

# Brand Choice

Revealing Customers' Unconscious-Automatic  
and Strategic Thinking Processes

---

Randolph J. Trappey III and  
Arch G. Woodside



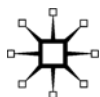
## Brand Choice

*This page intentionally left blank*

# **Brand Choice**

## **Revealing Customers' Unconscious-Automatic and Strategic Thinking Processes**

Randolph J. Trappey III and Arch G. Woodside



© Randolph J. Trappey III and Arch Woodside © 2005  
Softcover reprint of the hardcover 1st edition 2005 978-1-4039-4641-6

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No paragraph of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, 90 Tottenham Court Road, London W1T 4LP.

Any person who does any unauthorised act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The authors have asserted their rights to be identified as the authors of this work in accordance with the Copyright, Designs and Patents Act 1988.

First published 2005 by  
PALGRAVE MACMILLAN  
Houndmills, Basingstoke, Hampshire RG21 6XS and  
175 Fifth Avenue, New York, N. Y. 10010  
Companies and representatives throughout the world

PALGRAVE MACMILLAN is the global academic imprint of the Palgrave Macmillan division of St. Martin's Press, LLC and of Palgrave Macmillan Ltd. Macmillan® is a registered trademark in the United States, United Kingdom and other countries. Palgrave is a registered trademark in the European Union and other countries.

ISBN 978-1-349-52357-3 ISBN 978-0-230-51420-1 (eBook)  
DOI 10.1057/9780230514201

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

A catalogue record for this book is available from the British Library.

A catalog record for this book can be obtained from the Library of Congress.

10 9 8 7 6 5 4 3 2 1  
14 13 12 11 10 09 08 07 06 05

# Contents

<i>List of Tables</i>	vi
<i>List of Figures</i>	ix
1 Customer Thinking and Brand Choice	1
2 Automatic-Unconscious Process Models of Primary Choice	9
3 Customer Portfolio Analysis among Competing Retail Store Brands	40
4 Automatic Thinking and Store Choices by Near and Distant Customers	65
5 Modelling Bank Loyalty	83
6 Learning How Linkage Advertising and Prior Experience Affect Customer Behaviour	157
7 The Role of Human Cognitive Ability ( <i>g</i> ) in Consumers' Automatic and Strategic Processing of Brands	180
8 Conclusions and Implications for Future Research and Marketing Strategy	238
<i>Index</i>	254

# List of Tables

2.1	Retail Food Store Top-of-Mind-Awareness Shares by Attribute for All Respondents and Primary Customers	17
2.2	Correlation Coefficients of Primary Store Choice with Store that “First Comes to Mind” For Each of 14 Attributes and Primary Store	19
2.3	Comparison of Logit Model and Multiple Regression Model of Main Effects for Super One (SPR1) Supermarket as Primary Store	20
2.4	Comparison of Logit Model and Multiple Regression Model of Main Effects for Brookshires (BRK) Supermarket as Primary Store	20
2.5	Correlation among Variables Used in Super One Models	21
2.6	Main Effects of Attitude-Accessibility and Age Super One Named as Primary Store	22
2.7	Main Effects of Attitude-Accessibility on Brookshires Named as Primary Store	23
2.8	Cross-Validation Results: Regression Models for Super One as Primary Store	24
2.9	Cross-Validation Results: Regression Models for Brookshires as Primary Store	25
2.10	Cross-Validation Results: Regression Models for A&P as Primary Store	26
2.11	Open-Ended Responses for First and Second Mentioned Main Reasons for Shopping at Primary Store	27
2.12	Regression Models for Three Principal Least Favourite Stores (“Your Least Favourite Store, the Store You Don’t Like and Rarely or Never Shop”)	28
2.13	Open-Ended Responses for Reasons for Least Favourite Store	29
2.14	Towards a General Rule on the Size of the Retrieval Set Size Varying by Brand TOMA Position	31
3.1	Attitude Accessibility of Winn-Dixie for Evaluative Attributes by Winn-Dixie Customer and Non Customer Segments	49
3.2	Attitude-Accessibility of Superstore for Evaluative Attributes by Superstore Customer and Noncustomer Segments	50
3.3	Attitude-Accessibility of Schwegmann’s for Evaluative by Schwegmann’s Customers and Noncustomer Segments	52
3.4	Age and Household Size Profiles of Customer Portfolios for Three Supermarket Chains in New Orleans	54

