13	.15	06	.22
	Planning behavior factor c	11	.28	07	.06
	Relative distance to	-1.94	83	-3.24	-3.72
	primary store b		77		

Table 45. Comparisons of loyalty categories, "=Significant differences between groups at the .01-level, b=Significant differences between groups at the .05-level, c=Significant differences between groups at the .10-level (One-way ANOVA). Scheffe's post hoc test indicates no differences between groups at the .05-level.

The shopping orientation factors exhibit an intuitively appealing pattern across the categories, but the differences between groups are small and significant in only few of the cases. Price orientation is highest for the latent loyals, and lowest for the intentional loyals. For the contact orientation factor, there is also a significant difference between groups. Here, the intentional loyals have the highest score, whereas the non-loyals have the lowest score. There is also a difference between groups for the planning behavior factor. Specifically, there is a notable difference on this factor between the intentional and spurious loyals.

Above, the extent to which the households in the four groups had enrolled in loyalty programs was not included in the comparison. These figures are reported in Table 46. The cross-tabulation indicates that there is an association between the loyalty groups and the number of cards in the household. The results are, furthermore, in line with the observation that consumers who tend to be more price-oriented, and thereby use several stores, i.e., the latent loyals, also to a greater extent enroll in more than one loyalty program.

	Intentional loyals	Spurious loyals	Latent loyals	Non- loyals
No cards	29	17	39	11
	29.3%	25.0%	26.4%	28.9%
One card	43	24	35	11
	43.4%	35.3%	23.6%	28.9%
Two or more cards	27	27	74	16
	27.3%	39.7%	50.0%	42.1%
Total	99	68	148	38
	100.0%	100.0%	100.0%	100.0%

Table 46. Ownership of loyalty cards in the four loyalty-categories. Chi²= 15.5, significant at the .05-level

In this study, the comparison of intentional and spurious loyals is of specific interest. As evident from Table 45, the latter have lower scores on the personal contact factor, but higher scores on the other shopping orientation factors. Apart from the difference on the planning behavior factor, these differences are intuitive. However, the differences are small and not significant according to Scheffe's post hoc test¹⁵. Another way to probe the issue of what differentiates spurious versus intention loyals is to use logistic regression with the two categories as dependent variable.

¹⁵ It should be noted that Scheffe's post hoc test is of fairly low statistical power and thus a conservative test of significance between groups (Hair, Anderson, Tatham and Black 1998).

	Coefficients, logistic regression B
Shopper orientations	
Price orientation	.19
Contact orientation	13
Indifference factor	.24
Planning behavior factor	.37*
(constant)	39*

Table 47. Coefficients from logistic regression with a categorical variable for intentional (0)/ spurious loyals (1) as the dependent variable. n=161. – 2LL=206.5, Nagelkerke R²=.08, classification rate: 67 percent overall (89 percent for intentional loyals and 34 percent for spurious loyals, respectively). *coefficient significant at the .05-level.

As evident from Table 47 only one of the shopping orientation dimensions, the planning behavior factor, contributes significantly to explaining whether households are intentional or spurious loyals. A higher degree of planning behavior is related to the spurious-loyals group. However, the overall explanatory power of the model is low

The results presented in this section indicate that the variables measured in this study to a low degree contribute to the understanding of whether shoppers are intentional loyals, spurious loyals, latent loyals or non-loyals. Although the observed differences between groups concerning the shopping orientation characteristics are in an intuitively expected direction, the differences are generally too small to be significant. One reason for this result could be that the groups in themselves are heterogeneous, as the classification is not based on observed distinct differences between groups. In an attempt to circumvent this problem, comparisons were also made with sub-samples of extreme cases, but due to a limited number of observations, these analyses did not provide any interpretable results.

4.7 A close-up on households' shopping behavior

This section will take a more in-depth look at households' grocery shopping behavior. Eight cases are presented that give a more detailed picture of how households shop for groceries. The interviews will be analyzed for samples of provisioning strategies used. Provisioning strategies constitute, in a sense, the integrating element in the theoretical framework presented in section 2.8 in that they represent the overall approach to shopping used by the households which is expressed in their observable behavior. The interviews will also be used to illustrate and discuss some interesting findings from the survey. The views of the house-

holds on the stores available and the marketing activities used by the stores will be discussed in particular.

To attain a large variation in the shopping approaches, the households were selected on the basis of the results from the diary/survey. Two households were selected from each loyalty category, derived from the analyses presented in the previous section (Figure 29). In the selection of households from within each cell, care was taken to find "extreme" households.

Intentional loyals
Household B
Household G
Spurious loyals
Household A
Household F

Figure 29. How the households were selected.

The first part will provide thumbnail sketches of each household. In the following part, the "provisioning strategies" used by the households are discussed, and thereafter the households' different views on the available stores and their marketing activities are examined. The section ends with a comment on how the observations from the interviews relate to the findings from the diary/survey.

4.7.1 The households

Household A

"Anna", her husband, four children, and dog live in the southern part of the town in a house in which they have lived for the past ten years. Both she and her husband work outside the home, and the children are between six and fifteen years old. When it comes to grocery shopping, the household makes one planned, large-scale stock-up shopping trip every two weeks, and several smaller fill-in purchase trips in between the larger purchase trips. The big purchase trip is usually made on Thursdays by Anna and her husband together, whereas she makes the fill-in shopping trips. Thursday is a convenient day since they sometimes leave for the countryside on Fridays.

Anna and her family make almost all their grocery purchases at Matmagasinet, which is fairly conveniently located for them, although it is not their closest store. Konsum is somewhat closer to their home, but the difference in distance is small. The only thing Anna does not find at Matmagasinet is fresh fish, which she buys at Konsum. Konsum is the only store which regularly sells fresh fish; Anna knows that she can find fresh fish at Konsum every Tuesday. Anna sees herself as a person interested in food, therefore she keeps track of these things. She has heard that Hemköp sometimes also sells fresh fish, but she is not sure on the regularity. About once every two months she goes to Hemköp if she needs a special product such as Gorgonzola by weight or Mozzarella.

To the question of why Matmagasinet has been chosen as the family's primary store, Anna answers that it is very convenient to shop there with the ICA-card – she deposits money on her card every month – and the store also has comparatively low prices. For their family of six, Anna has discovered that they save 1500 SEK/month¹⁶ by shopping at Matmagasinet instead of shopping at Konsum. Apart from the price difference, she sees no real differences between these stores. Konsum might have a somewhat wider assortment, but the brands and products favored by the family are all found at Matmagasinet.

Overall, Anna sees no particular differences between the stores in the town, apart from the low prices at Matmagasinet. She says that she would not shop at Matmagasinet if she had found the products to be of inferior quality, but "if you can get the same products at a lower price in one store, there is no reason to go to another store." She likes that by using mostly one store, she knows where to find everything. She does not have a special relationship to store personnel, but finds that Matmagasinet is a store where you can go to buy large quantities of groceries without needing assistance. Sometimes she would like more contact with store personnel, but then again, she knows that she can find this type of personal service at Hemköp if she wants to.

Although she is price conscious, Anna does not look at the advertising that the other stores send out apart from looking for recipes. However, she uses the leaflets with price-specials from Matmagasinet when she plans what to buy.

¹⁶ Approximately US\$ 200.

Household B

"Barbara", her husband and her two teenage sons live in the same residential area as Anna and her family. Barbara works part-time on fairly irregular hours, and her husband works full-time.

Barbara, who is responsible for the grocery shopping, makes one major shopping trip each week. Apart from that, she makes some fill-in purchases if she runs out of something, such as milk or bread, or if she decides to make a special dish and does not have all necessary ingredients at home. She shops on Fridays unless something extraordinary happens. Usually she shops alone, but sometimes her sons come along if it fits with their schedules. On the Sundays when she finds that she needs to buy some special ingredients for a Sunday dinner, her husband often joins her to the store. On these occasions, grocery shopping is more like a small excursion and they go browsing in the store. Barbara views regular shopping as work, although it is work she enjoys doing. The enjoyment comes from the creative part of shopping — her shopping list only contains the basic items the household has run out of, and she has to invent her weekly menus in the store, which demands her creativity. Purchase decisions are made on, for example, what she finds in the meat counter. Some cuts of meat she only buys on special. Moreover, the shopping trip is an occasion to socialize with people she meets in the store.

Barbara's primary store is Hemköp Marnäs. This was the store she opted for after trying out one store after another and comparing them, when she moved to the town some ten years ago. This store is superior in every aspect in her opinion. She likes the personnel, the quality of fresh produce such as fruit, meat, etc. The store personnel have always been very helpful when Barbara asks them to bring special products into the store. She knows all the persons responsible for the departments in the store, and specifically with the fruit and vegetables department, she feels that she has a mutual exchange of ideas and help with them. Some of the products she originally asked for have now become standard ingredients in the store's assortment. The store is more or less on the other side of town from Barbara's home, but as she would shop by car anyway, she is not concerned with the extra distance. About two years ago, Barbara got a Hemköp-card on which she deposits money every month. The prime reason for getting the card had been the favorable interest rate and the convenience. However, since she had used a credit-card for shopping before that, the card was not a big change for her.

All the weekly purchases and fill-in purchases for special items are made at Hemköp, but when she only needs some milk, bread or other kind of staple, she will go to the store which happens to be the most conveniently located. In this way, she gets occasions to reappraise the other stores. So far, however, none of them has met her approval. Konsum, which is her closest store, has, according to her, checkouts that are too slow, unknowledgeable staff, and the store is always very disorganized. Although she knows that she can get lower prices at Matmagasinet, she finds it a boring place to shop. It is always crowded and half of the stock the store carries she would not want to buy anyway. Moreover, by shopping in one store, she will on average get reasonable prices on the products she buys.

By using Hemköp for such a long time, Barbara believes that she has established a valuable contact with the staff in the store – she says that she is known by all staff— and she agrees that one could say that she has a relationship to the store. This is important since then she knows that if she has any complaints on any products she has bought in the store, she will not be questioned, although the instances where she has had reasons to complain about a product have been few. She knows that she is a customer that the store manager and his personnel listen to and value.

Household C

"Cecilia", her husband, and their two children aged five and eight live in an old wooden house a couple of kilometers north of town. On some holidays, the family is enlarged with two more children. Her husband works full-time and Cecilia, who previously has alternated between working and being at home, has now gone back to school for further education.

To the question on how they usually do their grocery shopping, Cecilia's immediate answer is that it varies a lot. She is responsible for most of the shopping and going back to school has brought with it some changes. Before, she used to try to do more of her shopping in daytime as the stores usually are quieter then, but now she usually shops in the evenings. She goes shopping about twice a week. At the end of the week, on Thursday or Friday, she does her major shopping trip, buying components for meals such as meat, fish, potatoes, etc. On Monday or Tuesday she makes another shopping trip mainly buying milk (which they always buy a lot of), bread and fruit. On the days she knows she will be going to the store, she takes the car to school. Occasionally it happens that she might go to the store to buy ingredients for the same night's dinner if they decide they want a specific dish.

Cecilia starts compiling the shopping list a couple of days before going to the store. She says she needs a written shopping list as she otherwise would bring home only half of the things they need. A bit regretfully, she admits that usually some other products find their way into her shopping cart as well, for example, meat that is on promotion. During some periods, she has also made a weekly menu so she would know that she would get everything needed for each meal when shopping. She is not doing it at the time of the interview, but she feels that they

need to start doing it again as both of them are away from home during the day and due to increased time constraints shopping and cooking should go more smoothly.

Cecilia favors Hemköp Marnäs, the store where she does most of her purchases. She simply likes Hemköp Marnäs, it is a "nice store" and she finds her way around in the store. They also have very low prices on milk, which is important since they consume large quantities of milk, and good deals such as "buy three pay lower price." Hemköp also has good quality products, such as Swedish meat. Moreover, the store is on the right side of town from their home; had it been located on the other side of town, she thinks she would use it less. Besides Hemköp Marnäs, she also shops in Matmagasinet, two to three times a month, ICA Matmäster a couple of times a month, and occasionally in Hemköp City.

Matmagasinet often has good prices on many items. However, she finds that they sometimes have poor quality fruits and vegetables. Moreover, it is very crowded and the personnel are running around in the store, too busy to be of much help to single customers. For a specific shopping trip, she decides to go to either Hemköp Marnäs or Matmagasinet by looking at the ad leaflets from the store. If several of the items she has planned to purchase are promoted at Matmagasinet, she will go there. Cecilia likes looking through the leaflets, the products she mentions looking for the most are meat, bread and detergents.

Cecilia goes to ICA Matmäster when they have some special offer she is interested in; for example, the week before the interview she was passing by the store anyhow, and she went there to buy pork knuckle for a very good price. When she goes to ICA Matmäster she mostly buys the specific products that are promoted – she does not make her regular purchases there. However, she thinks that ICA Matmäster is a pretty good store, but it does not have as large a selection of products as the other stores. ICA Matmäster used to be the family's main store until 5-6 years ago, when they started to renovate the store. During the rebuilding, it became difficult to find things in the store and therefore she started shopping more and more at Hemköp Marnäs, which has been her main store ever since.

Cecilia has both a Hemköp-card and an ICA-card. She got both cards because her mother-in-law persuaded her that it was beneficial to have these cards for the special offers given to card members. She has not deposited any money on either of these cards, although she says that she thinks about doing it every month, since it seems convenient not to have to think about going to an ATM for cash before shopping. The reason for not depositing money on an account is, however, that she uses several stores not belonging to the same chain.

Household D

"Doris" lives with her youngest son, aged seventeen, in a house not far from where Anna and Barbara live with their families, i.e., in the southern parts of the town. She works full-time.

Doris makes a weekly major shopping trip on Fridays or early Saturday mornings to avoid the crowds, and usually she makes an additional fill-in shopping trip in the beginning of the week when she has run out of milk and fruit. For the major shopping trip, she goes to Matmagasinet, but she also shops at Konsum a couple of times a month, and at ICA Matmäster perhaps once a month. She used to shop a bit more often at ICA Matmäster, especially when she worked in that part of town, but during the past year she has been going there less and less.

Matmagasinet has become her primary store since it has, overall, much lower prices than the other stores. Before Matmagasinet opened, she shopped at Konsum and a now closed-down discount store belonging to the KF chain, but when Matmagasinet was established and she discovered the price differences, she shifted over an increasing share of her purchases to Matmagasinet. At the time of the interview, she estimates that she makes approximately 90 percent of her purchases at Matmagasinet (during the diary period, she made approximately 35 percent of her purchases at Matmagasinet and about 50 percent at ICA Matmäster).

When comparing Matmagasinet and the other stores, she does not perceive large differences apart from the price levels. However, Matmagasinet has a somewhat limited assortment and she can find more variety at Konsum and ICA Matmäster. For example, at Konsum she finds a greater variety of Abba's pickled herring. She also goes to Konsum for fresh or frozen salmon, and she prefers their quality of minced meat. Products on good deal at Konsum or ICA Matmäster are bought on minor shopping trips, but she never does her major shopping there. Sometimes, however, it happens that she goes to more than one store on the same purchase trip. She has been to Hemköp Marnäs a few times and says that it seems to be a very nice store with a good quality assortment. Through published price comparisons she knows that the Hemköp stores are more expensive, but if Hemköp Marnäs had been a bit more conveniently located for her she might go there for some high-quality special items.

Doris always brings a written shopping list for her major shopping trips. She emphasizes that she is very careful about planning her purchases. She notes products as she runs of out them, but before going to the store she sits down with leaflets and coupons she has received from the stores and looks though the special offers. She has an ICA-card and a KF-card, and thus receives information on membership specials from Matmagasinet, ICA Matmäster and Konsum. If products that she

usually buys are on promotion, she buys large quantities and stores them. For example, if she finds pork chops at 29.90 SEK à kilo, she would buy 6-7 kilos, package them in meal sizes and put them in the freezer. Using the freezer in this way and buying products on promotion are part of what she calls her long-term strategy. By always having a filled freezer and pantry, she avoids running out of products and having to make impromptu visits to the store. She is never tempted by promotions on products she does not normally buy, and only when she has forgotten to write down a needed item on the shopping list does she make purchase decisions in the store.

Doris says that it is important to plan purchases in order to save money. As a single parent of a teenage son, she needs to be careful with money. She says that many people she knows cannot understand how she can get away with such low food expenditures. She also says, however, that most people she knows spend a lot more money on food than she does without getting better food for it, because the buy haphazardly, without planning.

Household E

"Eva", her husband, and their two children, aged five and seven, live in a house in the same residential area as Anna and Barbara. Eva is working full time but has great freedom over her working hours. Her husband is currently setting up a business of his own.

Concerning their shopping habits, Eva says that she makes smaller purchases on her way home from work, and a major purchase when "it is starting to look empty" in the pantry. She estimates that this occurs every two weeks, and although she does not have a special day for shopping, it often turns out to be on a Friday, Saturday, or Sunday evening. Although she brings a shopping list on which she has listed items that they have run out of, she always makes a full tour of the store looking through all the shelves. If she finds attractive offers, she buys the product even if it is not on her list. On her smaller purchase trips, she mostly buys milk and bread, and sometimes something for an evening meal. Currently, the household is experiencing financial restrictions, so she usually tries to make something out of the products she has bought on her major trip.

Eva's main store, where she does her major purchases, is Konsum, and she is happy with it and sees no reason to switch. Although there might be stores with lower prices, it is difficult to learn to find one's way around in a new store. She also shops in Hemköp City, on her way home from work. Comparing these two stores, she finds them equally good, both stores having a large assortment of environmentally friendly products and produce, which is important to her. However,

Hemköp City closes earlier on weekends, at 4 p.m., compared to 8 p.m. when Konsum closes. Moreover, at Hemköp it is not possible to buy batches of ten liters of ecologically produced milk at the reduced price; at Konsum they have both normal and "eco-friendly" milk on this offer. Occasionally she goes to Matmagasinet, where she buys large quantities of some products, such as a brand of frozen vegetables that she likes. However, she does not particularly like shopping at Matmagasinet; it looks like a warehouse and it is always too crowded. She rarely shops in the stores in Marnäs, they are a bit out of the way, and moreover, she does not particularly like ICA Matmäster and its assortment.

