

**Script-elicitation and script organization within the
consumer decision-making context for the acquisition of
major household appliances**

by

Aletta Catharina Erasmus (neè Du Plessis)

Submitted in partial fulfillment of the requirements for the degree

Ph D

in the

Faculty of Natural Sciences and Agriculture
Department of Consumer Science

University of Pretoria

April 2002

PROMOTER: **Prof Elizabeth BOSHOFF** (University of Pretoria)
CO-PROMOTER: **Prof GG ROUSSEAU** (University of Port Elizabeth)

ACKNOWLEDGEMENTS

My sincerest appreciation to the following individuals and organisations for their contribution to the successful completion of this study:

- ◆ Professor Elizabeth Boshoff, promoter, for her support, encouragement and professional guidance during the duration of the project.
- ◆ Professor Deon Rousseau, co-promoter, for the positive way in which he contributed to the project.
- ◆ Mr. Rob Marais and Whirlpool SA for the financial support and encouragement, but especially for the company's support of the activities of the Department of Consumer Science, UP as an academic institution that could make a difference to the well-being of consumers and industry in general.
- ◆ Mr. Henk Theron and Annique for the financial contributions and encouragement.
- ◆ Dr Hermie Borraine, Department of Statistics, UP, for her enthusiasm, her statistical advice and guidance with the data analysis and interpretation.
- ◆ Mrs. Rina Owen, Division for Research Support, UP, who has a fine sense of humor and a very special gift to make a researcher feel at ease so that one does not get lost in your own data.
- ◆ Prof Piet de Kock, a special friend, for language editing.
- ◆ My husband, Nico for his understanding, loyalty and support when it was needed most.
- ◆ Our children, Lourens, Tania and Ronel for their continual support, encouragement and prayers.
- ◆ Wonderful friends for continual support

And above all.....

“Thank you to the Lord, for He is good!”

Ps 107:1

ABSTRACT

Script-elicitation and script organization for the acquisition of major household appliances within the consumer decision-making context

by

Aletta Catharina Erasmus (neè Du Plessis)

Promotor: **Prof Dr Elizabeth Boshoff** (University of Pretoria)

Co-promotor: **Prof Dr GG Rousseau** (University of Port Elizabeth)

Department of Consumer Science
University of Pretoria
for the degree PhD

The acquisition of major household appliances - in terms of the importance of the purchase, the consequences and impact of purchase decisions - is generally described as complex, high-risk decisions that can create a considerable amount of confusion and tension. The purchasing process is therefore generally approached with uncertainty and rather cautiously. Reports on the ways in which consumers address these difficulties, are however, ambiguous and conflicting. Some reports indicate more extensive information seeking and evaluation while others indicate that consumers handle complex decisions by reverting to more simplistic decision-making strategies.

Traditional consumer decision models which are generally used to direct and structure research in this regard, tend to portray the process of proceeding through a major purchase decision as a logical problem solving matter. In these models, the decision-making process is depicted as multi staged and complex. Objections against the use of traditional consumer decision-making models for all purchasing events, as well as conflicting evidence in terms of how consumers approach complex decision-making in the general instigated the investigation of the implementation of scripts as a more realistic portrayal of specific purchasing events such as the

acquisition of major household appliances. Although the script concept is generally accepted to be a valid construct with wide application in disciplines such as cognitive psychology, little has been done to develop and explore the potential of buying/shopping scripts and to implement it in practice since the first initiatives in the 1980's.

The research was explorative in nature and followed an ideographic approach using research techniques that were qualitatively orientated. Data-collection was done in five phases and multiple data-collection techniques were used. Data-collection was closely interwoven with data analysis so that results could be used to direct subsequent data-collection to address shortcomings in time.

The attempt to elicit and generate a script for purchasing major household appliances within the consumer decision-making context, proved successful. The selection, combination and order of executing the various script-elicitation techniques were effective in eliciting the relevant script norms and in generating a script that coincides with the basic properties and structural characteristics of a script.

The contribution of this study is twofold: in the field of consumer behaviour it firstly provides insight regarding complex consumer decision-making, specifically concerning the acquisition of major household appliances. Secondly, the study, done within the discipline of consumer science, involved theory from the field of cognitive psychology to suggest alternative frameworks to portray consumer decision-making. Expanding this principle to other commodities may entail many advantages for consumer science, retail and industry in terms of consumer behaviour and marketing because shopping scripts portray the reality of consumer decision-making behaviour.