3.5	Weekly Expenditures at All Supermarkets and Grocery Stores and Total Annual Household Income by Customer Portfolios for Three Supermarket Chains	55
3.6	Attitude-Accessibility Regression Models for Winn-Dixie	57
3.7	Attitude-Accessibility Regression Models for Superstore	57
3.8	Attitude-Accessibility Regression Models for Schwegmann's	58
4.1	Nearby and Distant Customers' Perceptions of their Primary Store	70
5.1	How Financial Services Customers in North America Utilise the Channels Available	86
5.2	Bank Channel Importance by Year 2006	88
5.3	Findings from "Technology in Banking" Study	91
5.4	Market Shares for Ten Banks	112
5.5	Main Bank Switching Behaviour	114
5.6	Switching Behaviour of Nat West and Lloyds	118
5.7	Switching Behaviour of Barclays and HSBC	120
5.8	Mean Positive, Negative, and Total Attributes Recall Varying by Customer	122
5.9	Positive and Negative Attribute-to-Brand Evocations	126
5.10	Regression Models of Bank Loyalty and Order of Mention	129
5.11	Gain Summary of Non Switching Behaviour	134
5.12	Attitude and Loyalty	134
5.13	Current Accounts and Switching Behaviour	136
5.14	Regression Analysis of Satisfaction Variables and Bank Loyalty	137
5.15	Perceived Switching Costs	138
5.16	Internet Purchases	141
5.17	Internet Usage and Bank Loyalty	142
5.18	Internet Bank Accounts Varying by Internet Item Purchase Frequency	143
5.19	Bank Loyal Past 2 Years	144
5.20	Internet Banking Attitudinal Questions	145
5.21	Misclassification Matrix	146
6.1	Expenditures by Acquiring Guide and Experience	172
6.2	Coefficient Alphas for Three Constructs	173
6.3	Visitors, Estimated Revenues and Costs	175
6.4	Net Revenue Analysis	176
6.5	Rate of New and Repeat Customers Visiting Destination Areas	177
7.1	Children: Matrix Raw Score $\times$ No. of Brands Recalled (60 seconds) by Product Category	209
7.2	No. Brands Recalled (60-seconds) Varying by Product Category and Quartiles of Matrix Raw Score	210

7.3	High and Low Involvement Brand Recall	212
7.4	Matrices Test Raw Scores $\times$ No. of Brands Recalled (60-seconds) by Product Category	216
7.5	No. of Brands Brands Recalled by Quartiles of Matrices Test Scores and Product Category	218
7.6	Turkey HSD of No. of Brands Recalled by Quartiles of Matrices test Scores and Product Category	220
7.7	High and Low Involvement Product Brand Recall Varying by Quartiles of Matrices Test Raw Score	224
7.8	Daily TV viewing Behaviour and Matrices Test Raw Scores	226
7.9	Mean No. Brands Recalled Varying by Quartiles of Matrices Test Raw Scores and TV viewing Quartiles	228
7.10	Turkey HSD Test for Brand Recall Varying by TV Viewing and Matrics Test Scores	231

# List of Figures

2.1	Retrieval Set Size Varying by Brand TOMA Position	32
3.1	Most Convenient Location	53
3.2	Lowest Overall Food Prices	53
4.1	Principal Thoughts Evoked by Primary Customers for Each of Three Competing Supermarkets	71
4.2	Winn-Dixie's Near and Distant Customer Perceptions	72
4.3	Superstore's Near and Distant Customer Perceptions	74
4.4	Schwegmann's Near and Distant Customer Perceptions	75
4.5	Principal Thoughts Evoking Winn-Dixie	76
4.6	Principal Thoughts Evoking Superstore	77
4.7	Principal Thoughts Evoking Competing Stores	78
4.8	Principal Thoughts Evoking Competing Stores	79
5.1	Cognitions and Post-Purchase Affective Responses	102
5.2	Prospect Theory	104
5.3	Ratio of Positive/Negative Attribute-to-Brand Evocations Varying by Total Brand Recall	123
5.4	Attribute-to-Brand Evocations are Curvilinear as TOMA Brand Increases	125
5.5	Nat West CHAID Model of Switching Behaviour	132
5.6	CHAID Results	140
6.1	Hypothesised Effects of Knowledge (K) and Experience (E) on Customers' Activities, Affect, Expenditures Intentions	162
6.2	Observed Effects of Knowledge (K) and Experience (E) on Customers' Activities, Affect, Expenditures and Intentions	171
7.1	Human Information Processing Model	185
7.2	Three to Nine Node Networks	200
7.3	A 16-Unit Neural Network Showing All Possible Interconnections	200
7.4	Total Brands Recalled (60 seconds) Varying by Quartiles of Matrix Raw Score	211
7.5	Distribution of Matrix Score	214
7.6	No. Brands Recalled (60 seconds) Varying by Matrices Test Raw Scores	217
7.7	Brand Recall, Cognitive Ability and TV Viewing	229
7.8	Interaction Effects of TV Viewing and Cognitive Ability – g	230

*This page intentionally left blank*

# 1

## Customer Thinking and Brand Choice

**Introduction: learning what evokes the brand or store in customers' minds**

Research on consumer automatic-unconscious and strategic-cognitive processes in associating brands with evaluative attributes (i.e., best quality; best value; slowest service) offer valuable tools for marketers wanting to understand the primary associations (i.e., the drivers) a brand owns in the minds of customers. A few such drivers connect to the brand that the consumer identifies as her primary choice. With the research methods described in this book, advertising and marketing strategists also learn which, if any, consumers retrieve their brand automatically-unconsciously in connection for important evaluative attributes.

Marketing strategists may make the mistake of advertising an attribute and benefit consequence that their brand cannot possibly possess. This failure-to-connect may be the case because a competing brand dominates the market with respect to this particular attribute or benefit. Strategists may also err in advertising a quality or benefit that has little or nothing to do with their brand's ability to attract and maintain primary customers. Given that consumers can easily summon up a brand as first coming to mind for a specific attribute, a handful of such automatic associates are demonstrably valuable in predicting brand choice behaviour.