The household has membership cards to ICA, Hemköp and Konsum. However, the Konsum card is the only one that she uses. Usually she deposits money on the account, which she finds convenient. The main reason for getting the cards was the attractive interest rates and the membership special offers. She recalls that she did deposit some money on the Hemköp card as well in the beginning. She is not really fond of coupons and would prefer an easier way to receive membership benefits. To deal with the household's current financial restrictions, Eva has made some changes in the type of food she purchases and prepares. Pancakes, fish-balls, and sausage have become more common on their menu. She also sometimes forsakes her concern for buying environmentally friendly products, which still are somewhat more expensive than other products. However, she would not consider shopping more often at Matmagasinet although they have lower prices, since she does not like their warehouse style.

Household F

"Flora", her husband, and their two small children live in a small village about twenty kilometers south of Ludvika. Flora is currently unemployed and stays home with the children.

Flora shops for groceries about once a week. For her, it is a nice occasion to get out of the house. Usually, she shops on Thursdays; on Fridays, the stores are too crowded and as she tends to keep putting it off during the week, she usually ends up going on a Thursday. She brings a written shopping list to the store, but sometimes buys additional items found on promotion in the store as well. About every other shopping trip, she buys ingredients for meals based on a two-week meal plan. On the other trips, she buys things they have run out of. However, she says that she usually spends about the same amount every shopping trip.

The stores Flora uses are mainly Matmagasinet and Hemköp Marnäs. Hemköp Marnäs is her preferred store, they have good quality produce and it is pleasant to walk around in the store. Matmagasinet does not have as good quality produce, nor

is it a very pleasant store to shop in, but the have good prices, e.g., SEK 19.90 for diapers, which usually costs about SEK 80, and it is possible to buy in bulk, for example, 5 kilos of flour. She estimates that she goes to Hemköp Marnäs three out of four times (during the surveyed period she did, however, mostly shop at Matmagasinet). For a particular shopping trip, she bases her store decision on the marketing leaflets she receives; if Matmagasinet has many special offers on products she is interested in, she usually shops there. She usually looks at the promotions from Matmagasinet, ICA in general and Konsum. She says, however, that she would do all her shopping at Hemköp Marnäs if the prices were better.

Flora has a membership card to all three chains, i.e., Hemköp, ICA and Konsum. However, she does not deposit any money on any of the cards, although she had intended to do so on the ICA card. Although she is a Konsum member, she rarely shops in the Konsum store, only if they have some very good special offers or if she has forgotten to buy some staple. She thinks the store has somewhat of a sterile atmosphere, and she has also had some bad experiences with foodstuffs she has bought there, like moldy cheese or ham gone bad.

As she currently is unemployed, she feels that she has to keep track of expenses, but she thinks it would be different if she had a job. She says that in general, she does not think that the price differences between stores on most products are significant. Moreover, she prefers to pay a little more to get products she likes, like Swedish apples or Swedish meat. Although one needs to pay more for good quality products, she thinks it is worth the price.

Household G

"Gabriella", her husband, their two small children, and dog live in a house not far from the area in which Anna and Barbara live. During the diary study, Gabriella was on maternity leave, but now both she and her husband work full time.

Household G makes one major shopping trip per week, usually on Thursdays. They take turns with the shopping; the person who leaves earlier from work to pick up the children from the daycare center goes grocery shopping with the children. Apart from the list of things they have run out of during the week, for instance cereal or plastic bags, they do not bring a shopping list to the store. Most of the purchasing decisions are made in the store, in part based on the in-store promotional activities. Gabriella says that she has a specific path around the store, and on her way through the store she finds combinations for meals. Sometimes she brings recipes, and she sees that she gets the items needed for these particular dishes. Apart from the major shopping trips, they make a couple of fill-in trips per week. These trips are made when they have run out of things like milk, or if the

person responsible for making the evening meal realizes that they are out of a needed ingredient.

The major shopping is always done at Hemköp Marnäs, although it is more or less on the other side of town from their home. This store has been their main store ever since they moved back to Ludvika after taking their academic degrees some ten years ago. Gabriella says that she thinks that the store has good quality fruits and vegetables, and a good deli counter. Moreover, it has a wider assortment than Hemköp City. Also, she used to work in the store before starting her education, so she knows her way around the store which she says makes shopping go that much faster. In addition, she still knows many of the persons working in the store, which she finds nice. The fill-in purchases are usually made at Hemköp City or at a small convenience store on the way home from work. About once a month they go to Matmagasinet to buy dog food. While they are there, usually a small number of other items find their way into the cart as well.

In general, she does not normally shop at Matmagasinet since she does not like their big-sized packages. She does not like buying food in large quantities, since she thinks it is a lot of work to take care of it all; to divide and pack it into usable sizes. As for the other stores in Ludvika, she strongly disapproves of Konsum. She finds the personnel unfriendly and that it takes "ages" at the checkouts, or if you ask for anything. She has not been to ICA Matmäster for quite awhile, so she really does not know what the store is like now, but before, she found the store to be awkwardly organized and difficult to shop in.

The household has a Hemköp card on which they make monthly deposits. They got the card as it made payments easier to handle, and also because of the relatively high interest rates. They sometimes use the special offers sent home to them and also look at the special membership offers that are obtained by inserting the card in a machine in the store. As to the other stores' marketing activities, they do not look at the leaflets that are sent home, apart from those from ICA in which Gabriella looks for recipes. She does not consider herself to be particularly price sensitive, and although she knows through the price surveys published in the local paper that Hemköp is not the store with the lowest prices, the price differences are not large enough for her to switch stores. When she and her husband were students, they were more on the look-out for stores with good prices due to their restricted incomes, but their general philosophy has always been that if one needs to prioritize, they will prioritize the food they eat.

Household H

Since the diary study, "Helena's" two grownup children have left home, and she has moved to a smaller apartment in the same area, where she lives with her dog. Currently, she works part-time.

Helena estimates that she shops for groceries about once a week, but she does not have a regular day for shopping. Usually, she shops on her way to work – as she works in the evenings, the shops are closed when she leaves work. Although she usually writes a shopping list, she often forgets to bring it to the store. Therefore, she often ends up buying more items than she had planned. It sometimes happens that she will make another purchase during the week if she gets a craving for something special. Apart from the weekly purchases, she makes a larger shopping trip about once a month. On this shopping trip, she stocks up on staples such as potatoes and pasta. On these shopping trips she also buys dog food.

The weekly purchase is usually made at ICA Matmäster. This is the most conveniently located store on her way to work. Helena has no car and always walks to work. Although Hemköp Marnäs is not far from ICA Matmäster, it is located on "the wrong side of the road," so she usually does not shop there. The larger monthly purchase is made at Matmagasinet. When she goes there, she borrows her daughter's car. She shops at Matmagasinet because it carries the brand of dog food she favors. Moreover, she finds it convenient to buy the larger packages of, for example, pork chops they have there. Having bought larger packages, she does not have to shop for food as often.

Helena thinks that all the stores in Ludvika are good and have pleasant personnel. She does not believe that the price differences between stores are large, either. However, she does not usually compare prices, so she says that she does not really know what the price differences are. Helena's store choice for the weekly purchase is purely based on convenience; if she were to move she would also change stores. She would, however, probably continue to shop at Matmagasinet. Helena has a membership card in Konsum which she has had for a long time, however, she seldom shops there as it is located on the opposite end of town. She does not go there on the monthly shopping trips when she uses a car, since Konsum does not carry the right brand of dog food.

In general, Helena does not look much at prices; she buys the food she has decided on, whether or not it is on special. Although she thinks that she probably would benefit from comparing prices more, she does not think it is worth the time and effort. Still, she looks at the leaflets that she receives in the mail, and at the interview she mentions that Hemköp has her favorite brand of coffee on special. She was not sure, however, whether she would go to Hemköp to get the coffee. One reason for looking in the leaflets, specifically those from ICA, are the recipes.

4.7.2 Provisioning strategies used by the households

From the short descriptions provided above it is clear that provisioning strategies can be very different. Table 48 below contains a summary of the strategies used by the households

Three aspects of these provisioning strategies are considered to be of particular interest. These are the degree of regularity in the pattern, how advertising and the in-store environment are used in the purchase decision process for products, and, how specific stores are incorporated into these strategies.

The first observation is that the households vary in the regularity of their grocery shopping patterns. That is, the *timing* of store trips varies from being an intrinsic part of the pattern – Barbara always making her major purchase on a Friday – or something dependent on other aspects of the household's activities – Eva shops when she realizes that she needs to refill the pantry. The regularity is, not unexpectedly, more related to the major shopping trip; fill-in purchases are more usually made in response to upcoming needs. The regularity of the shopping patterns indicates the degree to which grocery shopping is routinized. For households without a specific shopping day, the decision concerning the timing of purchases needs to be taken for every purchase trip: "should I go to the store today or not?"

The second aspect on which the households differ is how, on the one hand, advertising and, on the other hand, the store, and more specifically the in-store environment, is used in the purchase-decision process, i.e., deciding what products to buy. At one extreme are Anna and Doris who make all, or almost all, their purchase decisions by the kitchen table, before coming to the store. In this process, they both rely to a great extent on the retailer's leaflets they receive in the mail. The leaflets thus function as support tools for the process of deciding what to buy. Cecilia and Flora also make many of the purchase decisions before shopping and also use leaflets in the process, although they also regularly look for and buy promoted items they find in the store. Eva too makes a list of what to buy. However, in contrast to the other planners, she does not mention using leaflets in the process of writing the list, but mainly seem to base it on what the household has run out of. Eva also routinely scans the whole store for interesting buys. Like Eva, Helena writes a list of what she has run out of.

Household	Description of provisioning strategy
A – Anna	Major shopping trip once every two weeks (usually Thursdays) at Matmagasinet. Purchases planned beforehand, marketing information used in planning. Fill-in trips in between, at various stores, e.g., fresh fish at Konsum.
B – Barbara	Major shopping trip every Friday at Hemköp Marnäs. No planning before, purchase decisions taken in store based on current supply, "mood," and to some extent promotions. Some fill-in trips during the week; at the most conveniently located store for the occasion, or, if a special item needed, at Hemköp Marnäs.
C - Cecilia	About two shopping trips a week – meal components on Thursday/ Friday – milk, bread, fruit on Monday, Tuesday. Brings a written shopping list to the store. Hemköp Marnäs is her favorite store, but she also shops at Matmagasinet. Decisions on what store to go to on a particular trip are based on promotions in the leaflets. Occasionally she shops at ICA Matmäster when they have particularly interesting promotions. In general, a fairly irregular pattern.
D - Doris	Major shopping trip every week (Friday or Saturday), in general at Matmagasinet. All purchases are planned beforehand, marketing information used in planning. Other stores visited occasionally for purchases of promoted items of good value or brands or products not found at Matmagasinet.
E - Eva	A major shopping trip "when the pantry starts looking empty," about every two weeks, and fill-in trips in between. Major purchases made at Konsum, fill-in trips at Hemköp City on her way home from work. Brings a shopping list on her major shopping trip, but scans the whole store for interesting special offers. Occasional purchases at Matmagasinet, for selected items.
F - Flora	Usually one shopping trip per week. Mainly food items every other week to cover a two-week meal plan. Brings a written shopping list to the store. Hemköp Marnäs is her favorite store, but she also shops at Matmagasinet and occasionally at Konsum. Decides what store to go to based on advertising on promotions.
G – Gabriella	One major shopping trip per week, usually on Thursdays, to Hemköp Marnäs. Little planning beforehand, purchase decisions taken in store, often based on in-store promotions. Fill-in purchases made at the most conveniently located store. A trip to Matmagasinet about once a month, mainly for buying dog food.
H - Helena	One regular shopping trip per week at the most conveniently located store, which right now happens to be ICA Matmäster. Some planning before shopping trips. Another shopping trip about once a week for smaller items. Once a month she goes to Matmagasinet to buy staples, large packages of, e.g., meat, and dog food.

Table 48. Descriptions of the households' provisioning strategies

On the other extreme, one finds Barbara and Gabriella. Both of them make all or almost all the decisions on food items in the store. As they walk around in the store, they compose meals for the upcoming week. In this process, Gabriella often looks at the in-store promotions. Barbara, however, is more concerned with the quality of, e.g., meat and vegetables and what she is in the mood for, but sometimes also looks for special offers on certain items, such as specific cuts of meat. The in-store environment thus functions as a decision support tool for these shoppers.

Concerning the leaflets that the stores send out to households, only some of the shoppers thus use them for deciding what to buy and in some cases, where to buy. However, most of them do look at the leaflets. Interestingly, several of the interviewees, including Barbara and Gabriella who did not use leaflets for price information, mention that they look through the leaflets for recipes.

Of specific interest in this study is, of course, how the households decide where to shop. One noteworthy difference between the provisioning strategies used by the shoppers interviewed is whether a particular store is linked to a type of purchase trip or not. For some of the households, the store choice is given by the strategy – e.g., both Barbara and Gabriella always go to Hemköp Marnäs for the major purchase, and Anna always goes to Matmagasinet for the major purchase. In some of the other households, the strategy includes a decision rule for the choice of store for a particular trip: both Flora and Cecilia decide on the store for her shopping trip based on the extent to which the stores have the products she wants on promotion. If a specific store is included in the store-choice script, it is more often related to major shopping trips than to fill-in trips.

The different approaches used by these shoppers for choosing where to shop can be related to the four types of store-choice tactics that are presented by Laaksonen (1993, see page 66). The different choice tactics are, in turn, combined into provisioning strategies repeated over a weekly, bi-weekly or monthly period. Both Barbara and Gabriella have a similar pattern of choice tactics with a I/O-type choice (use of a store because of its comprehensive internal approval) for the major shopping trip and an E/O-type choice (the use of a store or a trait because of their functional suitability within a broader daily behavioral system, i.e., convenience) for fill-in trips. It is noteworthy that they have both used the same store for major purchases for several years (coincidentally they both use Hemköp Marnäs for their major purchases).

In contrast, Cecilia and Flora use a E/A-type choice (the use of a trait because of a specific reason given by the retail environment, e.g., specific prices) for their main purchases. Thus, even though they make the *same type of choice* for every major

shopping trip, they use different stores based on what products are promoted by the stores. Anna's store choice is also based on the price competition between stores. However, in her case, this results in always using the same store. Although she is price oriented, she does not comparison shop as she is confident that she already shops in the store with the best prices. The by far most price and value conscious person of the respondents, Doris, seem to have reached the same conclusion as Anna, for she has shifted an increasing share of her purchases to Matmagasinet. However, she still makes price comparisons between stores and is ready to go to another store for promoted products that she finds especially interesting. Finally, Helena's choice of store for her weekly purchases is based only on spatial convenience, that is, an E/O-type choice.

A relevant question is how these aspects can be related to store loyalty, in terms of how spending is allocated to specific stores and in terms of the correspondence between attitudinal and behavioral preference. Starting with the issue of behavioral preference, a reason for *not* concentrating purchases to a specific store is, as also indicated by the quantitative analyses, a high degree of price comparisons across stores. The interviews furthermore illustrate the link between comparisonshopping and how, on a more general level, decisions for purchases of grocery items are made. Price comparisons between stores are not made on an abstract store level, rather, they are related to the planning process for what to buy and to specific products. This indicates that price-comparisons are only meaningful for shoppers who make most decisions on what to buy before going shopping. If the decision process is mainly based on the in-store environment of a specific store, price comparisons between stores are not relevant. This reasoning fits with the observation that the two shoppers who rely mainly on in-store decision-making also mainly use the same store for their purchases. However, this is not to suggest that those individuals who plan their purchases in detail before shopping necessarily use many stores. Anna, for example, almost exclusively uses Matmagasinet, but still plans her purchases beforehand in detail, whereby she can be more efficient when in the store.

Concerning the second issue, it can be observed that both Barbara and Gabriella, who were selected from the "intentional loyals" group, both have a provisioning strategy in which a specific store is inherently connected to the major shopping trip. Moreover, they base this choice on overall liking. Incidentally they both forgo a more conveniently located store to go to their store of choice. In Engstrøm and Hartvig Larsen's terminology (1990) they have a "store map" of one store for the major purchase trip. For Anna, who was selected from the "spurious loyals" group, Matmagasinet also has a stable position within her household's provisioning strategy. However, for her this decision is not based on a strong attitudinal prefer-

ence as she thinks all stores in Ludvika are good. Rather, this choice is made on her knowledge that she makes substantial savings by shopping there, and also on the perceived added value of using the ICA-card for payments. Flora, the second "spurious loyal" does, however, have an attitudinal preference for a specific store, even if during the survey period she did shop mostly in Matmagasinet. In contrast to Barbara and Gabriella, although she has an overall preferred store, she uses a price-related choice tactic so it is not unlikely that she could use a store other than the one she thinks is the best for the majority of her purchases.

A general conclusion from the interviews is that provisioning strategies are a relevant level of analysis for store choices. The interviews show that store choices are not independent but related in a pattern that as a whole serve to cover the household's need for groceries and related items. It is also shown that the shape of these strategies varies, and that the roles of specific stores within the patterns vary.

4.7.3 Perceptions of the stores

The interviews also covered what the households thought about the stores that were available to them. There were large differences in how elaborated the interviewees were on this issue: the answers ranged from "well they are all pretty good" (e.g., Anna, Doris, Helena) to a detailed answer concerning what stores are good and why, what stores are acceptable and what stores should be avoided (e.g., Barbara). There were also differences in how specific stores were perceived: Eva is happy with Konsum whereas Barbara and Gabriella do not like Konsum at all. The large variation in whether or not the stores are perceived to be different is in line with the results from the quantitative analysis.