In conclusion, the advantages of a script as a portrayal of a specific purchasing event are explained: in terms of an improved understanding of consumer behaviour and to encourage more focused strategies by professionals in the field of consumer science, retail and industry to address consumers' needs.



**Die onttrekking en organisering van 'n teks
vir die verkryging van groot huishoudelike toerusting
binne 'n verbruikersbesluitnemingsraamwerk**

deur

Aletta Catharina Erasmus (neë Du Plessis)

Promotor: **Prof Dr Elizabeth Boshoff** (Universiteit van Pretoria)

Mede-promotor: **Prof Dr GG Rousseau** (Universiteit van Port Elizabeth)

Departement Verbruikerswetenskap
Universiteit van Pretoria
vir die graad Ph D

Die aankoop van groot huishoudelike toerusting word in die algemeen in terme van die belangrikheid van die aankoop, die gevolge en impak van die aankoopbesluit as komplekse, hoërisiko-aankope beskou. Omdat die besluitnemingsproses tot heelwat verwarring en spanning kan lei, word dit gewoonlik met onsekerheid en omsigtigheid benader. Navorsing oor hoe verbruikers hierdie probleme hanteer, bied egter teenstellende resultate. Terwyl sommige op meer intense inligtingsoeke en produkevaluering voor besluitneming dui, is daar ander wat toon dat verbruikers hulle tot eenvoudiger besluitnemingstrategieë wend.

Tradisionele verbruikersbesluitnemingsmodelle stel die proses van komplekse verbruikersbesluitneming oorwegend as logies en beredeneerde probleemoplossing voor wat in verskillende stadia verdeel kan word. Besware teen die algemene gebruik van hierdie modelle om aankoopgebeure voor te stel, en teenstellende bewyse ten opsigte van die wyse waarop verbruikers komplekse verbruikersbesluite hanteer, het aanleiding gegee tot 'n ondersoek na die moontlikheid om tekse/geskrifte as meer realistiese voorstellings van spesifieke aankoopgebeure soos dië vir die aankoop van groot huishoudelike toerusting te ontwikkel.

Hoewel tekse as 'n geldige konstruk in verskeie dissiplines soos kognitiewe sielkunde erken en gebruik word, is min gedoen om die potensiaal van aankooptekse verder te ontgin en ontwikkel

sedert die eerste inisiatiewe op hierdie gebied in die 1980's. Die navorsing was verkennend van aard en het 'n ideografiese benadering gevolg en navorsingstegnieke geïmplimenteer wat kwalitatief van aard is om van meet af inligting in te win wat spontaan vanuit verbruikers se ervaringsveld gestimuleer is. Data-opname is in vyf fases gedoen en veelvoudige data-insamelingstegnieke is gebruik. Data is onmiddelik na insameling verwerk sodat die resultate in opeenvolgende insamelingssessies in aanmerking geneem kon word om leemtes aan te spreek.

'n Teks vir die aankoop van groot huishoudelike toerusting binne verbruikersbesluitnemingsverband is met sukses gegenereer. Uit die voorgestelde kombinasie van data-insamelingstegnieke kon die toepaslike norme geïdentifiseer word en 'n teks gegenereer word wat voldoen aan die basiese eienskappe en strukturele kenmerke wat vir tekse voorgehou word.

Die bydrae van hierdie studie is tweeledig: eerstens bied dit op die gebied van verbruikersgedrag groter insig met betrekking tot komplekse verbruikersbesluitneming, spesifiek met betrekking tot groot huishoudelike toerusting waarvoor daar min teorie bestaan. Tweedens betrek die studie, wat binne die dissipline van verbruikerwetenskap deurgevoer is, teorie uit die kognitiewe sielkunde om tekse as nuwe raamwerke voor te stel om verbruikersbesluitneming uit te beeld. Die toepassing hiervan op ander kommoditeite kan baie voordele inhou vir verbruikerswetenskap, die kleinhandel en industrie omdat daar op hierdie manier nader aan die werklikheid van verbruikersgedrag gekom word.

In die verhandeling word ten slotte die voordele van die gebruik van 'n teks om 'n spesifieke aankoopgebeurtenis voor te stel bespreek: in terme daarvan om verbruikersgedrag beter te verstaan en om meer gefokusde strategieë deur die industrie, kleinhandel en professionele persone in die studiegebied van verbruikerswetenskap aan te moedig ter wille daarvan om verbruikersbehoefte aan te spreek.