Because most automatic brand associations are likely grounded in reality, this research offers a valuable tool for improving product and service offerings to consumers. Furthermore, research on attitude-accessibility connecting brands with evaluative beliefs is particularly essential for building paramorphic models of consumer unconscious and cognitive processes – especially unconscious processes involving bottom-up agendas. The empirical models demonstrated in this text fit well with Howard's (1989) proposal for limited problem-solving situations. Research presented herein also provides circumstantial evidence in support of the associate-to-cue proposition and choice sequence proposed by Holden (1993, p. 387): "By placing cues known to

facilitate retrieval in the choice situation, the probability of brand evocation is increased, and thereby increases the probability of choice of the brand – without evocation, the probability of choice is zero.”

This monograph is the product of applied and theoretical studies conducted and reported in part by the authors. The work reflects generally the authors’ philosophical partiality for working with commercial enterprises in preference to relying upon government and social funding bodies for monies when conducting business related research. Consequently, much of the work included herein tests and expands existing marketing and consumer psychology theories in an applied commercial framework. Notwithstanding this, parts of the research – Chapter 7 in particular, is research conducted entirely on an experimental basis funded primarily by the authors with the aim of commercial marketing applications at a later date.

Each chapter is a separate self-contained research study. Taken in their entirety, the chapters present a common theme of research pertaining to some aspect of cognitive processing models of brand choice behaviour. What follows is a brief outline of the text organisation and a synopsis of the contents of each of the chapters.

### Understanding why customers buy your brand

Chapter 2 explores automatic-unconscious processing of information associated with brand recall. In this chapter evidence is presented that a consumer’s top-of-mind brand name associations with a few traces of information are robustly correlated to brand choice behaviour. The evidence demonstrates that consumers can quickly retrieve a brand name from their long-term memories when asked an unaided recall question for specific attributes – such as, for automobiles, “most reliable” and “best styling.” Not only are these unaided brand name responses useful for understanding primary brand choice behaviour but also for learning why a brand appeals to some customers and not to others.

This chapter further explores how when shopping, a customer is likely to refer to a limited number of evaluative attributes and select the brand automatically associated with these attributes. The chapter reviews the relevant psychological and consumer research literature on automatic-unconscious processing. The details of the method and results of a field study to test the hypotheses are described. It culminates with a discussion and conclusions important for advertising research and marketing strategy formulation.

### Customer portfolio analysis

Chapter 3 examines how customer portfolio analysis may be of use for improving retailers’ efforts effectively to position their stores in the minds of consumers. In this chapter a customer portfolio for a store is demon-

strated to include new-primary, loyal-primary, and defector (formerly primary) customers, as well as intermittent customers who shop chiefly at competing stores. Customers' attitude-accessibility with regard to first-linking a specified store with evaluative attributes can offer valuable information on the shopping behaviour of customers in a store's portfolio.

Several hypotheses related to customer portfolio analysis and store attitude-accessibility are examined. The principal hypothesis is that the attitude-accessibility of the major supermarkets competing in the same metropolitan area will differ substantially among loyal, new, competitors' customers, and defector customer segments for each store. More specifically, for a given store, greater shares of loyal and new customers will exhibit positive, store attitude-accessibility profiles compared to non-customers and defectors.

The results of a cross-sectional telephone survey of 317 supermarket shoppers are described, and the findings support the hypotheses. The chapter concludes with recommendations for planning changes in retailing positioning strategies and for monitoring success of implementing these strategies.

## Understanding near and distant customers

Holden and Lutz (1992) propose that the reason consumers evoke different brands from long term memory into working memory is that different associates (e.g., benefits, attributes) have stronger links to some brands than others. This proposition is examined further in Chapter 4 for associate-to-store evocations for supermarket shopping, in a market environment where several competing supermarkets are readily accessible for shopping.

Chapter 4 expands on the central proposition of Holden and Lutz (1992) by offering additional related hypotheses: (H1) each competing store has a unique constellation of a few (3 to 7) associates that evoke the store's name among its primary customers; (H2) in associate-to-store retrievals, substantial differences occur in the proportions of a store's primary consumers evoking the store's name for a benefit among those consumers living closest to their primary store versus consumers living closest to competing stores; (H3) consumers are able to retrieve one or more competing stores (versus their primary store) for being "worst" on one or more benefits – for example, when asked to name the supermarket having the highest overall food prices.

The chapter reviews the relevant psychological and consumer research literature on automatic-unconscious processing and concludes with an application of the theory to store choice. The research in this chapter is of use to retailing strategists who seek an understanding of the causes for the gains and losses between competing stores.

## Modelling bank loyalty

Keller (1993) demonstrates that raising awareness of a brand increases the probability that the brand will be a member of a set of brands that receive serious purchase consideration. In Chapter 3 it was demonstrated that a brand's attribute-to-brand evocations would vary amongst the brand's portfolio of customers – ranging from new, loyal, defector and competitor. Chapter 5 examines in detail to what extent these evocations differ between various levels of brand consciousness along with how they may interact with switching behaviour, loyalty, commitment and perceptions of risk.