A specific element of the store evaluations that merits highlighting is how the price levels of stores are perceived. Undeniably, one of the stores on the Ludvika market, Matmagasinet, has markedly lower prices than the other stores. Although all of the interviewed shoppers seem to be aware of this, they vary in how large they perceive this price difference to be and in if they think the related savings are a sufficient reason for shopping at Matmagasinet. Clearly, Anna and Doris consider it worthwhile to shop at Matmagasinet. On the other hand, they did not perceive the stores to be much different in any other way. In contrast, although Eva thinks that she would save some money by shopping at Matmagasinet, she does not go there often as she does not like shopping there. In general, food prices were regarded and discussed very differently. On the one hand, Doris, who answered to the description of a "smart-shopper," mentioned the issue of prices at several occasions during the interview. She also seemed to be very knowledgeable about the prices on a large range of items. Eva, on the other hand, who also had a limited

budget, did not seem to be able to muster the energy needed for extensive pricesearch activities.

These interviews only give limited ability to make inferences about why stores are perceived so differently. Of course, it can be assumed that these shoppers have different frames of reference due to their experiences with grocery stores in general. These differences could also be related to *how* they shop and *how* the stores are used. For price-oriented shoppers such as Anna and Doris, prices are the main attribute on which stores are compared, and therefore attributes such as the layout of the store, or the behavior of personnel, is not included in the evaluation of stores. For example, Anna has concluded that she can find the same products in all stores and therefore chooses the one in which she finds the best prices. Another factor that might be interesting to relate to store perceptions is the shopper's level of involvement in shopping as an activity. Barbara, for instance, gave the impression of being very involved in both shopping for food and preparing food, and therefore the quality of the store seemed to be a much more important issue for her than it was for the other interviewees.

4.7.4 A final comment about the interviews

There were two main purposes with the interviews: to explore the provisioning strategies used by households and to provide in-depth descriptions relating to the findings from the quantitative analysis. The interviews corroborate the findings from the first part of the study, and add some further insights into how households use grocery stores.

In line with the findings from the quantitative analyses, price orientation is an important dimension in which shoppers vary and which effects their spending patterns. The interviews do, however, also show that price-conscious shoppers need not exhibit a low degree of behavioral loyalty. In a market with a low-price store such as Ludvika, they can opt to concentrate their purchases to such a store and still feel confident that they get the best value for the money. Moreover, the interviews also illustrate the variation found in the quantitative data material in how households evaluate the available stores and the consequences this has for their store-choice behavior.

An interesting tentative finding not covered by the quantitative analyses, is that there might be a relationship between how grocery stores are used and how the stores are chosen. Shoppers that make most purchase decisions in the store seem to rely more heavily on the in-store environment. It is plausible that they would be less inclined to regularly use several stores as they thereby would have to adapt shopping and decision-making styles for each store. In contrast, for households

making most of the purchase planning before going to the store, the store in itself might be of lesser importance as it is only the place where a pre-specified purchase plan is carried out. If the qualities of the store itself are less important, it is reasonable that the shopper is less likely to develop strong preferences for specific stores. This could be an explanation to why the spurious loyals exhibited a greater degree of planning than the intentional loyals in the analysis presented previously. For these households, specific stores are also more likely to be exchangeable. Furthermore, whether or not households employ detailed planning before going to the store is also related to the relevance of price comparisons as a basis for store-choice decisions.

5. Conclusions

This final chapter of the thesis begins with a summary of the findings organized along the four research objectives set up for the study. In the following sections, the findings are discussed from a wider perspective, and some managerial implications are developed. Thereafter, the limitations of the study are discussed. Finally, suggestions for future research are presented. These suggestions pertain to retail patronage research as well as research on customer loyalty in general.

5.1 A summary of findings

The overall purpose of this study was to explore store loyalty from a store patronage perspective, and to examine the effects of store evaluations and shopper characteristics on store loyalty. Following a theoretical review, this purpose was reformulated into four research objectives. A theoretical framework was also developed for the study (Figure 30).

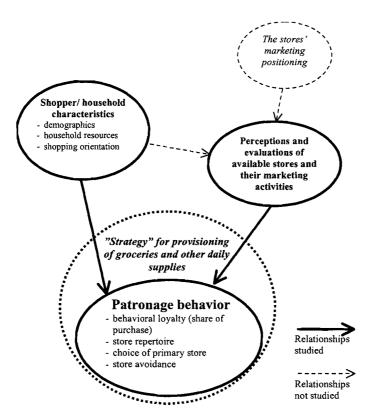


Figure 30. The theoretical framework for the study

5.1.1 Patronage behavior

The first research objective was to investigate aspects of households' patronage behavior and, specifically, their degree of behavioral loyalty – that is, the set of dependent variables in the theoretical framework. The findings in this study revealed patterns similar to those found in many other studies: most households do not confine their grocery shopping to one store only. However, they vary in how many stores they use and in how these stores are used.

The degree of behavioral loyalty has been of particular interest, and in this study this factor is seen as the share-of-purchase devoted to the primary store. As also shown in previous studies, the households vary greatly in this respect. The average share-of-purchase in the primary store was 64 percent, but this figure ranged from 23 percent to 100 percent. Similar findings concerning the degree of behavioral loyalty has been found in other studies (Cunningham 1961, Desmet and Volle 1996, East, Harris, Lomax, Wilson and Perkins 1997, Olsen, Stenvinkel Nilsson and Lind 1998). The average size of the store portfolio was four stores. Moreover, about a third of the respondents stated that they would avoid one or more of the stores in the market.

Although the share-of-purchase was the main measure of degree of behavioral loyalty used in this study, the diary data allowed for the estimation of related measures. Two such measures, share-of-visits, and Carman's measure of entropy (Carman 1970), were estimated and compared with the share-of-purchase measure. The three measures were highly correlated. They also behaved in much the same way in the subsequent bivariate correlation analyses with determinants of degree of behavioral loyalty. However, when comparing the two proportional measures of behavioral loyalty, for about 25 percent of the sample, the primary store according to the respective measure was not the same store. Thus the measures are relatively comparable when it comes to describing the households' overall behavioral tendency, whereas they give a slightly different picture of the role of different stores within the purchase pattern.

The degree of behavioral loyalty was, furthermore, related to other aspects of patronage behavior. Store repertoire was, as could be expected, negatively correlated to the degree of behavioral loyalty. The degree of behavioral loyalty was also negatively correlated to shopping frequency and positively correlated to variation in shopping size. Store avoidance was somewhat related to store repertoire – store avoiders tended to have a slightly smaller repertoire – and positively related to the share-of-visits in the main store.

5.1.2 Explaining behavioral loyalty, choice of primary store and store avoidance

The second research objective of this study was to explain the variance found primarily in degree of behavioral loyalty, but also in choice of primary store and store avoidance. As illustrated in Figure 30, two types of variables were suggested as explanatory variables: shopper/household characteristics and evaluations of stores.

Before making these analyses, the respondents' store evaluations were examined in more detail. One interesting finding is the significant differences between shoppers in how they evaluate the same set of stores. As all shoppers have been evaluating the same stores, one could assume that their evaluations of these stores would be fairly similar. On an aggregate level, there are also clear differences in how the stores are evaluated, indicating a certain consistency in store evaluations. However, both the survey and the interviews illustrate that shoppers vary greatly over how they perceive differentiation between stores, and how individual stores are perceived. The shoppers also vary in their preference, strong or weak, for particular stores. As indicated by the theoretical framework, the manner in which stores are perceived and evaluated is not only dependent on the stores' objective characteristics, but also on the shoppers' expectations, their ways of evaluating stores and in their approach to shopping. These relationships were not explicitly investigated in this study. However, the interviews suggested that how the store was used was linked to the way in which it was evaluated. Moreover, the level of involvement in the food procurement process did seem to be related to the way stores were evaluated.

Regarding degree of behavioral loyalty, both shopper/household characteristics and store characteristics contributed significantly to its explanation. Among the shopper characteristics, two of the shopping orientation variables developed in this study - price orientation and contact orientation - contributed significantly to the model. The relationships are in the expected direction, since it is reasonable to expect that shoppers who are more price oriented also comparison shop to a greater extent, thereby using more stores, spreading purchases more evenly across stores and devoting a lower share-of-purchase to the primary store. It is also reasonable that the more the shopper values a personal contact with store personnel, the more he or she would tend to concentrate purchases to a specific store in which he or she has developed a relationship to the people that work there. Apart from these two shopping orientation variables, age had a significant negative effect on degree of loyalty. There are no straightforward explanations to this finding, but as suggested by East et al. (1995) younger households with higher family commitments would tend to concentrate their grocery spending to one store as a means to simplifying the task of grocery shopping.

Whether or not the respondent had an attitudinal preference for the primary store, as derived from the store evaluation measures, had a significant impact on degree of behavioral loyalty. Location of the primary store – in relationship to the household's residence and the nearest store (apart from the primary store) – had a significant impact on degree of behavioral loyalty as well. The closer the primary store, the larger the share of purchases in this store. Whether or not the household had a card in the chain to which the store belonged was related to degree of behavioral loyalty, but only if that was the only card in the household. There was no relationship for households that had several membership cards. In all, a relatively modest share of variance in degree of behavioral loyalty was explained by the variables included in the study: adjusted R^2 for the complete model was .27. Yet, in comparison to findings from previous studies (East, Harris, Willson and Lomax 1995), this constitutes an improvement in the share of explained variance.

When relating these findings to the three suggested theories of loyalty (East 1997) presented earlier, the "resource constraints" view on behavioral loyalty was not supported by the findings presented here. In contrast, the findings are in line with the "non-shopping lifestyle"-theory, in that the price orientation factor has a significant negative effect on the degree of behavioral loyalty. A question that arises, however, is whether this should be interpreted as "absence of price orientation leads to a higher degree of behavioral loyalty," or "presence of price orientation leads to a lower degree of behavioral loyalty," which does not necessarily mean the same thing. It can be argued that it seems more appropriate to see the "shopping lifestyle" as the determinant with a negative effect on degree of behavioral loyalty, rather than to view the absence of such an approach to shopping as the determinant of a high degree of behavioral loyalty.

Concerning the discretionary view of loyalty, the idea that households with appropriate resources prefer one-stop shopping and thus concentrate purchases to a larger out-of-town store, was not reflected in this study. However, this might be due to the market structure, with no out-of-town hypermarkets or superstores in the studied area. On the other hand, the findings from the study imply that households with a high degree of behavioral loyalty behave in this way out of choice, in that they are in general more contact-prone, and thus are more interested in visiting the same store, and seeing the same personnel, more frequently. Moreover, if the shopper has a relative preference for the store in which most purchases are made, this has a significant positive impact on the degree of behavioral loyalty.

In addition to the first set of regression analyses in which the households' general tendency to be behaviorally loyal was the dependent variable, store-level analyses were also run. In these analyses, the share-of-purchase of all customers having used the specific store during the period was the dependent variable. These analyses revealed that shopper characteristics did have an effect on the share-of-

purchase in four of the store models. However, the pattern of what shopping-orientation dimensions were important, and the direction of the effect varied. The price-orientation factor had a significant negative effect for three of the stores. For Matmagasinet, the store with the low-price profile, price orientation did not have an effect on the share-of-purchase households devoted in the store, which is reasonable taking into consideration that price-oriented consumers making store comparisons would find it to be the cheapest store. Whether or not customers at Matmagasinet spend a small or large share in this store is thus not contingent on whether they are more or less price-oriented. One of the interviewees is an example of an extremely price-oriented consumer who has shifted a large percent of purchases to this particular store. Instead, a high share of purchase at Matmagasinet was associated with a high degree of planning.

In the store-level analyses, it was also shown that relative evaluations had a markedly higher effect on the degree of behavioral loyalty than evaluations per se, supporting Dick and Basu's (1994) contention that relative attitudes are more appropriate for explaining choice behavior. Finally, whether or not the household had a card only for the chain related to the specific store was related to share-of-purchase for two stores, Konsum and ICA Matmäster. One likely explanation as to why card ownership had a marked effect on the Konsum customers is that the Konsum program was the only one with a bonus scheme connected to the card. But the effect might also be attributed to the fact that there was only one store belonging to the Konsum chain in the Ludvika market and membership offers could thus only be obtained at this particular store. However, the effect of cards for the ICA Matmäster, which is one of two stores in which the ICA card can be used, suggests that the latter explanation could be of minor importance.

In the next section of the analyses, the question of what explains the choice of primary store was investigated. More specifically, two factors were studied, the evaluation of store, and the location of the store. The analyses showed that there were a large number of households for which the primary store was not the same as the store to which they gave the highest rating. This suggested that there is, for some households, a certain mismatch between attitudes and behavior. For about a third of the households the primary store was the store located closest to the household residence. For some households, there seemed to be a trade-off between location and overall store preference, but there were also households for whom the primary store was neither the attitudinally most preferred nor the most conveniently located store. These shoppers were slightly more price-oriented than other shoppers, and half of them had Matmagasinet as their primary store.

Finally, determinants of store avoidance were investigated. Again, the shoppingorientation dimensions were found to contribute to the explanation of whether or not the respondent would avoid stores. Store "avoiders" had a lower degree of price orientation, a higher degree of contact orientation, and a lower score on the indifference factor, indicating that they to a larger extent perceived differences between stores. Moreover, store "avoiders" tended to be somewhat younger. However, the explanatory power of these shopper characteristics in a logistic regression model was low. When analyzing the open-ended questions concerning store avoidance, it was shown that there were several categories of reasons for avoiding stores. This could be one explanation for the difficulties in explaining a general "store-avoidance tendency."

5.1.3 Comparing "intentional" vs. "spurious" loyals

The third research objective was to compare the characteristics of "intentional" and "spurious" loyals. As previous analyses on choice of primary store had indicated a mismatch between attitudinal and behavioral preference for a relatively large group of shoppers, it was considered relevant to carry out such a comparison. For this purpose, the households were categorized into four loyalty categories based on Dick and Basu's (1994) classification matrix.

A comparison of the four categories on shopper/household characteristics indicated differences concerning their shopping orientations that were intuitively appealing. The "intentional" loyals were the least price oriented, whereas the "latent" loyals were the most price oriented. The "intentional" loyals were also the most contact oriented whereas the non-loyals were the least contact oriented. Moreover, the "intentional" loyals had a low average score on the indifference factor, whereas the "spurious" loyals had a relatively high average score on this factor.

However, although being in the expected directions, the differences between "intentional" and "spurious" loyals on the shopping orientation variables were fairly small, and not statistically significant. In a logistic regression, the planning-behavior factor was the only variable that significantly contributed to the explanation of whether or not households were intentional or spurious loyals. Shoppers with a high degree of planning behavior were more likely to be "spurious" loyals. The lack of significant differences could be due to that the groups were not distinctly separated; the categorization was, in a manner of speaking, forced on the data set. Another reason could be that factors that would explain the difference between the categories, and specifically, factors that would explain why some shoppers have a high preference for a particular store, were not included in the study.

5.1.4 Exploring provisioning strategies

The fourth research objective was to explore households' provisioning strategies for groceries. Eight households were selected from the first data collection and interviewed about their shopping habits and store choices. To obtain a large

variation in the behavior of the households, they were chosen on the basis of the loyalty categorization in the previous stage of the analyses. The interviews illustrated the rich variation in how households organize the task of provisioning. Three aspects of these strategies were specifically highlighted. First of all, the households varied in the regularity of timing of shopping trips, which could be seen as an indicator of the extent to which their shopping patterns were routinized. Secondly, the households varied in how advertising vs. the in-store environment were used in the decision making process for what to buy. Some households made most of their purchase planning before going shopping, in many cases based on the promotional material from the stores. In contrast, there were also households that took almost all purchase decisions in the store, using the store itself as a decision support tool.

The third, and most important, issue from a store-choice perspective concerns how specific stores were incorporated into the provisioning strategies. Basically, the difference between the households was over whether a specific store was predetermined for a particular type of shopping trip or whether the strategy included a decision rule for how to choose, at each shopping occasion, between two or more alternatives. This might seem as a trivial observation, but it is really an essential aspect of store choice behavior, not often focused upon. If a particular store is predetermined by the strategy, the household is not likely to respond to any marketing activities, whereas if a decision, albeit based on a choice heuristic, is made at each shopping occasion, retailers stand a much larger chance of influencing consumers' store-choice behavior.

The more intriguing question is how these different patterns arise. The interviews suggest that this in part could be related to *how* the store was used in the provisioning process. For the households that to a great extent took their purchase decisions in the store, and also used it a support tool for meal planning, specific stores had more central positions within the provisioning strategies. In contrast, for the households that made most of the purchase planning by the kitchen table, the store itself seemed to be of somewhat less importance. As a consequence these shoppers' involvement in the store as such might be lower and this could also explain why they perceive small or no differences between stores. A large extent of planning also allows for more meaningful price comparisons across stores, since the shopper compiles a list of products for which price comparisons are relevant. For households that make most purchase decisions in the store, there are perhaps no particular products to which specific price comparisons before the shopping trip can be related.

5.2 Discussion

There is currently a strong emphasis within marketing theory and practice on customer loyalty and the idea that firms should gain the loyalty of their customers, or more specifically, the loyalty of "the right" customers. The focus within this line of thought is on companies' abilities to increase their customers' loyalty and how they should go about achieving this goal. But to what extent is it possible to make customers more loyal, and what are the assumptions about consumer behavior on which this view of customer loyalty is built?

One assumption implicit in much of the current literature on customer loyalty is that most customers have, or can be induced to form, strong preferences for specific products, stores, airlines, restaurants, etc., and that these preferences will lead to a high degree of behavioral loyalty. This assumption presupposes that buyers of these products or services are likely to be very involved in the product or service category and very concerned about the particular outcome of using the product or service in question. It also presupposes that consumers perceive large differences between service providers or brands, and base their purchasing decisions mainly on these differences. This would mean that there are clear variations between offers in their possibility to satisfy customers, and most consumers will find that a particular store or brand satisfies his or her needs distinctly better than alternative stores or brands and will consequently use this store or brand only.