TABLE OF CONTENTS

| | |
|--|-----------|
| CHAPTER 1: PRESENTATION OF THE DISSERTATION | 1 |
| STRUCTURE OF THE DISSERTATION..... | 1 |
| LITERATURE REVIEW | 2 |
| RESEARCH APPROACH AND METHODS..... | 2 |
| STATISTICAL ANALYSIS AND RESULTS..... | 3 |
| LIST OF REFERENCES FOR THE DISSERTATION..... | 3 |
| REFERENCE LIST | 3 |
| CHAPTER 2: INTRODUCTION AND STATEMENT OF THE PROBLEM | 4 |
| INTRODUCTION | 4 |
| THE NEED FOR AN IMPROVED UNDERSTANDING OF CONSUMERS' ACQUISITION OF HOUSEHOLD APPLIANCES | 7 |
| OBJECTIVES..... | 9 |
| REFERENCE LIST | 10 |
| CHAPTER 3: CONSUMER DECISION-MAKING MODELS WITHIN THE DISCIPLINE OF CONSUMER SCIENCE: A CRITICAL APPROACH | 13 |
| ABSTRACT | 13 |
| OPSOMMING..... | 14 |
| INTRODUCTION | 15 |
| TRADITIONAL MODELS OF CONSUMER DECISION-MAKING | 16 |
| Background | 16 |
| CONSUMER DECISION-MAKING MODELS CRITICIZED..... | 17 |
| Rational consumer decision-making criticized..... | 17 |
| A generalization of the consumer decision-making process | 19 |
| Comments on the detail included in consumer decision-models..... | 20 |
| Presumed decision-making strategies..... | 22 |
| Logical positivism used as theoretical approach to develop traditional consumer decision-making models | 23 |
| Concluding remark..... | 23 |

CHAPTER 3 *continued...*

| | |
|--|----|
| IMPLICATIONS OF CRITICISM FOR CONSUMER DECISION-MAKING RESEARCH..... | 24 |
| Introduction | 24 |
| Suggestions for research based on the criticism of traditional consumer decision-making models | 24 |
| CONCLUSION..... | 27 |
| REFERENCE LIST | 29 |

CHAPTER 4: THE POTENTIAL OF USING SCRIPT THEORY IN CONSUMER BEHAVIOUR

| | |
|---|-----------|
| RESEARCH | 32 |
| ABSTRACT | 32 |
| <i>OPSOMMING</i> | 33 |
| INTRODUCTION | 34 |
| BACKGROUND OF THE SCRIPT THEORY | 36 |
| SCRIPTS AS A SPECIFIC FORM OF SOCIAL SCHEMATA | 37 |
| Categories of schemata | 37 |
| Definition and discussion of relevant and related concepts | 37 |
| EMPIRICAL EVIDENCE FOR SCRIPTS | 41 |
| SCRIPTS AS PERFORMANCE STRUCTURES AND IN TERMS OF INFORMATION PROCESSING CAPACITY | 41 |
| PROPERTIES AND STRUCTURAL CHARACTERISTICS OF SCRIPTS..... | 42 |
| RELEVANT LEARNING THEORY | 44 |
| RATIONALE FOR THE ELICITATION OF SPECIFIC SHOPPING SCRIPTS | 45 |
| CONCLUSION..... | 47 |
| REFERENCE LIST | 48 |

CHAPTER 5: JUSTIFICATION OF A SCRIPT-ELICITATION PROCEDURE FOR THE

| | |
|---|-----------|
| ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES | 51 |
| ABSTRACT | 51 |
| <i>OPSOMMING</i> | 52 |
| INTRODUCTION | 53 |
| SCRIPT DEVELOPMENT IN MEMORY | 53 |
| THEORY ON SCRIPT ACTIVATION AND ELICITATION | 54 |
| Different perspectives of script activation in memory | 54 |
| Different approaches to script activation | 55 |
| Stages of script-elicitation and script generation | 56 |
| PROCEDURE FOR SCRIPT-ELICITATION | 57 |
| Theoretical approach | 57 |
| Sampling..... | 58 |
| Multiple data-collection techniques | 59 |

CHAPTER 5 *continued*...