More and more, financial services institutions recognise that customer ownership is a notion that can no longer be treated casually. Customer retention is regarded as a critical component of long-term profitability and survival. Competition has caused institutions to introduce permanent measures aimed at both maintaining and retaining profitable customer relationships. Much of the revolution is technology driven, with Internet banking playing a key role in a plethora of new products, services and brands aimed simultaneously at wooing new customers and retaining existing ones. Consequently, insight into brand switching behaviour amongst financial services customers is central to understanding how retention can be affected in the new knowledge economy.

Past research (Mittal and Lee, 1989; Goldsmith et al., 1991) reports a positive relationship between customer involvement and commitment. The research suggests further that commitment is a part of brand loyalty. However, little work has been done to explore the correlation between a customer's involvement and/or commitment with the financial services institution and the propensity to switch between institutions. Moreover, an examination of the role Internet banking may play in brand switching behaviour is absent.

Colgate and Stewart (1998) demonstrate significant variations pertaining to how remotely the customer wishes to deal with his or her bank. Nevertheless, little effort has been directed towards investigating whether or not the individual customer's perception of switching costs has an impact on the type of relationship he or she has with the financial services institution. With regard to this, Chapter 5 examines to what extent perceived switching costs affect a customer's propensity to switch financial services institutions. Furthermore, we examine the role Internet banking may have in changing the present situation.

Prospect theory (Kahnemann and Tversky, 1979) is a descriptive model of decision-making under risk. This concept is examined generally in relation to brand switching behaviour amongst financial services customers and in particular amongst holders of Internet accessible bank accounts. Chapter 5 also examines what is usually considered an intervening variable

between customer loyalty and customer retention – the action control paradigm. Attentive to this theory, the research reported herein evaluates how it may be linked to customer switching behaviour amongst financial institutions.

Changing customer expectations requires marketers to interact differently and in most cases in an anticipatory manner. Because financial institutions will seek to offer increased convenience to bank customers by encouraging them to engage in virtual interactions, branding and customer loyalty issues will become particularly important in testing the validity and extending the theory of the previously mentioned constructs. Chapter 5 examines how concomitant higher levels of satisfaction and control connected with the virtual bank account may or may not increase customer loyalty.

Finally, will the perception and reality of lower switching costs associated with Internet accessible online bank accounts lessen the perceived risk customers' associate with changing banks? If so, will this increase the propensity of customers to switch financial institutions? To date, very little research has addressed this issue (Hermanns and Sauter, 1999). Chapter 5 concludes with an examination of this issue and proposes specific recommendations for marketers of financial services and products.

## **Knowledge and experience**

How does a customer's knowledge and experience with a product or service interact with and/or increase net returns on advertising? Chapter 6 examines this issue through the lens of a quasi-experiment in advertising research. Quasi-experiments are tests of the effects of changing levels of outcome variables (e.g., sales levels) caused by treatment variables (e.g., advertising and linkage-advertising) when random assignment has not been used to create equivalent comparison groups from which treatment-caused change is inferred (Cook and Campbell, 1979, p. 6). Research presented in this chapter utilises nonequivalent but comparable groups to examine causal relationships between linkage-advertising and multiple dependent customer variables such as knowledge and experience. Linkage-advertising is the literature and related materials given to customers who respond to advertisers' offers of these materials (Woodside, 1994). Linkage-advertising "links the up-front advertising to the sale with additional arguments and benefits which the up-front advertising [i.e., the print or broadcast advertisement that includes the linkage offer] didn't have space or time to include" (Rapp and Collins, 1987).

Chapter 6 describes a large-scale field study of tourists frequenting Prince Edward Island, Canada. The study is an application of a quasi-experiment to determine the impact of linkage-advertising on several dependent variables. The method and results presented support the use of quasi-experiment

designs in advertising research and the general proposition that linkage-advertising likely causes substantial changes in multiple consumer variables such as knowledge and experience. Chapter 6 also describes how the results from the field study can be used to estimate the return on investment of the linkage-advertising program.

First, we illustrate two quasi-experimental designs: a one-group post-test-only design and a quasi-experimental design with predicted higher order interaction effects. The first is used widely in assessing the effects of linkage-advertising but is not recommended. Next we depict the application of the method and results to data from the large-scale field study. Lastly, we examine the net revenues of the linkage-advertising program and the role consumer variables such as knowledge and experience may play. Recommendations are made for using quasi-experiments in advertising research.

### The role of cognitive ability ( $g$ )

Though Fazio and colleagues (1989) established linkages between response latency (RTs), attitude and behaviour towards the brand, research in the consumer behaviour and marketing disciplines continues to ignore the role that human cognitive ability may play in the process. Are measures of response latency to unaided brand recall questions just proxy measures of reaction times to elementary cognitive tasks (ECT)? If this is the case, then what role if any does human cognitive ability as measured by  $g$  (general intelligence) play both in brand recall and in directing consumer attitudes, behaviours and decisions towards the brand?

ECTs are typically dissimilar to conventional cognitive ability tests in that test items require no reasoning or problem solving actions by the subject. Since ECTs are unlike IQ tests, which incorporate test items based on previously acquired knowledge, psychometric  $g$  can be systematically and independently studied. ECTs are designed to generate data from which individual differences in discrete processes such as stimulus apprehension, discrimination, choice, visual search, and information retrieval from short-term memory scan (STM) and long-term memory (LTM) can be ascertained. The tasks are typically so uncomplicated that each person in the study can execute them effortlessly with few if any errors. Test errors, if any, should not be the result of a lack of understanding of the task requirements by the subject in the study.