Studies on store usage behavior and brand usage behavior for many categories of branded goods have, however, repeatedly shown that undivided behavioral loyalty to a store or a brand is the exception rather than the rule (Dowling and Uncles 1997). In a previous study, even highly satisfied grocery store customers were not undividedly loyal to the focal store (Mägi 1995). This indicates that no matter what the firm does, most customers will not become wholly behaviorally loyal as there are other factors that drive their store or brand choice behavior. Most customers have store usage patterns that include two or more stores; if the attractiveness of the store was the only determinant of this usage pattern, why do not consumers simply exclusively use the one they like best? It is likely that for many products or services a large share of customers find that many providers perform on the same, satisfying, level, and choices between different providers might be due to situational factors, convenience, or variety-seeking behavior.

An issue related to the question on assumptions behind the current view of loyalty is that despite considerable research efforts which date back several decades, there is still confusion surrounding the concept of "loyalty" itself. There is no general definition, and to an even lesser degree, a generally accepted measurement of the concept. After a thorough examination of the literature, it can be argued that it is

better to acknowledge that "loyalty" as used in marketing is a notion with several referents, and that a search for *the* definition of "customer loyalty" is not fruitful. Rather than trying to reconcile all the different views on what dimensions should be included in "loyalty," and to develop a definition and measure matching such an attempted synthesis, a more fertile approach is to select dimensions that reflect the empirical issue to be studied.

Taking households' tendencies to use several stores as a starting point, the focus of interest in this study has been on how households spread their purchases across stores, and in what way evaluations of specific stores as well as shopper characteristics affect this behavior. Therefore, the degree of behavioral loyalty was found to be a relevant phenomenon to study. This dimension is not frequently accounted for in current studies of how customer satisfaction and/or perceived quality affects customer loyalty, because most studies use a measure of behavioral intentions as measurement of "loyalty." As a rule, such measures are of a more indistinct nature, and do not, in most cases, reflect variation in actual consumer behavior, such as breadth of the consumer's usage portfolio within the category.

The most important finding of this study is that when it comes to how households divide their purchases across stores, it is not only the store itself and its qualifications that determine the extent to which the store will be used. Instead, the degree of behavioral loyalty, both regarding a household's overall behavioral pattern and regarding usage of a specific store within the pattern, is also affected by specific shopper characteristics. This means that a firm's possibilities to increase the behavioral loyalty of its customers are limited by whether a high degree of behavioral loyalty is in line with general approach to grocery shopping preferred by the specific customer. For example, for customers who regard price comparisons and the use of several competitors as an important part of the purchasing process, there is no reason to stick to one competitor.

The findings from the study do, however, suggest that the type of customer evoked by the literature on customer loyalty exists. Even for grocery stores, which sometimes are thought to be a rather homogeneous service with no important differences between stores (apart from location), there are consumers who find the choice of a particular store an important aspect of their store patronage behavior, and cannot consider using any alternatives. But how common are these customers? Although it is difficult to pin-down exactly what customers match the description of the "intentional" loyal, a difficulty evidenced by the attempt to categorize customers made in this study, the findings suggest that a minority of shoppers fit this description.

In short, the argument put forth here is that the assumptions about consumer behavior on which the customer loyalty literature is based need to be made explicit and evaluated. The findings in this study suggest that being "loyal," defined as a strong commitment to use a particular store, is not a typical way for grocery shoppers to relate to the stores they use. One cannot assume that consumers in general form such strong preferences for particular stores that these preferences become the only determinant of patronage behavior. On the contrary: findings from the study indicate that factors other than the store itself and how it is evaluated also determine overall patronage behavior. However, differences between consumers need to be taken into account; for one segment of consumers, the assumptions about a high level of involvement in grocery shopping, and strong preferences for specific stores, seem to be valid.

Finally, the managerial perspective taken on loyalty in this study deserves comment. In the introduction of this text, several benefits of customer loyalty as seen from the company perspective were presented (Reichheld and Sasser 1990). But is it necessarily beneficial for consumers to be loyal to a firm, both in terms of staying with a company over time, and in concentrating purchases to a specific store? One suggested benefit for consumers is that a high degree of loyalty ensures a more personalized service. But little is known about the extent to which consumers value such a benefit. A downside of loyalty from a consumer perspective is that a high degree of loyalty limits the possibilities for making price comparisons and for taking advantage of competitive activities of stores. Would the relatively large number of consumers that currently use several stores be better off if using only one store? Since these consumers use several stores out of choice, the answer to this is probably no. It is likely that many consumers see benefits in regularly using several suppliers, rather than confining their purchases to one store.

5.3 Managerial implications

"Buying repurchase is possible, but you have to earn loyalty" – Idealistic Approach

"If someone has taught penguins how to play table tennis, it cannot be impossible to teach your customers to behave in the way you want" – Business Approach

"If you want loyalty, get a dog" - Pessimistic Approach

Sopanen begins her report on loyalty schemes in retailing with the above quotations that capture the different views on customer loyalty reflected in marketing

literature and marketing practice (Sopanen 1996). In the rhetoric of customer loyalty, and in much of the theoretical work in the area, the idealistic approach seems prevalent in that it is believed that customers can become, and often are, "truly" loyal according to the semantic meaning of the word. At the same time, retailers' (and other firms') extensive use of loyalty programs is more in line with the business approach, in that different types of reward systems are assumed to be both necessary and sufficient for inducing customer behavioral loyalty. In a sense, this indicates that business people do not trust the possibility that customers might actually develop deep-felt loyalty for a store, brand, or service provider. Finally, the "pessimistic" approach has to some extent been the point of departure for this study. For many products and services, many consumers are not likely to be truly loval to one specific provider, and obtaining such lovalty from the majority of customers is an unrealistic goal for companies. The results from the empirical study supports this contention: many consumers prefer to use several stores, and only a minor share of customers answer to the description of "truly" loyal customers proposed by marketing theory and popular management literature.

If the "pessimistic" approach is the most realistic, this view should be taken into account by companies for which increasing customer loyalty is a top priority. If previous marketing activities were largely based on the assumption that all consumers are fickle and easily swayed by for example promotions, now there is a shift to the assumption that consumers in general are "loyalty" prone. It seems to be believed that it is just a matter of "doing the right thing" to earn the loyalty of one's customers. However, much like how the effects of promotions on consumers' store choices have often been overestimated by retailers (Urbany, Dickon and Kalapurakal 1996), it is possible that the effects of measures taken for increasing customer loyalty on both customer behavior and financial gains will be overestimated as well. This is not to say that efforts such as customer satisfaction programs should be advised against, but caution should be taken in setting too high expectations for them. It is important to set realistic goals for the level of behavioral loyalty that can be reached.

Taking into consideration that differences exist among customers also suggests that the somewhat dated assumption that customers are price sensitive and respond to price-related marketing activities should not be altogether dismissed. In line with the increasing emphasis on relationship marketing, the usefulness of mass-communicated promotions is sometimes questioned. The effectiveness of these measures on consumers' store choice has also been rather difficult to estimate, as the sales increases for promoted items can be explained by in-store decision making as well as by increased store traffic. However, this study suggests that there is a segment of customers who use leaflets extensively, and also use promotions in

their store-choice process. Although a decrease in mass-marketing activities might be warranted, it should be kept in mind that they do affect the behavior of a substantial segment of grocery shoppers.

A narrow-minded focus on customer loyalty and relationship marketing also threatens to conceal the fact that retailing to a large extent is a volume-based business. As many of the costs of running a store are fixed, not only profitability per customer, but also the gross margin in absolute figures, affect the overall profitability of the store. If a store focused on the patronage of customers that exhibit, or are likely to develop, a high degree of behavioral loyalty, and if this customer group is relatively small, the total sales volume might end up being too small to cover the fixed costs of operating the store. Dowling and Uncles (1997) note that 100 percent loyal buyers tend to be light buyers. Moreover, whether or not a customer contributes to the profitability of a store, is not only dependent on how much he or she spends, but also on the margins on the products that this customer buys.

How effective are loyalty programs? Can consumers really be taught to behave loyally? As emphasized earlier, due to the cross-sectional design of this study, the findings concerning the effects of program memberships on degree of behavioral loyalty should be interpreted with care. However, one noteworthy observation is that identified differences between card-holders and non-card holders concerning the degree of behavioral loyalty only concern households with one card. For households with more than one card, there is no relationship between the ownership of cards and the degree of behavioral loyalty. This is important as it cannot be assumed that most customers enroll in one program only: among the households in this study having enrolled in a customer membership program, there were more households that had two or more cards than households with one card. These findings underscore the importance of being aware of and investigating households' "membership portfolios." This factor should also be taken into account when retailers assess their customer portfolios.

Although the findings suggest that only a minority of customers are "truly" loyal in the sense that they devote a high share-of-spending to a store for which they have strong preferences, they do exist, and their attitudes and behaviors should be of particular interest for retailers. These customers seem to be more involved in grocery stores in general and they are therefore more prone to come up with suggestions and comments for the store. Moreover, as these customers seem more sensitive in how they evaluate different offers, their more pronounced attitudes might to some extent reflect more subtle differences in store evaluations for the greater majority of consumers.

Finally, an aspect included in this study, seldom focused upon in patronage research, is store avoidance. Although a limited share of respondents, about a third, indicated that there were stores they would avoid, the fact that stores are avoided, some stores more than others, makes it an important aspect of study. For example, for stores that are claimed to be avoided by more than 10 percent of the households in the catchment area, it is worthwhile to examine whether systematic reasons exist for them to do so. Thus, data on store-avoidance reasons could be helpful in a troubleshooting process. Since such data is collected from consumers who are not customers of the particular store and thus usually do not participate in regular customer surveys, it would also constitute a valuable complement to more traditional market research data.

5.4 Limitations of the study

As with most studies, there are certain limitations associated with this study that affect the generalizability of the findings or could constitute threats to the validity of the findings. In this section, some limitations that are due to how the study was implemented are discussed, as well as limitations that are related to aspects that were not taken into account by the study.

In the beginning of chapter 3, it was argued that for the purpose of this study, an important aspect was to have a design in which all respondents were facing the same choice objects. The choice of a single market does, however, also entail a certain limitation on the study in that the sample strictly speaking is only representative for a specific market. Store choice patterns are contingent on what stores, or store formats, are available to the households. Therefore, households that meet another supply structure, e.g., only the choice between two competing stores, would behave differently.

Nevertheless, the choices open to the Ludvika households were judged to be similar to those found in many other places, in that there was several stores with similar offers to choose from. There is no reason to believe that households with a similar range of stores to choose from would behave much differently than the Ludvika panel. This contention is supported through comparisons with similar studies (Desmet and Volle 1996, Olsen, Stenvinkel Nilsson and Lind 1998). The close correspondence of the findings from this study with findings from other studies, concerning patronage behavior and degree of behavioral loyalty, suggests that the behavior observed here is fairly typical.

A single market design also means that the types of store encountered by the respondents in this study may not be representative for the market conditions encountered in other areas, and consequently the effect of store perceptions on behavior could vary. The extent to which stores are perceived to be different

would reasonably vary when the factual differences between stores would be larger or smaller. As no comparable studies with a different set of store formats are available, the findings on the effects of store characteristics on behavior should be interpreted carefully.

Another restriction caused by the diary data collection approach was the relatively limited time frame, four weeks, during which store-choice data was recorded. Although this time frame was considered to be necessary for limiting the amount of respondent effort required for participating in the study, it is acknowledged that the limited time frame affects the reliability of the measures of patronage dimensions used. With a limited time frame, irregular behavior has a greater impact on the measures used in the study.

Concerning the store evaluation measures used in this study, it should be noted that only a measure of overall evaluation was used. This approach does not acknowledge any variation in how different dimensions of the stores' offers might be evaluated. Although the dimensions were highly correlated, as indicated by the high alpha values for the summated variables, a more detailed analysis on the effects of the evaluations of specific components such as the store's price profile should improve the validity of the results. However, since reliable measures of each store attribute for each store would necessitate a substantial increase in the length of the questionnaire, it was decided to only take overall evaluations into account.

Another aspect of the measures of store evaluation that should be considered is the use of difference scores for estimating the measure of relative attitudes. This approach assumes a specific arithmetic for how relative attitudes are formed that might deviate from how consumers actually compare stores and develop relative attitudes. However, the derived measure of relative attitudes did perform in the expected way, which supports the chosen approach.

A final aspect that should be considered is that the questionnaire is restricted to measuring the opinions and attitudes of one respondent within the household, whereas behavior was measured on the household level as it was argued that grocery shopping behavior is most appropriately viewed on the household level. Here, the opinions of the main shopper are seen as a proxy for the household's opinions, and their shared view on how to shop and what stores are appropriate for the households' needs. If individuals within the same household have fairly different views on these issues, and also share the task of grocery shopping equally, such differences would imply that the household-level behavior cannot be adequately explained by the answers of one person. However, as the respondents to the questionnaire made all, or a dominant share of purchases in about 80 percent of the surveyed households, this objection was not considered crucial. Moreover, house-

holds in which the respondent made less than half of the purchases were excluded from the analyses in which shopper characteristics were used.

5.5 Future research

5.5.1 Research issues related to store loyalty and store patronage

On the basis of the findings in this study, three areas that would be fruitful avenues for future research endeavors within retail patronage research will be offered.

The first issue is the topic of shopping orientations. Although the notion of shopping orientations has been a part of the patronage and consumer behavior literature since Stone (1954), it has not been extensively used in research and theory development. The findings from this study suggest that "shopping orientation" is a useful concept that encapsulates consumers' motivations on how to shop and how to use the stores available to them. Therefore, a continued look at shopping orientations and how they relate to store choice patterns is encouraged. For this purpose, a key undertaking would be to examine in a more in-depth manner the content of these dimensions and to develop more refined measurement scales than those used in this study. Specifically, the planning behavior factor is, judging by the interview material, a more complex dimension.

The theoretical framework indicated that evaluations of stores are affected by household and shopper characteristics, that is, how stores are perceived is a function of the perceivers. Although there are, on the aggregate level, similarities concerning how the households in Ludvika regard the stores available to them, there are differences in how the stores are ranked and in just *how different* the stores are perceived to be. An important research undertaking is to examine why stores are perceived so differently and how consumers develop their frames of reference.

Finally, a suggested area for future research is on households' provisioning strategies. The exploratory analyses in this study suggest that it is fruitful to analyze patronage behavior on a higher level than store choices, per se. Thereby, the interrelatedness between different choices is taken into account. An interesting question is how store-choice tactics are developed. For example, why do some households select one specific store for major purchases, whereas others use a larger portfolio of stores? One approach for studying the development of store-choice tactics is through in-depth studies of households that have relocated and are in the process of applying their way of shopping to a new set of stores. Another aspect of provisioning strategies is in the planning process, specifically how households that employ a high degree of planning use marketing material from the stores in this process. The interviews indicate that some households do use tools

such as leaflets when making their purchase lists, as well as in deciding what store/s to visit.

5.5.2 Research issues related to research on loyalty in general

Although this study has focused on loyalty to grocery stores, the literature review and the findings from the study have evoked research questions concerning customer loyalty in general. Specifically, there are three areas suggested for further research.

The first issue concerns consumers' usage portfolios. As shown in this study, consumers vary greatly in how many stores they use. Similar patterns have been found for branded consumer goods as well, and it is likely that the same pattern would be found for some categories of service providers. A research question that would need further scrutiny is why consumers' brand or service portfolios differ.

Developing knowledge of consumers' brand, store, or service provider portfolios, would be obtained by investigating the relative evaluations of objects included in the choice set, as well as evaluations of the objects excluded from the choice set. Current research on perceived service quality and customer satisfaction is usually based on the evaluation of, or satisfaction with, the focal object. Such an approach does not take into account that some customers are equally satisfied with a number of stores or brands, whereas others have strong preferences for certain brands. Looking at all the brands a consumer is familiar with is in line with earlier work on brand loyalty, e.g., the ideas put forward by Jacoby (1971).

Finally, as argued above, general research on customer loyalty would benefit from taking shopper characteristics explicitly into account. An important area for further investigation is to examine why some customers are more likely to develop bonds with different types of service and product providers. There might be consumers that are more "relationship-prone" than others, and thus more likely to respond more positively to relationship-marketing practices.

References

Anderson, E.W., C. Fornell and D.R. Lehman (1994), "Customer Satisfaction, Market Share and Profitability: Findings from Sweden," *Journal of Marketing*, 58 (3), 53-66.

Anderson, E.W. and M.W. Sullivan (1990), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science*, 12 (2), 125-145.

Babakus, E. and G.W. Boller (1992), "An Empirical Assessment of the SERVQUAL Scale," *Journal of Business Research*, 24, 253-268.

Belk, R.W. (1985), "Issues in the Intention-Behavior Discrepancy," in: *Research in Consumer Behavior*. Eds., Sheth, J. N., Greenwich: JAI Press. 1: 1-34.

Belk, R.W., M. Wallendorf and J.F. Sherry (1989), "The Sacred and the Profane in Consumer Behavior: Theodicy on the Odyssey," *Journal of Consumer Research*, 16 (June), 1-38.

Bell, D.R., T.-H. Ho and C.S. Tang (1998), "Determining Where to Shop: Fixed and Variable Costs of Shopping," *Journal of Marketing Research*, 35 (August), 352-369.

Bellenger, D.N., E. Steinberg and W.W. Stanton (1976), "The Congruence of Store Image and Self Image as it Relates to Store Loyalty," *Journal of Retailing*, 52 (1), 17-32.

Bettman, J.R., E.J. Johnson and J.W. Payne (1991). "Consumer Decision Making," in: *Handbook of Consumer Behavior*. Eds., Robertson, T. S. and H. H. Kassarijan, Englewood Cliffs: Prentice-Hall.

Boulding, W., A. Kalra, R. Staeling and V.A. Zeithaml (1993), "A Dynamic Process Model of Consumer Satisfaction," *Journal of Marketing Research*, 15 (1), 7-27.