While unaided brand recall tests the strength of the brand, the study of its dependence on human factors such as cognitive ability may provide marketing managers with new knowledge about customers. An experiment was conducted first among children to understand the relationship between general intelligence ( $g$ ) test scores and varied measures of response latency to tasks of unaided brand recall (TOMA) for high involvement and

low involvement products. The research was then repeated as a large-scale study of adults living and residing in the London metropolitan area. Results from both the pilot study of children and the large-scale study of adults are reported herein.

Even though research by the authors and others have demonstrated that attitude-to-brand accessibility is an automatic-unconscious process, no previous research in this area has explored to what degree unaided brand recall could be affected by the speed of human information processing and by implication working memory (WM) capacity. Could it be that consumers with higher levels of  $g$ , who are demonstrably more capable of processing information at faster speeds, are able automatically to access and retrieve more brand information in a unit of time? If so, this would imply that consumers with higher levels of cognitive ability are likely to have more information available to them in the strategic processing phase of decision-making.

The hypotheses that this chapter explores propose that a subject's ability automatically access to brand names in memory and recall them in a timed unaided brand recall test is governed in part by the subjects information processing ability as reflected by  $g$ . It is further hypothesised that at a fundamental level, the recognition of advertising stimuli, the retrieval of information, the provision of a heuristic for brand evaluation, and the ultimate relevance decision that determines further higher-level processing, are all ultimately governed by human cognitive ability or general intelligence ( $g$ ).

The purpose of the research is to offer preliminary evidence to the effect that "human variables" controlling for consumer behaviour necessarily include, together with age and gender, human cognitive abilities as well.

## Conclusion

This chapter provides a review of the main findings for each of the chapters in this monograph. A brief discussion of the strategic and practical implications for marketers is included on a chapter-by-chapter basis. The final chapter includes also a to the point examination of the limitations that encompass the whole of the research, as well as avenues for future research. Future research should advance the research in Chapter 7 with respect to the role human cognitive ability may play in consumer brand recall, choice and other behaviours.

## References

- Colgate, M. and Stewart, K. "The challenge of relationships in services," *International Journal of Service Industry Management*, 9, 5 (1998).
- Cook, T. D. and Campbell, D. T. *Quasi-experimentation*. Chicago: Rand McNally, 1979.

- Fazio, R. H., Powell, M. C. and Williams, C. J. "The Role of Attitude Accessibility in the Attitude-to-Behaviour Process." *Journal of Consumer Research*, 16, 4 (1989): 280–88.
- Goldsmith, R. E., Emmert, J. and Hofacker, C. "A causal model of consumer involvement: replication and extension" *Proceedings Winter Educators' Conference* (1991).
- Hermanns, A. and Sauter, M. *Management-Handbuch Electronic Commerce*. Frankfurt: Verlag Vahlen, 1999.
- Holden, S. J. S. "Understanding Brand Awareness: Let Me Give You a C(l)ue!" in *Advances in Consumer Research*, Volume 20, Provo, UT: Association for Consumer Research (1993): 383–388.
- Holden, S. J. S. and Lutz, R. J. "Ask Not What the Brand Can Evoke: Ask What Can Evoke the Brand?" *Advances in Consumer Research*, 19, (eds) J. F. Sherry, Jr. and B. Sternthal, Provo, UT: Association for Consumer Research (1992): 101–107.
- Howard, J. A. *Consumer Behaviour in Marketing Strategy*. Englewood Cliffs, NJ: Prentice-Hall, 1989.
- Kahnemann, D. and Tversky, A. "Prospect Theory: An Analysis of Decision under Risk," *Econometrica*, 47 (March 1979).
- Keller, K. "Conceptualising, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57, 1 (1993).
- Mittal, B. and Lee, M. S. "A causal model of consumer involvement," *Journal of Economic Psychology*, 10 (1989).
- Rapp, S. and Collins, T. *Maximarketing*. New York: McGraw-Hill, 1987.
- Woodside, A. G. "Modeling linkage-advertising: Going beyond better media comparisons." *Journal of Advertising Research*, 34 (July/August), (1994): 22–31.

# 2

## Automatic-Unconscious Process Models of Primary Choice

### Three realities

In the globally integrated consumer oriented societies of 21<sup>st</sup> Century, there are three realities all marketers must eventually come to terms with when advertising and marketing a brand:

- Customers have very limited attention spans;
- They devote little time or effort to processing information about brands or stores; and
- They have access, desire, or ability to retrieve easily only a few bits of information about brands or stores included in their long-term memories (see Olshavsky and Granbois, 1979; Kassarian, 1981).

This chapter offers evidence that a consumer's top-of-mind brand or store-name associations with a few bits of information, such as "most reliable" and "lowest overall prices," relate strongly to the consumer's shopping and buying behaviour. For brand and store choice, Tigert (1983) refers to these few associate-to-brand or store retrievals as "hot buttons." These hot buttons are a brand's "determinant attributes" (cf. Alpert, 1971). Thus, this chapter argues and demonstrates empirically that the following view about customers is overstated and misleading:

Subjects just do not care much about products; they are unimportant to them. Although issues such as racial equality, wars, and the draft may stir them up, products do not. Hence, the emerging conclusion must be that true attitudes about these items most likely do not exist for many subjects. Bicycles, colas, and toothpaste generally do not have attitudes associated with them. To claim that attitudes about these products do exist is to claim that subjects "give a damn" about them. [Most] subjects do not. (Kassarian, 1981)

The evidence here is that customers can quickly name a brand or a store (i.e., retrieve a name from their long-term memories) when asked what brand (or store) first comes-to-mind for specific bits of information, such as, for automobiles, “most reliable” and “best styling” and, for grocery stores, “most convenient for you” and “lowest overall food prices”; and that these top-of-mind brand (or store) name responses are robustly correlated with customers’ primary brand and/or store choices.

Discovery of such information is useful for learning why some brands are appealing to some customers and unappealing to other. Furthermore, research in this chapter demonstrates that customers should not be asked for the thoughts that first come-to-mind for a given brand or store. Rather, it is recommended that marketers work backwards by asking customers to name the brand or store that first comes-to-mind for each of a limited number of bits of information – possible determinant attributes.

Listed below are two principal reasons marketers and advertisers should work backwards when seeking to discover the underlying nature of their brand. First, a customer is able automatically to evoke only a few brands or stores from long-term memory. This process is analogous to a customer going to a file drawer in her or his head and retrieving a folder containing some names and evaluations. The customer must then process and select the most representative name to answer the questions (see Grunert, 1988; 1990). Consequently, when shopping, a customer is likely to refer to a limited number of evaluative attributes – hot buttons – and select the brand or store automatically associated with these hot buttons. Second, when marketers work forwards by asking a customer what thoughts first come to mind about a given brand or store, three assumptions are made: (1) the brand or store mentioned is in the customer’s long-term memory, (2) she or he can retrieve that particular name, and (3) that name will be retrieved easily. Often all three of these assumptions are incorrect.

This chapter first presents a review of relevant psychological and consumer research literature on automatic-unconscious processing. Then formal hypotheses follow from the literature review. The third section and the appendix describe details of the method of a field study to test the hypotheses. The chapter then closes with a discussion and conclusions relevant for advertising research and marketing strategy.

## Literature review and theoretical foundations

In consumer research, Grunert (1988; 1990) emphasises that two kinds of cognitive processes can be distinguished, namely automatic and strategic processes.

1. Automatic processes are mostly unconscious. These processes are learned. They change very slowly, and are not subject to the capacity limitations of working memory.

2. Strategic processes are also known as conscious thinking. They are subject to capacity limitations, but they can be easily adapted to situational circumstances.

The vast majority of consumer decisions are in fact not based on a large degree of conscious thinking. A lot of information processing is unconscious. To name just a few examples: the cognition of outside stimuli and the decision to select them for conscious attention are unconscious processes. The integration of new information with information already stored in memory is an unconscious process. Retrieval of information from long-term memory into working memory is unconscious as well. The basic pattern is clear: unconscious information processing sets the limits within which conscious information processing can occur (Grunert, 1988).

### Defining automatic-unconscious processing

Shiffrin and Dumais (1981) provide a practical definition of automatic-unconscious processing: the activation of some concept or response whenever a given set of external initiating stimuli are presented, regardless of a subject's attempt to ignore or bypass the distraction. Based on the concept of automatic-unconscious processing, Fazio (1986) and his colleagues (Fazio, Powell, and Herr, 1983; Fazio, Powell, and Williams, 1989) propose and empirically support a model of the process by which attitudes guide behaviour. According to Fazio's attitude-accessibility model, attitudes guide appraisals of objects (such as brands and possibly retail stores) only if they have been activated from memory upon observation of the object. The model includes the view that behaviour in any given situation is a function of the individual's immediate perceptions of the attitude object in the context of the situation in which the object is encountered. "Hence, the accessibility of the attitude from memory is postulated to act as a critical determinant of whether the attitude-to-behaviour process is initiated" (Fazio et al., 1989).

### Measuring attitude-accessibility

How can attitude-accessibility be measured? Two methods demonstrate high inter-method reliabilities (Pearson  $r$ 's above .80): the subject's top-of-mind brand order mention in response to requests to name her or his most preferred brand; and the speed of responding (a latency measure) to the question of whether or not the subject likes or dislikes a brand when the brand's name is observed or mentioned (cf. Fazio, 1986).

In a related but separate stream of studies from the marketing and consumer research literature predating the more recent work in social psychology (Fazio et al., 1983; Fazio et al., 1989), several researchers (using other expressions of the same concept) hypothesise automatic-unconscious

processing as a moderating link between the relation of attitude and behaviour (cf. Axelrod, 1968; Cohen, 1966; Gruber, 1969; Haley and Case, 1979; MacLachlan, 1977; MacLachlan and LaBarbera, 1979; MacLachlan, Czepiel, and LaBarbera, 1979; Aaker, Bagozzi, Carman, and MacLachlan, 1980). Cohen (1966) is most specific in providing a theoretical rationale for a "level of consciousness concept" as an important determinant of "the amount of brand strength".