Burford, R.L., B.M. Enis and G.W. Paul (1971), "An Index for the Measurement of Consumer Loyalty," *Decision Sciences*, 2 (2), 17-24.

Carman, J.M. (1970), "Correlates of Brand Loyalty: Some Positive Results," *Journal of Marketing Research*, 7 (February), 67-76.

Carman, J.M. (1990), "Consumer Perceptions of Service Quality: An Assessment of the Servqual Dimensions," *Journal of Retailing*, 66 (1), 33-55.

Charlton, P. (1973), "A Review of Shop Loyalty," *Journal of the Market Reserach Society*, 15 (1), 35-51.

Churchill, G.A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (February), 64-73.

Copeland, M.T. (1923), "Relation of Consumers' Buying Habits to Marketing Methods," *Harvard Business Review*, 1 (April), 282-289.

Coyne, K. (1989), "Beyond Service Fads - Meaningful Strategies for the Real World," *Sloan Management Review*, 30 (summer), 69-76.

Cronin, J.J. and S.A. Taylor (1992), "Measuring Service Quality: a Reexamination and Extension," *Journal of Marketing*, 56 (3), 55-68.

Cronin, J.J. and S.A. Taylor (1994), "SERVPREF Versus SERVQUAL: Reconsiling Performance-Based and Perceptions-Minus Expectations Measurement of Service Quality," *Journal of Marketing*, 58 (1), 55-68.

Cunningham, R.M. (1956), "Brand Loyalty - What, Where, How Much?," *Harvard Business Review* (Jan-Feb), 116-128.

Cunningham, R.M. (1961), "Customer Loyalty to Store and Brand," *Harvard Business Review* (November-December), 127-137.

Dabholkar, P.A., D.I. Thorpe and J.O. Rentz (1996), "A Measure of Service Quality for Retail Stores: Scale Development and Validation," *Journal of the Academy of Marketing Science*, 24 (1), 3-16.

Darden, W.R. and B.J. Babin (1994), "Exploring the Concept of Affective Quality: Expanding the Concept of Retail Personality," *Journal of Business Research*, 29 (2), 101-109.

Day, G.S. (1969), "A Two-Dimensional Concept of Brand Loyalty," *Journal of Advertising Research*, 9 (3), 29-35.

de Ruyter, K., M. Wetzels and J. Bloemer (1996), On the Relationship Between Perceived Service Quality and Behavioral Intentions: a Cross-sectional Perspective, 25th EMAC conference, Warwick, UK.

Denison, T. and S. Knox (1994), Exploring Shopping Behavior amongst Primary Customers: Patterns in Store Loyalty and Expenditure. 23rd EMAC conference, Maastricht, the Netherlands.

Desmet, P. and P. Volle (1996), *The Modeling and Assessment of Store Loyalty Performance with a Simple-Effect Gravitational Model*, 25th EMAC conference, Warwick, England.

Dick, A.S. and K. Basu (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, 22 (2), 99-113.

Dowling, G.R. and M. Uncles (1997), "Do Customer Loyalty Programs Really Work?," *Sloan Management Review*, 38 (4), 71-82.

Dufer, J. and J.-L. Moulins (1989), "La Relation entre la Satisfaction du Consommateur et sa Fidélité a la Marque: un Examen Critique," *Recherche et Applications en Marketing*, 4 (2), 21-36.

Eagly, A.H. and S. Chaiken (1993), *The Psychology of Attitudes*, Fort Worth: Harcourt Brace Jovanovich College Publishers.

East, R. (1997), Consumer Behaviour: Advances and Applications in Marketing, London; New York: Prentice Hall.

East, R., P. Harris, W. Lomax, G. Wilson and D. Perkins (1997), *First-Store Loyalty to US and British Supermarkets*. 26th EMAC, Budapest, Hungary.

East, R., P. Harris, G. Willson and W. Lomax (1995), "Loyalty to Supermarkets," *The International Review of Retail, Distribution and Consumer Research*, 5 (1), 99-109.

Ehrenberg, A.S.C. and G.J. Goodhart (1970), "A Model of Multi-Brand Buying," *Journal of Marketing Research*, 7 (February), 77-84.

Engel, J.F., R.D. Blackwell and P.W. Miniard (1995), *Consumer Behavior*, Forth Worth: The Dryden Press.

Engstrøm, H. and H. Hartvig Larsen (1987), Husholdningernes butikvalg: indkøbsadfærd for dagligvarer (The Households' Store Choices. Buying Behavior for Groceries), Kopenhagen: Nyt Nordisk Forlag Arnold Busck.

Engstrøm, H. and H. Hartvig Larsen (1990), *The Interaction between Households and Stores - a Theoretical Approach*. Advanced Research in Marketing, the 19th EMAC conference, Innsbruck, Austria.

Falk, T. and C.-R. Julander (1983), Köpcentrum i statskärnan - inverkan på detaljhandel och konsumenter (Shopping Centre in the City Centre - Effects on the Retail Trade and Consumers), Malmö: Liber.

Food Business News (1999), "Top of Mind in 1999," February, 1-2.

Fornell, C. (1992), "A National Customer Satisfaction Barometer: the Swedish Experience," *Journal of Marketing*, 55 (1), 1-21.

Fornell, C., M.D. Johnson, E.W. Anderson, C. Jaesung and B. Everitt Bryant (1996), "The American Customer Satisfaction Index: Nature, Purpose and Findings," *Journal of Marketing*, 60 (October), 7-18.

Fournier, S. (1998), "Consumers and their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (4), 343-373.

Fournier, S. and J.L. Wao (1997), "Reviving Brand Loyalty: a Reconceptualization within the Framework of Consumer-Brand Relationships," *International Journal of Research in Marketing*, 14 (5), 451-472.

Goldman, A. (1977-78), "The Shopping Style Explanation for Store Loyalty," *Journal of Retailing*, 53 (4), 33-46, 94.

Gremler, D.D. and S.W. Brown (1996), "Service Loyalty: Its Nature, Importance, and Implications," in: *QUIS5 - Advancing Service Quality: A Global Perspective*. Eds., Edvardsson, B.et al, New York: International Service Quality Association: 171-180.

Gujarati, D.N. (1995), Basic Econometrics, New York: McGraw-Hill.

Hair, J.F., R.E. Anderson, R.L. Tatham and W.C. Black (1998), *Multivariate Data Analysis*, Upper Saddle River: Prentice Hall.

Hirschman, A.O. (1970), Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States, Cambridge: Harvard University Press.

Holmberg, C. (1996), Stores and Consumers - Two Perspectives on Food Purchasing, Stockholm: Stockholm School of Economics, Doctoral Dissertation.

Holmberg, U. (1994), Konsumenters tillfredsställelse med butiker i tre branscher (Consumers' Satisfaction with Stores in Three Industries), Licentiate Thesis, Gothenburg: Söderberg Research Institute of Commerce.

Howard, J.A. and J.N. Sheth (1969), *The Theory of Buyer Behavior*, New York: John Wiley & Sons.

Hoyer, W.D. (1984), "An Examination of Consumer Decision Making for a Common Repeat Purchase Product," *Journal of Consumer Research*, 11 (December), 822-829.

Huff, D.L. (1962), Determination of Intra-Urban Retail Trade Areas, Los Angeles: University of California, Real Estate Research Program.

Huff, D.L. (1964), "Defining and Estimating a Trade Area," Journal of Marketing, 28 (3), 34-38.

Jacoby, J. (1971), "A Model of Multi-Brand Loyalty," *Journal of Advertising Research*, 11 (3), 25-31.

Jacoby, J. (1975), "A Brand Loyalty Concept: Comments on a Comment," *Journal of Marketing Research*, 12 (November), 484-7.

Jacoby, J. and R.W. Chestnut (1978), *Brand Loyalty Measurement and Management*, New York: John Wiley & Sons.

Jacoby, J. and D.B. Kyner (1973), "Brand Loyalty vs. Repeat Purchasing Behavior," *Journal of Marketing Research*, 10 (February), 1-9.

Julander, C.-R. (1984), Extrapriser och veckoannonser: Effekter av dagligvaruhandelns SA/VA aktiviteter (Price Promotions and Weekly Ads. Effects of the Promotional Activities in Grocery Retailing), Stockholm: The Economic Research Institute.

Keaveney, S.M. and K.A. Hunt (1992), "Conceptualization and Operationalization of Retail Store Image: A Case of Rival Middle-Level Theories," *Journal of the Academy of Marketing Science*, 20 (2), 165-175.

Kumar, V. and R.P. Leone (1988), "Measuring the Effect of Retail Store Promotions and Brand and Store Substitution," *Journal of Marketing Research*, 25 (May), 178-85.

Laaksonen, M. (1981), Shopping Orientation: An Attitude Structure Approach, Research Papers, 77, Vaasa: University of Vaasa.

Laaksonen, M. (1993), "Retail Patronage Dynamics: Learning about Daily Shopping Behavior in Contexts of Changing Retail Structures," *Journal of Business Research*, 28 (1/2), 3-174.

Lessig, P. (1973), "Consumer Store Images and Store Loyalties," *Journal of Marketing*, 37 (October), 72-74.

Lichtenstein, D.R., S. Burton and R.G. Netemeyer (1997), "An Examination of Deal Proneness Across Sales Promotion Types: A Consumer Segmentation Perspective," *Journal of Retailing*, 73 (2), 283-297.

Liljander, V. and T. Strandvik (1993), "Different Comparison Standards as Determinants of Service Quality," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 6, 118-132.

Lindquist, J.D. (1974-75), "Meaning of Image: A Survey of Empirical and Hypothetical Evidence," *Journal of Retailing*, 50 (4), 29-37.

Marjanen, H. (1993), *Store Location and the Mystery of Consumer Spatial Behavior*, Research Report, D-4:1993, Turku: Turku School of Economics and Business Administration.

Martineau, P. (1958), "The Personality of the Retail Store," *Harvard Business Review*, 36 (January), 47-55.

McGoldrick, P.J. and E. Andre (1997), "Consumer Misbehavior. Promiscuity or Loyalty in Grocery Shopping," *Journal of Retailing and Consumer Services*, 4 (2), 73-81.

Miller, D. (1998), A Theory of Shopping, Ithaca: Cornell University Press.

Monroe, K.B. and J.P. Guiltinan (1975), "A Path-Analytic Exploration of Retail Patronage Influences," *Journal of Consumer Research*, 2 (June), 19-28.

Moulson, T.J. (1965), "Danger Signals: How to Spot Erosion in Brand Loyalty," *Printer's Ink* (March 12), 55-61.

Mägi, A. (1995), Customer Satisfaction in a Store Performance Framework, EFI Research report, Stockholm: Economic Research Institute.

Oliva, T.A., R.L. Oliver and I.C. MacMillan (1992), "A Catastrophe Model for Developing Service Satisfaction Strategies," *Journal of Marketing*, 56 (July), 83-95.

Oliver, R.L. (1997), Satisfaction: A Behavioral Perspective on the Consumer, New York: The MacGraw-Hill Companies.

Olsen, J.K., O. Stenvinkel Nilsson and R. Lind (1998), Analyse af indkøbsadfaerden og butiskloyaliteten for 9 danske supermarkedkaeder, no. 1, Kopenhagen: Center for Detailhandelsstudier.

Parasuraman, A., L.L. Berry and V.A. Zeithaml (1991), "Refinement and Reassessment of the SERVQUAL scale," *Journal of Retailing*, 67 (4), 420-450.

Parasuraman, A., V.A. Zeithaml and L.L. Berry (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64 (1), 12-40.

Parasuraman, A., V.A. Zeithaml and L.L. Berry (1994), "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research," *Journal of Marketing*, 58 (1), 111-124.

Persson, P.-G. (1995), *Modeling the Impact of Sales Promotion on Store Profits*, Stockholm: Stockholm School of Economics, Doctoral Dissertation.

Peterson, R.A. and R.A. Kerin (1983), "Store Image Measurement in Patronage Research: Fact and Artifact," in: *Patronage Behavior and Retail Management*. Eds., Darden, W. R. and R. F. Lusch, New York: North-Holland.

Peterson, R.A. and W.R. Wilson (1992), "Measuring Customer Satisfaction: Fact and Artifact," *Journal of the Academy of Marketing Science*, 20 (1), 61-71.

Reichheld, F.F. (1993), "Loyalty-Based Management," Harvard Business Review, 71 (2), 64-73.

Reichheld, F.F. (1996), *The Loyalty Effect. The Hidden Force Behind Growth, Profits, and Lasting Value, Boston: Harvard Business School Press.*

Reichheld, F.F. and W.E.J. Sasser (1990), "Zero Defections: Quality Comes to Services," *Harvard Business Review*, 68 (September -October), 105-111.

Reynolds, F., W. Darden and W. Martin (1974-75), "Developing an Image of the Store-Loyal Customer," *Journal of Retailing*, 50, 73-84.

Rust, R.T., A.J. Zahorik and T.L. Keiningham (1995), "Return on Quality (ROQ): Making Service Quality Financially Accountable," *Journal of Marketing*, 59 (April), 58-70.

Schindler, R. (1989), "The Exitement of Getting a Bargain: Some Hypotheses Concerning the Origins and Effects of Smart-Shopper Feelings," *Advances in Consumer Research*, 16, 447-453.

Sharp, B. and A. Sharp (1997), "Loyalty Programs and their Impact on Repeat-purchase Loyalty Patterns," *International Journal of Research in Marketing*, 14, 473-486.

Sherif, C.W., M. Sherif and R.E. Nebergall (1965), *Attitude and Attitude Change*, Philadelphia: W. B. Sauders Company.

Sherif, M. and C.I. Hovland (1961), Social Judgement: Assimilation and Contrast Effects in Communication and Attitude Change, New Haven: Yale University Press.

Sieber, S. (1973), "Integrating Fieldwork and Survey Methods," *American Journal of Sociology*, 78 (6), 1335-1359.

Sirohi, N., E.W. McLauglin and D.R. Wittink (1998), "A Model of Consumer Perceptions and Store Loyalty Intentions for a Supermarket Retailer," *Journal of Retailing*, 74 (2), 223-245.

Smith, M.F. and M.L. Carsky (1996), "Grocery Shopping Behavior: A Comparison of Involved and Univolved Consumers," *Journal of Retailing and Consumer Services*, 3 (2), 73-80.

Sopanen, S. (1996), Customer Loyalty Schemes in Retailing Across Europe, Oxford: Oxford Institute of Retail Management.

Spreng, R.A., S.B. MacKenzie and R.W. Olshavsky (1996), "A Reexamination of the Determinants of Consumer Satisfaction," *Journal of Marketing*, 60 (July), 15-32.

Stanley, T.J. and M.A. Sewall (1976), "Image Inputs to a Probabilistic Model: Predicting Retail Potential," *Journal of Marketing*, 40 (July), 48-53.

Stern, P. (1996), Long Run Loyalty: An Exploratory Study. ESOMAR/EMAC Symposium on Research Methodologies for "the New Marketing", Lattimer, UK, ESOMAR.

Stone, G.P. (1954), "City Shoppers and Urban Identification: Observations on the Social Psychology of City Life," *American Journal of Psychology*, 60, 36-45.

Söderlund, M. (1998), "Customer Satisfaction and its Consequences on Customer Behavior Revisited: The Impact of Different Levels of Satisfaction on Word-of-mouth, Feedback to the Supplier and Loyalty," *International Journal of Service Industry Management*, 9 (2), 169-188.

Tarpey, L.X.S. (1974), "A Brand Loyalty Concept: A Comment," *Journal of Marketing Research*, 11 (May), 214-7.

Tarpey, L.X.S. (1975), "Brand Loyalty Revisited: A Commentary," *Journal of Marketing Research*, 12 (November), 488-491.

Tate, R. (1961), "The Supermarket Battle for Store Loyalty," *Journal of Marketing*, 25 (October), 8-13.

Taylor, S.A. and T.L. Baker (1994), "An Assessment of the Relationship Between Service Quality and Customer Satisfaction in the Formation of Consumers' Purchase Intentions," *Journal of Retailing*, 70 (2), 163-178.

Teas, K.R. and K.M. Palan (1997), "The Realms of Scientific Meaning Framework for Constructing Theoretically Meaningful Nominal Definitions of Marketing Concepts," *Journal of Marketing*, 61 (April), 52-67.

Tollin, K. (1990), Konsumentbilder i marknadsföringen av livsmedel. (Images of Consumers in the Marketing of Groceries), Stockholm: University of Stockholm, Doctoral Dissertation.

Tucker, W.T. (1964), "The Development of Brand Loyalty," *Journal of Marketing Research*, 1 (August), 32-35.

Uncles, M. and K. Hammond (1995), "Grocery Store Patronage," *The International Review of Retail, Distribution and Consumer Research*, 5 (3), 287-302.

Urbany, J.E., P.R. Dickon and R. Kalapurakal (1996), "Price Search in the Retail Grocery Market," *Journal of Marketing*, 60 (April), 91-104.

Uusitalo, O. (1993), Retail Dis/satisfaction: Framing the Domain of Consumer Dis/satisfaction in a Dynamic Shopping Context, Reports from the Department of Economics and Managagement, 16/93, Jyväskylä: University of Jyväskylä.

Uusitalo, O. (1998), Consumer Perceptions of Grocery Stores, Jyväskylä: Univeristy of Jyväskylä.

Walters, R.G. (1991), "Assessing the Impact of Retail Price Promotions on Product Substitution, Complementary Purchase, and Interstore Sales Displacement," *Journal of Marketing*, 55 (April), 17-28.

Webster, F.E. (1965), "The 'Deal-Prone' Consumer," *Journal of Marketing Research*, 2 (May), 186-189.

Verhallen, T.M.M. and G.J. de Nooij (1982), "Retail Attribute Sensitivity and Shopping Patronage," *Journal of Economic Psychology*, 2, 39-55.

Williams, R.A., J.J. Painter and H.R. Nicholas (1978), "A Policy-Oriented Typology of Grocery Shoppers," *Journal of Retailing*, 54 (1), 27-43.

Wind, Y. and D. Lerner (1979), "On the Measurement of Purchase Data: Surveys Versus Purchase Diaries," *Journal of Marketing Research*, 16 (February), 39-47.

Yi, Y. (1990), "A Critical Review of Consumer Satisfaction," in: *Review of Marketing*. Eds., Zeithaml, V. A., Chicago: American Marketing Association: 68-123.

Zeithaml, V.A., L.L. Berry and A. Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (April), 31-46.

Zimmer, M.R. and L.L. Golden (1988), "Impressions of Retail Stores: A Content Analysis of Consumer Images," *Journal of Retailing*, 64 (3), 265-293.

Ölander, F. and J. Thøgersen (1995), "Understanding of Consumer Behavior as a Prerequisite for Environmental Protection," *Journal of Consumer Policy*, 18, 344-385.

Appendix 1 – the questionnaire (translated version)

In the first part of this questionnaire we would like to ask some questions about what you think about the stores in Ludvika. It is important that you try to answer all questions. There are no right or wrong answers, it is your opinion that matters!

1. Is there any store in Ludvika that is better than the other stores on any of the following parts?

			in
Concerning opening hours	is better than other stores		(1)
Concerning the quality of fruits and vegetables Concerning the orderliness of the	is better than other stores	۵	(2)
store	is better than other stores		(3)
Concerning the quality of fresh produce	is better than other stores		(4)
Concerning the variety of goods	is better than other stores		(5)
Concerning the price level	is better than other stores		(6)
Concerning how personnel treat customers	is better than other stores	□	(7)
Concerning special price offers	is better than other stores	٥	(8)

In this section we ask you to evaluate the stores you are familiar with. The following pages will feature a number of statements about the major stores in Ludvika. Mark the number that corresponds to your opinion. Answer the questions for all the stores you are familiar with, including the stores that you currently do not shop in. If you are not familiar with a particular store, please indicate that and continue to the questions about the next store.

		strongly disagree					strongly agree		
is overall a very good store	1	2	3	4	5	6	7	(10)	
carries high-quality fresh produce	1	2	3	4	5	6	7	(11)	
carries high-quality fruits and vegetables	1	2	3	4	5	6	7	(12)	
gives value for the money	1	2	3	4	5	6	7	(13)	
is well organized	1	2	3	4	5	6	7	(14)	
has nice personnel	1	2	3	4	5	6	7	(15)	
is clean and neat	1	2	3	4	5	6	7	(16)	
has a spacious layout	Ī	2	3	4	5	6	7	(17)	
has a good variety of goods	1	2	3	4	5	6	7	(18)	
has high availability of staff for handling queries	1	2	3	4	5	6	7	(19)	

(20)

	strongly disagree						strongly agree		
is overall a very good store	Ĭ	2	3	4	5	6	7	(21)	
carries high-quality fresh produce	1	$\overline{}_2$	3	4	5	6	7	(22)	
carries high-quality fruits and vegetables	1	2	3	4	5	6	7	(23)	
gives value for the money	1	2	3	4	5	6	7	(24)	
is well organized	1	2	3	4	5	6	7	(25)	
has nice personnel	1	2	3	4	5	6	7	(26)	
is clean and neat	1	2	3	4	5	6	7	(27)	
has a spacious layout	1	2	3	4	5	6	7	(28)	
has a good variety of goods	1	2	3	4	5	6	7	(29)	
has high availability of staff for handling queries	$\frac{1}{s}$	2	3	4	5	6	7	(30)	

	strongl disagre						strong agree	•
is overall a very good store	1	2	3	4	5	6	7	(32)
carries high-quality fresh produce	I	2	3	4	5	6	7	(33)
carries high-quality fruits and vegetables	1	2	3	4	5	6	7	(34)
gives value for the money	1	2	3	4	5	6	7	(35)
is well organized	1	2	3	4	_ 5	6	7	(36)
has nice personnel	1	2	3	4	5	6	7	(37)
is clean and neat	1	2	3	4	5	6	7	(38)
has a spacious layout	1	2	3	4	5	6	7	(39)
has a good variety of goods	1	2	3	4	5	6	7	(40)
has high availability of staff for handling queries	1	2	3	4	5	6	7	(41)

5. Konsum extra... \square I am not familiar with this store (continue to question 6) (42)

	trongl						strong	ly
C C	lisagre	re					agree	?
is overall a very good store	_1	2	3	4	5	6	7	(43)
carries high-quality fresh produce	1	2	3_	4	5	6_	7	(44)
carries high-quality fruits and vegetables	1	2	3	4	5	6	7	(45)
gives value for the money	1	2	3	4	5	6	7	(46)
is well organized	1	2	3	4	5	6	7	(47)
has nice personnel	1	2	3	4	5	6	7	(48)
is clean and neat	1	2	3	4	5	6	7	(49)
has a spacious layout	1	2	3	4	5	6	7	(50)
has a good variety of goods	1	2	3	4	5	6	7	(51)
has high availability of staff for handling queries	1	2	3	4	5	6	7	(52)

6. Matmagasinet	☐ I am not familiar with this store (continue to question 7)	(53)

	strongly disagree						strongly agree			
is overall a very good store	Ĭ	2	3	4	5	6_	_ 7	(54)		
carries high-quality fresh produce	1	2	3	4	5	6	7	(55)		
carries high-quality fruits and vegetables	1	2	3	4	5	6	7	(56)		
gives value for the money	1	2	3	4	5	6	7	(57)		
is well organized	1	2	3	4	5	6	7	(58)		
has nice personnel	$\overline{1}$	2	3	4	5	6	7	(59)		
is clean and neat	\overline{I}	2	3	4	5	6	7	(60)		
has a spacious layout	1	2	3	4	5	6	7	(61)		
has a good variety of goods	1	2	3	4	5	6	7	(62)		
has high availability of staff for handling queries	1	2	3	4	5	6	7	(63)		

7. Do you regularly shop in any store other than the stores listed above? If so, we would like you to evaluate that store as well. If not, please continue to question 8.

Store				
Store				

	strongly disagree						strongly agree			
is overall a very good store	Ĭ	2	3	4	5	6	7	(64)		
carries high quality fresh produce	1	2	3	4	5	6	7	(65)		
carries high quality fruits and vegetables	1	2	3	4	5	6	7	(66)		
gives value for money	1	2	3	4	5	6	7	(67)		
is well organized	1	2	3	4	5	6	7	(68)		
has nice personnel	1	2	3	4	5	6	7	(69)		
is clean and proper	I	2	3	4	5	6	7	(70)		
has a spacious layout	1	2	3	4	5	6	7	(71)		
has a good assortment	I	2	3	4	5	6	7	(72)		
has high availability of staff for handling queries	1	2	3	4	5	6	7	(73)		

8. Is there any store which you consider to be your "main store," that is, a store in which you know your way around and make a major share of your purchases?

Yes		 is my main store	
No	→ (continue to question 11)		(74

9. If you answered yes to the previous questi	on, is the mai	in store th	ie closest	store to ye	our home	?
Yes 📮						
No \Box \rightarrow (continue to question 11)	(75)					
10. Imagine that you moved and that your closest to your home. Would you still shop in			would no	longer b	e the sto	re
	Yes, very likely	Yes, likely	Doubt- fully	No, not likely	No, not at all likely	
it takes you 5 more minutes to get to this store as compared to getting to the store which is now closest?	a		0	٥	ū	(76)
it takes you 10 more minutes to get to this store as compared to getting to the store which is now closest?	0	ū	۵			⁻ (77)
it takes you 15 more minutes to get to this store as compared to getting to the store which is now closest?		٥		٥		⁻ (78)
it takes you 20 more minutes to get to this store as compared to getting to the store which is now closest?			٥	ū	۵	⁻ (79)
11. Imagine a situation in which all now, but are all located in the same p to all stores. Everything else – person exactly as it is today. Are there any sto they had the same location as the other	olace. It wo inel, price ores you wo	uld thus level, ai	be as e	asy for y tment –	ou to g would l	et be
Yes, I would not shop in						
ICA Matmäster ☐ (80) Hemköp City ☐ (81) Hemköp Marnäs ☐ (82) No, there are no stores I would avoid		Konsum Extra Matmagasinet □(85)			(83) (84)	
If you answered yes to the above question, w	hy would you	avoid th	is store/th	ese stores	?	

12. Following are some general questions about your household's shopping behavior. We ask you to indicate the extent to which you agree/ disagree to the following statements.

	strongi disagre	-				ely e		
The stores in Ludvika have the same variety of goods	Ī	2	3	4	5	6	7	(86)
We do a major purchase about once a month	1	2	3	4	5	6	7	(87)
I shop in the store which has the best offers	1	2	3	4	5	6	7	(88)
I think it is important to have personal contact with the	ne 1	2	3	4	5	6	7	(89)
store's staff								
I think all grocery stores in Ludvika are the same	1	2	3	4	5	6	7	(90)
I think it is important that shopping takes little time	1	2	3	4	5	6	7	(91)
One profits from comparing prices between stores	1	2	3	4	5	6	7	(92)
We plan our purchases for a week at a time or a longer	er 1	2	3	4	5	6	7	(93)
period								
I think it is important that the store personnel recognize	es 1	2	3	4	5	6	7	(94)
me								

13. How often or seldom do you do any of the following?

never						always			
I use coupons when possible	1	2	3	4	5	6	7	(95)	
I bring a written shopping list to the store	1	2	3	4	5	6	7	(96)	
I read the stores' advertisements in the newspaper		2	3	4	5	6	7	(97)	
I read the ad leaflets sent to my home	1	2	3	4	5	6	7	(98)	

14. How large share of the household's grocery purchase do you make?

I do all of the household's grocery shopping	
I do the largest part of the household's grocery shopping	
I do about half of the household's grocery shopping	
I do a minor share of the household's grocery shopping	(99)

In the final part of the questionnaire, we would like to ask some questions about yourself and your household.

15. How many persons are in the household?					
We are	person/s, of which	are children under the age of 18.	(100) (101)		

less than 10 000 SEK 10 000 - 14 900 SEK 15 000 - 19 900 SEK 20 000 - 24 900 SEK 25 000 - 29 900 SEK	0000	30 000 - 34 900 SEK 35 000 - 39 900 SEK 40 000 - 44 900 SEK 45 000 - 49 900 SEK 50 000 SEK or more	(102)		
17. Do you/your he you deposit money o		e any membership cards any of those cards?	for any grocery ch	pains? If so, do	
Hemköp-card_	(103)	Yes, we deposit money o	n that card	٥	(104)
ICA-card	(105)	Yes, we deposit money o			(106)
Konsum-card	(107)	Yes, we deposit money o			(108)
_Vivo-card	(109)	Yes, we deposit money o		0	(110)
Other card:	<u> </u>	Yes, we deposit money o	n that card	٥	(112)
18. Do you go groce Yes, always Yes, sometimes No, never We do not have a car a	0	'ny car?			
19. How old are you?					
years old (1	14)				
20. Are you?					
female	(115)				
	outside the map	vika. We ask you to indicate , please indicate the direct			
		That was the last question. nk you for your cooperation	n!		

16. How large is your household's total monthly income before taxes (incl. housing

allowance, unemployment benefits, parents' allowance, child benefits, etc.)?

Appendix 2 - Additional tables

	n	mean	std. dev.
The stores in Ludvika have the same variety of goods	351	4.41	1.58
We do a major purchase about once a month	354	3.27	2.30
I shop in the store which has the best offers	355	3.16	2.12
I think it is important to have personal contact with the store's staff	360	5.04	1.73
I think all grocery stores in Ludvika are the same	356	2.96	1.78
I think it is important that shopping takes little time	357	5.25	1.72
One profits from comparing prices between stores	355	5.15	1.89
We plan our purchases for a week at a time or a longer period	359	3.33	2.33
I think it is important that the store personnel recognizes	361	4.24	2.12
me			
I use coupons when possible	365	4.98	1.89
I bring a written shopping list	364	5.38	1.90
I read the stores' advertisements in the newspaper	364	4.78	2.06
I read the ad leaflets sent to my home	365	5.29	1.95

Table 49. Descriptive data – items on shopping attitudes and behaviors.

		···_			
-	Component				
	Price	Contact	Indifference	Planning	
1. One profits from comparing prices	.76	_			
between stores					
2.I shop in the store which has the best offers	.70	26			
3.I read the ad leaflets sent to my home	.78	.25			
4.I read the stores' advertisements in the newspaper	.72	.29			
5.I use coupons when possible	.66	.38		.20	
6.I think it is important to have		.85			
personal contact with the store's staff 7.I think it is important that the store personnel recognizes me		.87			
8. The stores in Ludvika have the same variety of goods			.73		
9.I think all grocery stores in Ludvika are the same			.81		
10.I think it is important that shopping takes little time			.56		
11.We do a major purchase about once a month				.79	
12.We plan our purchases for a week at a time or a longer period				.83	

Table 50. Factor solution for the full sample. Missing values (in cases with no more than 2 missing values) are replaced with means, n=358.

			Primary	store accordi	ng to "share-	of-visits"	
		ICA	Hemköp	Hemköp	Konsum	Mat-	Other
	_	Matmäster	Marnäs	City		magasinet	store
Primary store	ICA	35	1	3			4
according to	Matmäster	10.4%	.3%	.9%			1.2%
"share-of-	Hemköp	4	61	2	1	2	
purchase"	Marnäs	1.2%	18.0%	.6%	3%	.6%	1.5%
	Hemköp		1	36	1		5
	City		.3%	10.7%	.3%		1.5%
	Konsum	1			52%	1	2
		.3%			15.4%	.3%	.6%
	Mat-	6	5	10	7	72	7
	magasinet	1.8%	1.5%	3.0%	2.1%	21.3%	2.1%
	Other			1	1	3	9
	store			.3%	.3%	.9%	2.7%

Table 51. Cross-tabulation for primary store, according to the share-of-visits, and share-of-purchase measure, respectively. n=338. Total percentages, cells that represent cases where the primary store is the same according to both measures are marked in bold. Households with a tie for primary store according to the share-of-visits measure, are not included.

			Primary store according to "share-of-purchase"				
		ICA	Hemköp	Hemköp	Konsum	Mat-	Other
		Matmäster	Marnäs	City		magasinet	store
Perceived	ICA	30	1	1	1	4	
main store	Matmäster	9.9%	.3%	.3%	.3%	1.3%	_
	Hemköp	4	66	2	2	6	
	Marnäs	1.3%	21.7%	.7%	.7%	2.0%	
	Hemköp	1	_	31	_	1	1
	City	.3%		10.2%		.3%	3%
	Konsum	2	_	1	47	2	1
		.7%		3% _	15.5%	.7%	.3%
	Mat-	3	2		2	81	4
	magasinet	1.0%	.7%		.7%	26.6%	1.3%
	Other		1	2	1		4
	store		.3%	.7%	.3%		1.3%

Table 52. A comparison of the store mentioned as the main store and the primary store according to the share-of-purchase measure. Total percentages, cells that represent cases where the perceived main store is the same store as the primary store according to the share-of-purchase measure are marked in bold. These stores are the same in 85.2 percent of the cases. n=304.

			Primary store according to "share-of-visits"				
		ICA	Hemköp	Hemköp	Konsum	Mat-	Other
		Matmäster	Marnäs_	City		magasinet	store
Perceived	ICA	28		1	2	2	2
main store	Matmäster	10.0%		4%	.7%	.7%	.7%
	Hemköp	5	56	3	2	3	3
	Marnäs	1.8%	19.9%	1.1%	7%	1.1%	1.1%
	Hemköp	·		30			2
	City			10.7%			.7%
	Konsum	1		1	45	3	2
		.4%		.4% _	16.0%	1.1% _	.7%
	Mat-	5		6	4	58	7
magasinet	magasinet	1.8%	.7%	2.1%	1.4%	20.6%	2.5%
	Other		2		1		5
	store		.7%		.4%		1.8%

Table 53. A comparison of the store mentioned as the main store and the primary store according to the share-of-visits measure. Total percentages, cells that represent cases where the perceived main store is the same store as the primary store according to the share-of-purchase measure are marked in bold. These stores are the same in 79 percent of the cases.

Appendix 3 – Comparisons across stores

In the main section of this thesis, the variation in household behavior is the focus of the analysis. In this appendix, the store perspective will be taken, that is, some comparisons across stores will be reported. Do household-level differences "cancel out" on the store level, or are there also differences between stores? First, store choice behavior aggregated on the store level is reported, and thereafter the respondents' evaluations are compared across stores.

Comparing purchase behavior across stores

First, the market shares of each store as reflected in the panel, are reported (Table 54).

	Total sum of	Market share in the
	purchases made in	panel
	the store (SEK)	
ICA Matmäster	123,322	12.5%
Hemköp Marnäs	207,525	21.0%
Hemköp City	146,721	14.8%
Konsum	158,458	16.0%
Matmagasinet	259,663	26.2%
All other stores	93,635	9.5%
Total	989,324	100.0%

Table 54. The stores' markets shares in the panel

How does it look when comparing patronage across stores? An interesting question is how many customers each store has and how many customers have each store as their main provider in terms share-of-purchase. Moreover, do some stores cater to a larger share of their customers' needs or are there no apparent differences across stores? Table 55 reports usage data across stores.

	No. of households that used the store during the surveyed	Average share-of- purchase for	No. of households for which the store is the primary store. Absolute	Average share- of-purchase for "primary store"
	period	all users	no. and % of users	users
ICA	178	28.1%	47 (26.4%)	60.5%
Matmäster				
Hemköp	208	36.0%	85 (40.9%)	65.6%
Marnäs				
Hemköp City	250	21.7%	46 (18.4%)	63.1%
Konsum	181	33.2%	58 (32.0%)	72.3%
Matmagasinet	239	39.8%	118 (49.4%)	63.5%

Table 55. Usage data across stores

The data in Table 55 shows that the stores are used differently and to a different extent. To begin with, the stores have a varying number of customers. However, this would be expected considering that the stores vary somewhat in capacity and also are located in different parts of town. The next column shows that the stores differ in how large share they receive of the total spending of the customers they cater to. Customers of Matmagasinet spend on average 40 percent of their monthly budget in this store, whereas customers of ICA Matmäster only spend on average 28 percent of their monthly budget.