Total [unaided] recall of a brand relates to brand attitudes, which range from strongly favourable to indifferent and even to negative feelings toward the brand. Position of [unaided] recall of a brand among total brands recalled is highly related to differences within the range of brand attitudes, and therefore to brand behaviour. Total [unaided] recall can be divided into three levels of consciousness, which successfully separate widely divergent attitudes towards brands. Brands that are recalled at the first level of consciousness (earliest) are more favourably viewed than those recalled in the second level of consciousness. The brands recalled in the second level of consciousness are more favourably viewed than those recalled in the third level of consciousness. Brands that produce favourable action (those regularly used and with a high switch-to potential) will be recalled almost exclusively in the first level of consciousness.

Axelrod (1968; 1986) demonstrates that top-of-mind-awareness (TOMA) of a brand is a sensitive and stable measure that can serve as an intermediate criterion for predicting brand-choice behaviour and brand-switching behaviour. Axelrod (1968) emphasised the need for developing valid and reliable intermediate survey indicators of whether or not marketing and advertising influence product and brand-choice behaviour because of the greater expense and time necessary for experiments to measure the impact of marketing and advertising actions on such behaviour. Based on the empirical findings, he suggested top-of-mind-awareness measures as one of two useful intermediate criteria to be associated strongly with product and brand-choice behaviour (the other measure found useful by Axelrod was the constant sum method). Other researchers demonstrate a strong link between (unaided) brand awareness and market share and offer the conclusion that managers can use awareness data for measuring potential market share (Gruber, 1969; Burke and Schoeffler, 1980).

### Other measures of automatic-unconscious processing

MacLachlan (1977) and colleagues (e.g., Aaker et al., 1980) verify that response latency (defined by MacLachlan as the length of time taken by a respondent to make a paired-comparison choice) is a valid measure of strength of preference. Aaker et al. (1980) found that the combination of measuring response latency and paired comparisons is superior to constant sum measures, even though the best single indicator of brand preference is

the constant sum. "Thus, in many situations, such as telephone interviewing, where the constant sum measure is unwieldy but the recording of response latency is not, the paired comparison/response latency approach might be preferable."

Hoyer and Brown (1990) demonstrate in a controlled experiment of peanut butter brand-choice that unaided brand awareness is a dominant choice heuristic among awareness-group subjects versus subjects with no brand awareness. Subjects with no brand awareness tended to sample more brands and selected the high-quality brand on the final choice trial significantly more often than those with brand awareness. Hoyer and Brown (1990) point out that the consumer in many purchase situations is, at best, a passive recipient of product information and one who tends to spend minimal time and cognitive effort in choosing among brands (also, cf. Hoyer, 1984); they refer to several streams of research beginning with the early work of Titchener (1912, p. 33): "What ... is the feeling [i.e., that experienced upon recognition]? In experiments upon recognition it is variously reported as a glow of warmth, a sense of ownership, a feeling of intimacy, a sense of being at home, a feeling of ease, a comfortable feeling. It is a feeling of pleasure in its affective quality, diffusively organic in its sensory character."

## Research on retail store choice behaviour

In research on retail store choice behaviour, the limited value of using any intermediate criterion to indicate the impact of marketing actions on retail store choice has been implied strongly at least by Doyle (1977) and his colleagues (Doyle and Gidengil, 1977; Corstjens and Doyle, 1989). Corstjens and Doyle (1989) point out that "research into how consumers choose shops is usually dated from Martineau's (1958) concept of store image. Reviews of the stream of studies in this area have been presented by Wyckham, Lazer and Crissy (1971), May (1975), Ring (1979), Pessemier (1980), Peterson and Kerin (1983), and Downs and Haynes (1984). But despite the vast literature on store image and positioning the theoretical and practical implications are rather disappointing." As Rosenbloom (1983) concludes, direct evidence of a link between a store's image and its capacity to attract and maintain patronage is difficult to obtain. The evidence that is available is usually fragmentary and indirect and does not provide a sufficient basis for proving in a rigorous way the relationship of store image to consumer patronage.

While few would argue with Doyle (1977) and his colleagues that the most reliable means of measuring the impact of marketing actions on store choice behaviour is via field experimentation and direct sales measures, research on attitude-accessibility of retail store evaluations may indicate attitude-accessibility to be an important moderating variable affecting the

value of image measures as intermediate criteria of store choice behaviour. Consequently, the additional benefit of using valid and reliable intermediate criteria measures of store choice might be added possibly to the benefits of low cost and high speed of store attitude research.

The term "intermediate criteria" is used here as intended by Axelrod (1968), that is, a variable between marketing actions (i.e., advertising, pricing, store layout, and others) and customer purchases. An intermediate criteria is an indicator of influence of marketing actions on customer purchases. One of the limitations of the study reported in this chapter is that the study does not include a marketing experiment involving manipulating marketing actions and examining the impact of such manipulations on both the intermediate criteria of attitude accessibility and customer purchases. Our aim is to confirm and extend the work of several scholars (cf. Cohen, 1966; Axelrod, 1968; Tigert, 1983; Kopp, Eng and Tigert, 1991) that customers' unaided top-of-mind retrieval of a brand or store name in response to a general category question or evaluative attribute question is associated positively and strongly with their primary purchase choice of brand or store.