The third column reports the number of customers that use the store as their main provider in terms of money spent during the period. This shows that the stores on average play somewhat different roles in the store repertoires of their customers. Only 25 percent of Hemköp City's customers use it as a main store, whereas almost half of Matmagasinet's customers use this store as a main store. This could mean that the former store, to a larger extent, is used for smaller purchases. Considering that the store is located in the city center, with comparatively fewer parking opportunities, this result seems reasonable. There is also, however, a difference between stores with more similar facilities and locations, most notably between the neighboring stores ICA Matmäster and Hemköp Marnäs.

In the fourth column, the average share-of-purchase for those who use the store as the main store is reported. If the behaviorally loyal customers of respective store belong to the same category of "behaviorally loyal" customers, one would assume that the variation in share-of-purchase for this sub-group of customers would be equal across stores. However, there is also an interesting difference here. The Konsum "loyals" make a significantly larger share of their purchases in this store as compared to, Matmagasinet's "loyals," for instance.

Finally, the number of store avoiders per store, is compared (Table 56). Again, there are substantial differences, 17 percent of the respondents have indicated that they would avoid the Konsum store, whereas in contrast 4 percent have indicated that they would avoid Hemköp Marnäs.

	Share of store avoiders
ICA Matmäster	12.6%
Hemköp Marnäs	3.8%
Hemköp City	10.1%
Konsum	17.0%
Matmagasinet	14.3%

Table 56. The share of store avoiders per store

Comparing evaluations across stores

In Table 57, the ratings on the evaluation items for the different stores are reported on an aggregate level. As indicated by the table, approximately two-thirds of the respondents, or more, rated each store.

Hemköp Marnäs has overall the highest rating on all items except "value for the money," where Matmagasinet has the highest rating. The largest differences between stores seem to be those concerning assortment-related dimensions, whereas there are smaller differences on personnel-related dimensions.

	ICA Matmäster	Hemköp Marnäs	Hemköp City	Konsum	Mat- magasinet	others
Overall good store	5.07	6.21	5.60	5.30	5.22	4.81
	237	286	286	236	294	74
Good fresh	5.17	6.22	5.95	5.26	5.01	4.24
produce	235	287	284	232	294	71
Good quality	5.10	6.23	5.83	5.14	4.98	4.18
fruits & vegetables _	240	283	284	232	296	72
Value for the	4.47	4.84	4.53	4.70	6.17	3.85
money	233	283	281	230	298	75
The store is well	4.68	6.03	5.56	5.25	4.32	5.07
organized	241	284	285	235	297	75
Friendly	5.46	5.57	5.05	5.03	5.05	5.88
personnel	239	284	285	237	292	75
Nice and clean	5.46	6.14	5.72	5.53	4.70	5.57
	239	284	284	234	295	76
Spacious layout	5.04	6.01	4.91	5.45	4.42	3.05
	241	285	284	234	296	75
Good assortment	5.29	6.20	5.65	5.43	4.88	3.65
variety ————————————————————————————————————	240	286	282	236	_ 298	75
Staff availability	4.54	5.08	4.53	4.50	4.28	5.26
	240	282	284	234	292	76

Table 57. The ratings of stores, means and n.

The above Table shows the mean ratings for each store, but there could also be significant variation on the individual level. Thus, although Hemköp Marnäs has the highest overall ratings indicating that in general it is perceived to be the best store, on the individual shopper level, other stores could be preferred (i.e., receive the highest rating). 81 percent of the respondents had a preferred store according to the summated measures (Table 21, p. 110). Table 58 reports how these preferences are divided across stores. As expected, Hemköp Marnäs has a high

share of households that prefer this store based on the evaluations, but half of the shoppers have a preference for one of the other stores.

Store evaluations	Frequency	Percent
ICA Matmäster preferred store	28	9 %
Hemköp M preferred store	148	50 %
Hemköp C preferred store	34	11 %
Konsum preferred store	41	14 %
MM preferred store	41	14 %
Other store preferred store	6	2 %
Total	298	100 %

Table 58. The attitudinally preferred store.

In looking at the different loyalty categories derived in section 4.6, the store that is the primary store differs between these categories (Table 59). Among the households that have ICA Matmäster as their primary store, 15 percent were categorized as intentional loyals, whereas this figure is 45 percent for the Konsum store. Matmagasinet has the largest share, 27 percent, of spurious loyals.

		Primary store					
		ICA	Hemköp	Hemköp	Konsum	Mat-	Other
		Matmäster	Marnäs	City		magasinet	store
Loyalty	Intentional	7	36	10	25	21	_
categories	loyais	15.2%	43.9%	22.7%	45.5%	18.6%_	
	Spurious	8	5	10	12	30	3
	loyals	17.4%	6.1%	22.7%	21.8%	26.5%	23.1%
	Latent	27	33	19	12	49	8
	loyals	<i>58.7%</i>	40.2%	43.2%	21.8%	43.4%	61.5%
	Non-	4	8	5	6	13	2
	loyals	8.7%	9.8%	11.4%	10.9%	11.5%	15.4%
	Total	46	82	44	55	113	13
		100.0%	100.0%	100.0%	100. <u>0%</u>	100.0%	100.0

Table 59. Primary stores within in the four loyalty categories. Frequencies and column percents. n=353, Chi²-test significant at the .01-level (Chi²=45.1, df. 15). An expected count of less than 5 observations in five of the cells. The Chi²-test was performed on a sample in which "other store" loyals were excluded and in this analysis there was an expected count of less than 5 in two cells; this test was also significant at the .01-level.

THE FOUNDATION FOR DISTRIBUTION RESEARCH (FDR)

The Foundation for Distribution Research at the Stockholm School of Economics was founded in 1981 to address long-term needs of students, academicians, industry, and society for research and education concerning issues of trade and distribution. Specifically, the Foundation covers these areas:

- Research programs dealing with issues of trade and distribution to offer postgraduates exciting research opportunities,
- Research on issues of vital importance to the distribution of goods and services,
- Courses, course segments and other teaching assignments related to issues of trade distribution,
- Dissemination of results from research with significance for the distribution of goods and services,
- Continuing exchange of research ideas and results with researchers and educators in Sweden, the rest of Europe, and the United States.

The Foundation is supported by a number of leading corporations engaged in the distribution of goods and services, manufacturers as well as retailers and wholesalers. Sponsors are invited semi-annually to share results from the Foundation's research, teaching and other activities. In this way and by other means, the Foundation for Distribution Research manages to conduct an ongoing discussion with corporations having an interest in its field of operations. The sponsors of the Foundation for Distribution Research are:

Ahlsell AB Apoteksbolaget AB ARLA Ekon. För. Axel Johnson Saba AB DLF, Dagligvaruleverantörers Förbund ICA AB
KF, Kooperativa Förbundet
Telia AB

Foundation for Distribution Research (FDR)

THE ECONOMIC RESEARCH INSTITUTE AT THE STOCKHOLM SCHOOL OF ECONOMICS

P O Box 6501, S-113 83 STOCKHOLM # Tel +46-8-736 90 00 # Fax +46-8-33 94 89, E-mail: fondinfo@hhs.se, Internet: www.hhs.se/fdr

Publications from the Foundation for Distribution Research, Spring 1999

FDR Working Paper Series

Bergkvist, L. (1998), *Measuring Advertising Effectiveness: A Literature Review*, FDR Working Paper Series, No 20. Stockholm: Foundation for Distribution Research.

Wahlund, R. (1998), The Importance of the Brand and Price for the Consumer's Choice of Fast-moving consumer good – a Conjoint Analysis for the Introduction of a New Brand, FDR Working Paper Series, No 19. Stockholm: Foundation for Distribution Research (in Swedish).

Marell, A & R. Wahlund (1998), Attitudes toward the Euro and the EMU in Sweden and in the other EU countries – International Comparisons, FDR Working Paper Series, No 18. Stockholm: Foundation for Distribution Research.

Dahlén, M. (1997), Internet Usage. A Shopping Perspective – Two Consumer Surveys, FDR Working Paper Series, No 17. Stockholm: Foundation for Distribution Research (in Swedish).

Hven, L & R. Wahlund (1997), A Tentative Study of Swedish Physicians' Prescriptions of Pharmaceuticals – a Conjoint Analysis, FDR Working Paper Series, No. 16. Stockholm: Foundation for Distribution Research (in Swedish).

Gunnarsson J. (1997), Segmentation and Behavioral Stability Over Time: Literature Review and Some Tentative Findings, FDR Working Paper Series, No. 15. Stockholm: Foundation for Distribution Research.

Dahlén, M. (1996), *Internet – Medium, Marketing Channel and Marketplace*, FDR Working Paper Series, No. 14. Stockholm: Foundation for Distribution Research (in Swedish).

Mägi, A. (1995), *To Run a Store*: A Study of 14 ICA-Retailers, FDR Working Paper Series, No. 13. Stockholm: Foundation for Distribution Research (in Swedish).

Sandén-Håkansson, U. (1995), Logotype Exposure in Television Commercials - an exploratory study, FDR Working Paper Series, No. 12. Stockholm: Foundation for Distribution Research.

Hernant, M. & P-G Persson (1995), In Search of the Deal Prone Consumer - A Study of Consumers' Usage of Sales Promotions Introducing a New Type of Single Source Data. FDR, Working Paper Series, No. 11. Stockholm: Foundation for Distribution Research.

Sandén Håkansson, U. (1994), *The Media Choice Process And Its Actors* - A Descriptive Study of advertising Campaigns, Media ChoiceAnd Co-operation. FDR Working Paper Series No. 10. Stockholm: Foundation for Distribution Research(in Swedish).

Wahlund, R. & Gunnarsson, J. (1994), *Household Financial Strategies* - Results Fram An Empirical Study on Economic Psychology of the Household Financial Behaviour. FDR Working Paper Series, No. 9. Stockholm: Foundation for Distribution Research (in Swedish).

Holmberg, C. & U. Sandén (1994), Promotional Response, Sales Development and Purchasing Patterns - in the Confectionery Category. FDR Working Paper Series, No. 8. Stockholm: Foundation for Distribution Research.

Hernant, M., C Holmberg & P-G Persson (1994), An Empirical Study of Consumers' Reference Prices in a Promotion Intensive Product Category. FDR Working Paper Series, No. 7. Stockholm: Foundation for Distribution Research.

Fossum, L. (1994), *Pricing of Fast Moving Consumer Goods* - An Exploratory Interview Survey with Decision Makers, FDR Working Paper Series, No. 6. Stockholm: Foundation for Distribution Research (in Swedish).

Mägi, A. & Julander, C-R. (1994), *Perceived Quality, Productivity and Profitability in Retailing*, FDR Working Paper Series, No. 5. Stockholm: Foundation for Distribution Research (in Swedish).

Håkansson, P.& M Söderlund (1994), Cannibalisation Among Consumer Goods - an empirical study of the introduction of new products in the milk category, FDR Working Paper Series, No. 4. Stockholm: Foundation for Distribution Research.

Mägi, A., M. Eliasson,& C-R. Julander (1994), *Productivity and Profitability in Grocery Retailing*, FDR Working Paper Series, No. 3. Stockholm: Foundation for Distribution Research (in Swedish).

Håkansson, P. (1994), *Do Strong Brands Make a Difference?* FDR Working Paper Series, No. 2. Stockholm: Foundation for Distribution Research.

Sandén, U. (1993), *Marketing Mix and Market Share* - a descriptive study of advertising and promotion behavior in two consumer product categories. FDR Working Paper Series, No. 1. Stockholm: Foundation for Distribution Research.

EFI Research Reports and Research Papers

Albert, L. & O.Fredriksson (1986), *Rendering of the Floor Business*. A Study of Structures and Profitability Along with Some Ideas For Changes, EFI Resesarch Report. Stockholm: EFI (in Swedish).

Fredriksson, O. (1992), Computer Communication within Distribution Systems, Licentiate thesis, EFI Research Report: Stockholm: EFI (in Swedish).

Gunnarsson, J. (1996), *Three Studies of Financial Behavior*, Licentiate thesis, EFI Research Report. Stockholm: EFI.

Gunnarsson, J.& Wahlund, R. (1995), *Household Financial Strategies* - An Exploratory Study. EFI Research Report. Stockholm: EFI (in Swedish).

Holmberg, C. (1992), Effects of Feature Advertising and Other Promotions, Licentiate thesis, EFI Research Report, Stockholm: EFI.

Holmlöv, P.G. & C-R. Julander (1984), Commercial Satellite Television - Closer and Closer, EFI Research Report. Stockholm: EFI (in Swedish).

Håkansson, P. & Söderlund, M. (1995), The Swedish Alcoholic Retailing Monopoly And Its Customer. A Discussion Material to Estimate Consequences of A possible Deregulation of the Industry for Alcoholic Retailing. (1995) EFI Research Paper 6549. Stockholm: EFI. (in Swedish)

Julander, C-R. & C. Holmberg (1987), Market Information from POS Scanner Check-Outs Counters, EFI Research Report, Stockholm: EFI (in Swedish).

Julander C-R. & P-G. Persson (1993), Toward a Theory of Promotional Effect in Grocery Retailing, EFI Research Paper. Stockholm: EFI.

Lange F. & R. Wahlund (1997), Consumers Planning & Purchases of Grocery Products, EFI Research Paper. Stockholm: EFI (in Swedish).

Lindstedt, A-M. (1984), *The Development of Finepaper Wholesaleing since 1950*, EFI Research Paper 6278. Stockholm: EFI (in Swedish).

Mägi, A. (1995), Customer Satisfaction in a Store Performance Framework, Licentiate thesis, EFI Research Report. Stockholm: EFI.

Persson, P-G. (1992), Basket Analysis: A New Way of Studying Short Term Promotional Effects in Grocery Retailing, EFI Research Report. Stockholm: EFI.

Persson, P-G. (1993), *Decomposing Promotional Elasticity*, EFI Research Report. Stockholm: EFI.

Persson, P-G (1993), Promotional Response Variation Across Product Categories, EFI Research Report. Stockholm: EFI.

Sandén-Håkansson, U. (1996), From Campaign Objective to Media Mix: A study on the cooperation between advertisers, advertising agencies and media agencies. Licentiate thesis. EFI Research Report. Stockholm: EFI (in Swedish)

Journal Articles and Conference Papers

Dahlén, M. (1997), Closing in on the Web Consumer. A Study in Internet Shopping, submitted to the EMAC Conference and the ITS Conference in Stockholm, May-June 1998. Dahlén, M. (1997), Controlling the Uncontrollable. Towards the Perfect Web Sample, presented at the ESOMAR Worldwide Internet Seminar and Exhibition in Paris, 28-30 January 1998.

Dahlén, M (1997), 'Navigating the Never-Ending Unknown – Crusing the Web', paper presented at COTIM97 conference in Brussels, November 23-26.

Delmar, F. & J. Gunnarsson, (1997), 'Predicting group membership among entrepreneurs, nascent entrepreneurs and non-entrepreneurs Using Psychological Data and network activities.' In: Pardo, I. Q. (Ed.) *The XXII Colloquium of Economic Psychology*, pp. 881-900. Valencia: UIPEC.

Falk, T. & C-R. Julander (Eds.) (1983), 'Current Trends in Distribution Research', in *International Journal of Physical Distribution and Materials Management*, Vol 13, No 5/6.

Fredriksson, O. (1990), 'Information Technology and Product Delivery: One Swedish exmple of EDI'. In Holmlöv, P-G (Ed.) *Proceedings from the Conference on Telecommunications Use and Users – Economic and Behavioral Aspects*, Saltsjöbaden, 28-29 November, 1988, via TELDOK No 17, Stockholm:Telia, s 103-115.

Fredriksson, O. & M. Vilgon (1996), 'Evolution of inter-organizational information systems in industrial distribution: the cases of Luna and Pappersgruppen' in *European Journal of Information Systems* Vol. 5, No. 1, s. 47-61.

Fredriksson, O. & M. Vilgon (1994), Evolution of Distribution: Prerequisites for and Outcomes of Inter-Organizational Information Systems. In Ebers, M. (Ed), Proceedings of the European Science Foundation Workshop on Inter-organizational Networks: Structures and Processes, Berlin, 6-7 September 1993, Paderborn University, s. 553-587.

Fredriksson, O. & P.G. Holmlöv (1992), *Intelligent Food Distribution Networks in a Common Market Europe*, paper presented at the Executive and Researcher Seminar 'The Swedish Food Industry and the European Market', Bro, 21-23 October.

Groenland, E., A.G. & R. Wahlund (1996), Household saving behaviour and financial management, Journal of Economic Psychology 17, pp. 669-675.

Gunnarsson, J. & R. Wahlund (1997), Household financial strategies in Sweden: An exploratory study, Journal of Economic Psychology 18, pp. 201-233.

Gunnarsson, J., (1997), 'Using Households' Saving Behaviors to Segment the Dutch Market: a Two-Period Panel Study.' In: Timmermans, H. & I. Vermeulen (eds.), *Book of Abstracts, 4th Recent Advances in Retailing & Services Science Conference*. Scottsdale, AZ, June 30 – July 3, p. 33. Eindhoven: EIRASS.

Gunnarsson, J. (1995), 'Ownership of Risky Assets, Attitudes Towards Financial Risk Taking and the Use of Spouse Data in Analysis of Household Financial Behavior', in Nyhus, E.K. & S.V. Troye (Eds.), *Frontiers in Economic Psychology*, Proceedings of the 1995 IAREP Conference, Bergen, Norway, pp. 290-310. Bergen: NHH.