Some indication of the substantial influence of attitude-accessibility as a moderating variable between store image and store choice is provided by the work of Tigert (1983). For three sets of studies of retail food, fast food, and do-it-yourself primary store choice, Tigert (1983) asked respondents, "Please tell me all things considered, the single most important reason you shop at the store where you shop most often." The respondents were also asked to name the second most important reason. Tigert (1983) used this open-ended, direct questioning method to learn the determinant attributes for store choice for each store among sets of competing stores; he used Alpert's (1971) definition of determinant attributes, "those attributes projected by the product's [store's] image which lead to the choice of the product [store] may be called determinant, since they determine preference and purchase."

For retail, food store-choice data collected in Toronto, Cleveland, and Tampa, Tigert (1983) performed a comparative analysis between the proportions of total mentions of attributes using the open-ended approach and logit coefficients estimated from forced-choice store ratings data for the same sets of competing stores. He reports that both approaches identified geographical convenience as the most determinant attribute. In all three cities, low prices was the second strongest attribute in the direct, questioning data, but in Tampa, friendly, courteous service ranked second in the logit analysis, followed by price. Tigert (1983) concludes that the high correlations ( $r > .80$  for the data from two of the three cities) between direct-questioning and the rating data indicate "that the direct-questioning technique is a reasonably valid method of identifying determinant attributes [of store choice]."

## Hypotheses

(H1) The most accessible attitudes that associate a given store with evaluative store attributes are highly predictive of primary store choice. Based on the discussion in the literature review, the primary objective of this study is to investigate the hypothesis (H1) that the most accessible attitudes that associate a given store with evaluative store attributes are highly predictive of primary store choice. Following the insights of Grunert (1988) and the research streams reviewed from psychology (e.g., Fazio et al., 1989) and marketing (e.g., Cohen, 1966), it is proposed that retail store customers are able automatically to access and retrieve from their long-term memories for associating first with evaluative attributes (e.g., lowest overall food prices, most convenient location, or largest selection of foods) and that such automatic associations accurately predict primary store choice, that is, the store where the customers shop for most of their product needs.

If the empirical study confirms the first hypothesis, a series of propositions related to the first hypothesis may be developed and tested as a set of additional hypotheses on attitude-accessibility and primary store choice. For example, for retail food stores, (H2) a store that dominates competing stores in being named most often by customers in a market area as their primary store will be the store named most often first (activated from memory) for one or both of the two most determinant attributes found by Tigert (1983): most convenient location and lowest prices. While accessibility to attitudes toward other attributes (e.g., quality, selection variety, speed of checkout) are likely to be associated with primary store choice, a given store identified most often by customers in a market area to be their primary store would also need to dominate its competitors in being named earlier when these customers are asked about store attributes found to be the most determinant of supermarket store choice.

However, not all competing stores are likely to be retrieved by their primary customers for specific evaluative attributes. For example, a store having noticeably higher overall food prices than its competitors' is unlikely to be retrieved by its primary store customers when asked which store first comes-to-mind as offering the lowest overall food prices.

The practical value of testing the automatic-unconscious processing among customers in linking store names to evaluative attributes is to learn the extent that such links are contributing or hurting the store in sustaining its primary store customer base. That is, which automatic links between the store and evaluative attributes are being made by customers that really do contribute to sustaining the store's share of primary store customers? It is demonstrated herein that (1) primary customers of different stores make automatic links to different evaluative attributes with their respective primary stores and that (2) such linkages provide accurate predictions of primary store choice.

(H3) Strong positive correlations exist between positive evaluative attributes and primary choice. The identification of a customer's primary store is associated positively with accessing the same store from his or her memory for positive evaluative attributes. Thus, (H3) strong positive correlations are predicted among the store being named for positive evaluative attributes and being named as the subject's primary shopping store.

(H4) A few and similar determinant attributes are useful in predicting a substantial share of the variance. Consequently, (H4) a few and similar determinant attributes are useful in predicting a substantial share of the variance of primary store choice for each store in a set of competing stores. These two hypotheses – H3 and H4, reflect the proposition that for store X to be identified by some customers as their primary store, then store X must be highest in accessibility for one or more positive determinant attributes even when only a few customers name store X as their primary store. Thus, customers identifying store X as their primary store will be likely to name store X first as having the lowest overall food prices, even when most other customers identify the same store as having the highest overall food prices.

## Method

The hypotheses were tested using survey data collected from a telephone survey completed in 1989. A representative sample of 400 households was drawn from households with telephones from a small city (a population of 75,000) located in the southern region of the United States. Random-digit-dialing of the last four telephone numbers among banks of household telephone exchanges known to be in use was completed.

Adult female or male household members responsible for doing most of the shopping for groceries to be consumed at home completed the interviews. Four attempts during early evening hours and on Saturdays and Sundays were used to reach each household included in the sample. Adult members of 73 percent of the households reached agreed to complete the survey. A total of 301 useable interviews were completed.

## Results

A total of 11 supermarkets were identified by one or more respondents as their primary store. However, as summarised in Table 2.1, one store, Super One, was identified by 47 percent of the 301 respondents as their primary store, and the three stores identified most often were the primary stores for 80 percent of the respondents. Table 2.1 summarises the details on store name and evaluative attribute accessibility for the three stores named by most of the respondents as their primary stores.