Gunnarsson, J. & R. Wahlund (1994), *Household Financial Strategies - They Do Exist!* Paper presented at the IAREP conference in Rotterdam, July.

Gunnarsson, J. & R. Wahlund (1994), 'Saving Behavior over the Life-Cycle And Time Preference in Financial Strategies', In Antonides G. & W.F. Van Raaij, (eds.), Proceedings of the IAREP/SABE conference *Integrating views on economical behavior*, pp. 70-88. Rotterdam: Erasmus Universiteit.

Holmberg, C. and Mägi, A. (1996) 'Who decides for the undecided customer? – a discussion on customer input into the customer orientation process' *in Research Methodologies for 'the New Marketing'*, proceeding from the ESOMAR/EMAC Symposium in Latimer UK, ESOMAR Publication Series - Volume 204

Julander C-R. (1992), 'Basket Analysis: A New Way of Analysing Scanner Data', in *International Journal of Retail and Distribution Management*, Vol. 20, No. 7, 1992, pp 10-18.

Julander, C-R. (1987), *Improved In-Store Marketing from Technology Sourced Data*, paper presented at Spectra Usedata Conference.

Julander C-R. & M. Eliasson (1993), A Causal Model of Labor Productivity - an empirical test using PLS, paper presented at EMAC Conference, Barcelona, Spain, May 25-28.

Julander, C-R., A. Mägi, J. Jonsson & A. Lindqvist (1996), "Linking Customer Satisfaction to Financial Performance Data" in Edvardsson, B. et. al. (Eds.) *Advancing Service Quality: A Global Perspective.* Proceedings from Quis 5, June 17-20 in Karlstad. New York: International Service Quality Association, pp. 301-310.

Mägi, A. & C-R. Julander (1996), 'Perceived Service Quality and Customer Satisfaction in a Store Profit Performance Framework - an empirical study of Swedish grocery retailers', in *Journal of Retailing and Consumer Services*, Vol. 3, No. 1 pp. 33-41.

Wahlund, R. & J. Gunnarsson (1996), *Mental Discounting and Financial Strategies*, Journal of Economic Psychology 17, pp. 709-730.

Wahlund, R & J. Gunnarsson (1995), *Subjective Discounting and Household Financial* Strategies, paper presented at the IAREP workshop on Household Saving Behavior at Tilburg Universiteit, Holland, October 27.

Wahlund R. (1997), *Perspectives in economic psychology (Editorial)*, Journal of Economic Psychology 18, pp. 153-156.

Wahlund, R. (1995) Confirmation Bias among Professionals, paper presented at the IAREP annual conference in Bergen.

Others

Eliasson, M. & C-R. Julander (1991), Productivity in Swedish Grocery Retailing, EFI Research Report. Stockholm: EFI.

Engman, B. (1984), Swedish Paint Retailing in Development. Stockholm: EFI (in Swedish). Falk, T. (1983), Buying through Computers. Trading without Stores and Wholesalers, through Telecomputing. Stockholm: EFI (in Swedish).

Falk, T. & C-R. Julander (1983), Downtown Shopping Centre - Influence on Retailing and Consumers. Stockholm: Liber (in Swedish).

Fredriksson, O. & P.G. Holmlöv (eds) (1990), Successful Use of New Information Technology in the Distribution of Goods and Services. Stockholm: TELDOK (in Swedish).

Fredriksson, O., P.G. Holmlöv & C-R. Julander (1987), Distribution of Goods and Services in the Information Society. A Prestudy as A Point of Departure for Continuing Research, Stockholm: EFI (in Swedish).

Gunnarsson, J. (1999), Portfolio-Based Segmentation and Consumer Behavior. Empirical Evidence and Methodological Issues, a dissertation for the Doctor's degree in philosophy. Stockholm: EFI.

Hammarkvist, K-O. (1986), The Changing Distribution, Stockholm: EFI (in Swedish).

Hammarkvist, K-O. & N-E. Wirsäll (eds) (1980), *The Wholesale Trade of the 80s*. Malmö: Liber (in Swedish)

Hedman, L. & P.G. Holmlöv (1986), Cable Television in Sweden. Stockholm: Rabén & Siögren (in Swedish).

Holmberg, C. (1996), Stores and Consumers – Two Perspectives on Food Purchasing, a dissertation for the Doctor's degree in philosophy. Stockholm: EFI.

Holmlöv, P.G. & C-R. Julander (1984), Commercial Satellite Television. Consequences for Swedish Industry. Stockholm: EFI (in Swedish).

Holmlöv, P.G., L. Hedman & M. Thomas (1985), Watching Satellite Television in Upplands Väsby, Uppsala: Uppsala universitet (in Swedish).

Julander, C-R. (1995), *The Wholesalers Role in the Information and Communication Society*, a lecture by the winner of the Söderbergska Handelspriset. Stockholm & Göteborg: Torsten & Ragnar Söderbergs Stiftelser.

Julander, C-R. (1989), What's in the basket? Receipt analysis for marketing decisions: An exploratory study, Working Paper. Foundation for Distribution Research.

Julander, C-R. (1984), Weekly Promotions and Advertising. Effects of Retailing Sales Promotion. Stockholm: EFI (in Swedish).

Lindberg, C., P.G. Holmlöv & K-E. Wärneryd (1989), *The Fax and Its Users*. Stockholm: TELDOK (in Swedish).

Persson, P-G. (1995), *Modeling the Impact of Sales Promotion on Store Profits*. A dissertation for the doctor's degree in philosophy. Stockholm: EFI.

Thimerdal, A. (ed) (1987), *Projekt 2000*. Stockholm: Foundation for Distribution Research. (in Swedish)

Thimerdal, A. & N-E. Wirsäll (eds) (1979), *The Trade of the 80s.* Stockholm: ICA Bokförlag (in Swedish).

Wahlund, R. (1997), Recruiting Graduates from the Stockholm School of Economics. The Stockholm School of Economics' Image Barometer 1997. Stockholm: Stockholm School of Economics Corporate Partners (in Swedish).

Wahlund, R. (1996), Recruiting Graduates from the Stockholm School of Economics. The Stockholm School of Economics' Image Barometer 1996. Stockholm: Stockholm School of Economics Corporate Partners (in Swedish).

Wahlund, R. (1995), Recruiting Graduates from the Stockholm School of Economics. The Stockholm School of Economics' Image Barometer 1995. Stockholm: Stockholm School of Economics Corporate Partners (in Swedish).

Wahlund, R. (1994), Recruiting Graduates from the Stockholm School of Economics. The Stockholm School of Economics' Corporate Image Barometer 1994 Stockholm: Stockholm School of Economics Corporate Partners (in Swedish).

Wahlund, R. (1994), 'Psychology and Ethics' in Bergkvist, L., R. Wahlund, & K-E. Wärneryd, (eds.) (1994), *Ethics and Finances*, Stockholm: SNS (in Swedish).

Wirsäll, N-E. (1988), Debate, Research and Renewal. Necessary Elements in the Development of Trading. Göteborg & Stockholm: Torsten & Ragnar Söderbergs Stiftelser (in Swedish).

Wirsäll, N-E. (1982 & 1986), Renewal of the Trade. Västerås: Idé- & Faktaproduktioner (in Swedish).

Wirsäll, N-E. & P.G. Holmlöv (1994), *The Capricious consumer - Reflections on A Seminar About Strategies And Trading* Stockholm: Foundation for Distribution Research (in Swedish).

Wirsäll, N-E. & C-R. Julander (1991), *The Flexible Retailing Industry*. Stockholm: EFI (in Swedish).

EFT

The Economic Research Institute

Reports since 1995

Published in the language indicated by the title

1999

Andersson, P., Experto Credite: Three Papers on Experienced Decision-Makers.

Gunnarsson, J., Portfolio-Based Segmentation and Consumer Behavior: Empirical Evidence and Methodological Issues.

Japanese Production Management in Sunrise or Sunset.

Christer Karlsson (editor).

Lindé, J., Essays on the Effects of Fiscal and Monetary Policy.

Ljunggren, U., Indikatorer i grundskolan i Stockholms stad före stadsdelsnämndsreformen – en kartläggning

Nilsson, K., Ledtider för ledningsinformation.

Skalin, J., Modelling Macroeconomic Time Series with Smooth Transition Autoregressions.

Spagnolo, G., Essays on Managerial Incentives and Product-Market Competition.

Söderström, U., Monetary Policy under Uncertainty.

1998

Andersson, M., On Testing and Forecasting in Fractionally Integrated Time Series Models.

Berg-Suurwee, U., Styrning av kultur- och fritidsförvaltning innan stadsdelsnämndsreformen

Berg-Suurwee, U., Nyckeltal avseende kultur- och fritidsförvaltning innan stadsdelnämndsreformen.

Bergström, F., Essays on the Political Economy of Industrial Policy.

Bild, M., Valuation of Takeovers.

Charpentier, C., Samuelson, L.A., Effekter av en sjukvårdsreform – en analys av Stockholmsmodellen.

Eriksson-Skoog, G., The Soft Budget Constraint: The Emergence, Persistence and Logic of an Institution. The Case of Tanzania 1967-1992.

Gredenhoff, M., Bootstrap Inference in Time Series Econometrics.

Ioannidis, D., I nationens tjänst? Strategisk handling i politisk miljö – en nationell teleoperatörs interorganisatoriska, strategiska utveckling.

Johansson, S., Savings Investment, and Economic Reforms in Developing Countries.

Levin, J., Essays in Company Valuation.

Ljunggren, U., Styrning av grundskolan i Stockholms stad innan stadsdelsnämndsreformen.

Mattsson, S., Från stat till marknad – effekter på nätverksrelationer vid en bolagiseringsreform.

Nyberg, A., Innovation in Distribution Channels – An Evolutionary Approach.

Olsson, P., Studies in Company Valuation.

Reneby, J., Pricing Corporate Securities.

Roszbach, K., Essays on Banking Credit and Interest Rates.

Runsten, M., The Association Between Accounting Information and Stock Prices. Model development and empirical tests based on Swedish Data.

Segendorff, B., Essays on Bargaining and Delegation.

Sjöberg, L., Bagozzi, R., Ingvar, D.H., Will and Economic Behavior.

Sjögren, A., Perspectives on Human Capital: Economic Growth, Occupational Choice and Intergenerational Mobility.

Studier i kostnadsintäktsanalys, red Jennergren, P.

Söderholm, J., Målstyrning av decentraliserade organisationer.

Styrning mot finansiella och icke-finansiella mål.

Thorburn, K., Cash Auction Bankruptcy and Corporate Restructuring

Wijkström, F., Different Faces of Civil Society.

Zethraeus, N., Essays on Economic Evaluation in Health Care. Evaluation of Hormone Replacement Therapy and Uncertainty in Economic Evaluations.

1997

Alexius, A., Essays on Exchange Rates, Prices and Interest Rates.

Andersson, B., Essays on the Swedish Electricity Market.

Berggren, N., Essays in Constitutional Economics.

Ericsson, J., Credit Risk in Corporate Securities and Derivatives. Valuation and Optimal Capital Structure Choice.

Charpentier, C., Budgeteringens roller, aktörer och effekter. En studie av budgetprocesserna i en offentlig organisation.

De Geer, H., Silfverberg, G., Citizens'Trust and Authorities' Choices, A Report from The Fourth International Conference on Ethics in the Public Service, Stockholm June 15-18, 1994.

Friberg, R., Prices, Profits and Exchange Rates.

Från optionsprissättning till konkurslagstiftning.

red. Bergström, C., Björk, T.

Hagerud, G.E., A New Non-Linear GARCH Model.

Haksar, A., Environmental Effects of Economywide Policies: Case Studies of Costa Rica and Sri Lanka.

He, C., Statistical Properties of Garch Processes.

Holmgren, M., Datorbaserat kontrollrum inom processindustrin; erfarenheter i ett tidsperspektiv.

Jennergren, P., Tutorial on the McKinsey Model for Valuation of Companies.

Lagerlöf, J., Essays on Political Economy, Information, and Welfare.

Lange, F., Wahlund, R., Planerade och oplanerade köp - Konsumenternas planering och köp av dagligvaror.

Löthgren, M., Essays on Efficiency and Productivity; Contributions on Bootstrap, DEA and Stochastic Frontier Models.

Nilsson, H.E., Using Conceptual Data Modelling in Management Accounting: A Case Study.

Sjöberg, L., Ramsberg, J., En analys av en samhällsekonomisk bedömning av ändrade säkerhetsföreskrifter rörande heta arbeten.

Säfvenblad, P., Price Formation in Multi-Asset Securities Markets.

Sällström, S., On the Dynamics of Price Quality.

Södergren, B., På väg mot en horisontell organisation? Erfarenheter från näringslivet av decentralisering och därefter.

Tambour, M., Essays on Performance Measurement in Health Care.

Thorén, B., Berg-Surwee, U., Områdesarbete i Östra Hökarängen - ett försök att studera effekter av decentralisering.

Zhang Gang., Chinese Rural Enterprises Between Plan and Market.

Åhlström, P., Sequences in the Profess of Adopting Lean Production.

Åkesson, G., Företagsledning i strategiskt vakuum. Om aktörer och förändringsprocesser.

Asbrink, S., Nonlinearities and Regime Shifts in Financial Time Series.

1996

Advancing your Business. People and Information Systems in Concert. red. Lundeberg, M., Sundgren, B.

Att föra verksamheten framåt. Människor och informationssystem i sam-verkan. red. Lundeberg, M., Sundgren, B.

Andersson, P., Concurrence, Transition and Evolution - Perspectives of Industrial Marketing Change Processes.

Andersson, P., The Emergence and Change of Pharmacia Biotech 1959-1995. The Power of the Slow Flow and the Drama of Great Events.

Asplund, M., Essays in Industrial Economics.

Delmar, F., Entrepreneurial Behavior & Business Performance.

Edlund, L., The Marriage Market: How Do You Compare?

Gunnarsson, J., Three Studies of Financial Behavior. Research Report.

Hedborg, A., Studies of Framing, Judgment and Choice.

Holgersson, C., Höök, P., Ledarutveckling för kvinnor - Uppföljning av en satsning på Volvo - Research Report.

Holmberg, C., Stores and Consumers - Two Perspectives on Food Purchasing.

Håkansson, P., Wahlund, R., Varumärken. Från teori till praktik.

Karlsson, A., The Family Business as an Heirloom. Research Report.

Linghag, S., Man är handelsstudent. Research Report.

Molin, J., Essays on Corporate Finance and Governance.

Mägi, A., The French Food Retailing Industry - A Descriptive Study.

Mölleryd, B., Så byggdes en världsindustri - Entreprenörskapets betydelse för svensk mobiltelefoni. Research Report.

Nielsen, S., Omkostningskalkulation for avancerede produktionsomgivelser - en sammenligning af stokastiske og deterministiske omkostningskalkulationsmodeller.

Normark, P., Danielsson, L., Larsson, A., Lundblad, P., Kooperativa nyckeltal. Research Report.

Sandin, R., Heterogeneity in Oligopoly: Theories and Tests.

Sandén-Håkansson, U., Från kampanjmål till mediemix - en studie av samarbete mellan annonsörer, reklambyråer och mediebyråer. Research Report.

Stein, J., Söderlund, M., Framgång i arbetet, strategier för att utföra arbetsuppgifterna, arbetsuppgifternas karaktär och utbildningskvalitet. En empirisk studie av civilekonomer. Research Report.

Strömberg, P., Thorburn, K., An Empirical Investigation of Swedish Corporations in Liquidation Bankruptcy. Research Report.

Söderlund, M., Och ge oss den nöjda kunden. En studie av kundtillfredsställelse och dess orsaker och effekter. Research Report.

Thodenius, B., Användningen av ledningsinformationssystem i Sverige: Lägesbild 1995. Research Report.

Ulfsdotter, **U.**, Internationalisering för expansion eller hemmamarknadsförsvar? De nordiska marknaderna för fruktyoghurt 1982-1994.

Westelius, A., A Study of Patterns of Communication in Management Accounting and Control Projects.

Wijkström, F., Den svenska ideella sektorn och pengarna. Research Report.

Örtendahl, M., Health and Time - A Problem of Discounting.

1995

Becker, T., Essays on Stochastic Fiscal Policy, Public Debt and Private Consumption.

Blomberg, J., Ordning och kaos i projektsamarbete - en social-fenomenologisk upplösning av en organisationsteoretisk paradox.

Brodin, B., Lundkvist, L., Sjöstrand, S-E., Östman, L., Styrelsearbete i koncerner

Brännström, T., Bias Approximation and Reduction in Vector Autoregressive Models. Research Report.

Ekonomisk politik i omvandling. red. Jonung, L.

Gunnarsson, J., Wahlund, R., Hushållens finansiella strategier. En explorativ studie.

Höök, P., Chefsutveckling ur könsperspektiv - Mentorskap och nätverk på Vattenfall - Research Report.

Levin, J., Olsson, P., Looking Beyond the Horizon and Other Issues in Company Valuation. Research Report.

Mägi, A., Customer Statisfaction in a Store Performance Framework. Research Report.

Persson, P-G., Modeling the Impact of Sales Promotion on Store Profits.

Roman, L., Institutions in Transition. A Study of Vietnamese Banking.

Sandberg, J., Statistisk metod - dess vetenskapliga hemvist, grundläggande principer och möjligheter inom samhällsvetenskapen. Research Report.

Sandberg, J., How Do We Justify Knowledge Produced by Interpretative Approaches? Research Report.

Schuster, **W.**, Redovisning av konvertibla skuldebrev och konvertibla vinstandelsbevis - klassificering och värdering.

Söderberg, K., Farmartjänsten - Ny kooperation inom lantbruket. Research Report.

Söderqvist, T., Benefit Estimation in the Case of Nonmarket Goods. Four Essays on Reductions of Health Risks Due to Residential Radon Radiation.

Thorén, B., Användning av information vid ekonomisk styrning - månadsrapporter och andra informationskällor.