| | |
|--|----|
| DATA-COLLECTION STAGES AND PROCEDURES | 60 |
| Motivation for different data-collection stages..... | 60 |
| Data-collection stages..... | 60 |
| <i>Stage 1: Script-elicitation through a concept driven, written reconstruction technique</i> | 60 |
| <i>Stage 2: Script-elicitation through a concept driven, oral reconstruction technique</i> | 61 |
| <i>Stage 3: Elicitation of script sub-actions and role expectations, through a data driven, discrimination technique</i> | 61 |
| <i>Stage 4: Elicitation of sub-actions and role expectations through a data driven, written reconstruction technique</i> | 62 |
| <i>Stage 5: Focus-group discussions</i> | 63 |
| PROCEDURE FOR SCRIPT GENERATION | 65 |
| Data analysis and interpretation..... | 65 |
| Script generation..... | 67 |
| Script evaluation according to the properties and characteristics of a script..... | 67 |
| ISSUES OF TRUSTWORTHINESS AND AUTHENTICITY | 69 |
| CONCLUSION..... | 71 |
| REFERENCE LIST | 72 |

CHAPTER 6: ELICITATION AND GENERATION OF A SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES WITHIN A CONSUMER DECISION-MAKING

| | |
|--|-----------|
| CONTEXT | 76 |
| ABSTRACT | 76 |
| OPSOMMING..... | 77 |
| INTRODUCTION | 78 |
| RESEARCH DESIGN..... | 79 |
| Research objective and sub-objectives..... | 79 |
| Conceptual framework and definition of concepts..... | 80 |
| PROCEDURE..... | 82 |
| Theoretical approach | 82 |
| Sample framework..... | 82 |
| Data-collection site..... | 84 |
| Data-collection and analysis | 84 |
| <i>Stage 1: Script-elicitation through a concept driven, written reconstruction technique</i> | 85 |
| <i>Stage 2: Script-elicitation through a concept driven, oral reconstruction technique</i> | 86 |
| <i>Stage 3: Elicitation of script sub-actions and role expectations, through a data driven discrimination technique</i> | 86 |
| <i>Stage 4: Elicitation of sub-actions and role expectations through a data driven, written reconstruction technique</i> | 88 |
| <i>Stage 5: Focus-group discussions</i> | 90 |

CHAPTER 6 *continued* ...

| | |
|---|-----|
| DATA ANALYSIS AND RESULTS | 91 |
| Isolation of script norms and elements and ordering of actions | 91 |
| Stage 1: Script-elicitation through a concept driven, written reconstruction technique | 91 |
| Stage 2: Script-elicitation through a concept driven, oral reconstruction technique | 93 |
| Stage 3: Elicitation of script sub-actions and role expectations, through a data driven discrimination technique | 95 |
| Stage 4: Determining the set quality of the script through a data driven, written reconstruction technique | 96 |
| Elicitation of role schemata | 97 |
| Stage 5: Focus-group discussions | 100 |
| ORGANIZATION OF SCRIPT PROTOCOLS | 102 |
| Identification of strength of actions | 102 |
| Empirical script protocols for stages 1 to 4 | 102 |
| Organization of a single empirical script protocol | 104 |
| Theoretical script | 106 |
| Discussion of the script | 106 |
| CONCLUSION | 110 |
| Properties of the script | 110 |
| Structural characteristics of a script | 112 |
| Recommendations | 113 |
| REFERENCE LIST | 114 |

| | |
|---|------------|
| CHAPTER 7: THE POTENTIAL OF A SCRIPT TO PORTRAY THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES IN CONSUMER BEHAVIOUR RESEARCH | 117 |
| ABSTRACT | 117 |
| OPSOMMING | 118 |
| INTRODUCTION | 119 |
| OBJECTIVES | 120 |
| CONSUMERS' APPROACH TO THE ACQUISITION OF ELECTRICAL HOUSEHOLD APPLIANCES | 120 |
| Introduction | 120 |
| Electrical household appliances are no longer perceived to be luxury items | 120 |
| Complexity of the purchase decision | 121 |
| Risk perception as a result of uncertainty involved | 121 |
| Confusing evidence regarding consumers' coping with the decision-making process | 122 |
| THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES WITHIN A TRADITIONAL CONSUMER DECISION-MAKING FRAMEWORK | 125 |

CHAPTER 7 *continued* ...

THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES WITHIN A SCRIPT

| | |
|---|------------|
| FRAMEWORK..... | 128 |
| A proposal to use scripts to reflect purchasing events..... | 128 |
| A theoretical script for the acquisition of major household appliances..... | 129 |
| Interpretation of the script..... | 132 |
| ADVANTAGES OF A SCRIPT AS PORTRAYAL OF THE DECISION-MAKING EVENT | 136 |
| Unique properties and characteristics of a script..... | 136 |
| Script reveals issues of concern | 138 |
| CONCLUSION..... | 140 |
| REFERENCE LIST | 141 |
| CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS | 146 |
| INTRODUCTION | 146 |
| CONCLUSIONS..... | 147 |
| RECOMMENDATIONS | 149 |

LIST OF FIGURES

LIST OF TABLES

| | | |
|-------------------|--|------------|
| TABLE 5.1 | SUGGESTED PRESENTATION OF ACTION FREQUENCIES | 67 |
| TABLE 6.1 | PROFILE OF PARTICIPANTS FOR THE VARIOUS SCRIPT ELICITATION STAGES | 83 |
| TABLE 6.2 | EXAMPLES OF CLUSTERED ACTION STATEMENTS | 94 |
| TABLE 6.3 | RESULTS: STAGE 1 (CONCEPT DRIVEN, WRITTEN RECONSTRUCTION TECHNIQUE) | 95 |
| TABLE 6.4 | RESULTS: STAGE 2 (CONCEPT DRIVEN, ORAL RECONSTRUCTION TECHNIQUE) | 96 |
| TABLE 6.5 | RESULTS: STAGE 3 (DATA DRIVEN DISCRIMINATION TECHNIQUE) | 97 |
| TABLE 6.6 | RESULTS: STAGE 4 (DATA DRIVEN, WRITTEN RECONSTRUCTION TECHNIQUE) | 99 |
| TABLE 6.7 | RESULTS STAGES 2 TO 5: INDICATION OF ROLE ACTIONS | 101 |
| TABLE 6.8 | CONCLUDING STATEMENTS OF FOCUS-GROUPS | 102 |
| TABLE 6.9 | PARAMETERS FOR INDICATION OF ACTION STRENGTHS IN THE SCRIPT PROTOCOLS | 104 |
| TABLE 6.10 | PRELIMINARY EMPIRICAL SCRIPT PROTOCOLS: STAGES 1 TO 4 | 105 |
| TABLE 6.11 | THEORETICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES | 109 |
| TABLE 7.1 | PARAMETERS FOR INDICATION OF ACTION STRENGTHS IN THE SCRIPT PROTOCOLS | 132 |
| TABLE 7.2 | THEORETICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES | 134 |

LIST OF FIGURES

| | |
|--|------------|
| FIGURE 6.1: INSTRUCTIONS FOR SCRIPT-ELICITATION THROUGH A CONCEPT DRIVEN, WRITTEN RECONSTRUCTION TECHNIQUE (STAGE 1) | 86 |
| FIGURE 6.2: INSTRUCTIONS FOR ELICITATION OF SCRIPT SUB-ACTIONS AND ROLE EXPECTATIONS THROUGH A VISUAL PROMPTING TECHNIQUE (STAGE 3) | 89 |
| FIGURE 6.3: INSTRUCTIONS FOR ELICITATION OF SUB-ACTIONS AND ROLE EXPECTATIONS THROUGH A WRITTEN RECONSTRUCTION TECHNIQUE (STAGE 4) | 91 |
| FIGURE 6.4: INTEGRATED EMPIRICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES | 107 |
| FIGURE 7.1: EMPIRICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES | 133 |

1

PRESENTATION OF THE DISSERTATION

STRUCTURE OF THE DISSERTATION

The dissertation is presented in the form of articles and is presented in the following chapters:

- CHAPTER 2: Introduction and statement of the problem**
- CHAPTER 3: Consumer decision-making models within the discipline of Consumer Science: a critical approach**
- CHAPTER 4: The potential of using script theory in consumer behaviour research**
- CHAPTER 5: Justification of a script-elicitation procedure for the acquisition of major household appliances**
- CHAPTER 6: The elicitation and generation of a script for the acquisition of major household appliances within a consumer decision-making context**
- CHAPTER 7: The potential of a script to portray the acquisition of major household appliances in consumer behaviour research**
- CHAPTER 8: Conclusion and recommendations**

This dissertation deviates from the traditional format for dissertations. It is presented in the form of a sequence of articles where every article represents a significant part of the research process from the motivation for the study up to the results and conclusive remarks. Having discussed the motivation for the research and research objectives in chapter 2, every one of the following chapters/articles can be considered independent entities in terms of their topics and contents. For the purpose of conformity, the style and layout as prescribed for the **South African Journal of Family Ecology and Consumer Sciences** were used for the technical presentation of the articles.

The published articles included in the dissertation were peer-reviewed before publication and are contained in the published format in annexure A. The unpublished articles have been submitted for publication but won't necessarily be published at the time when the thesis is submitted for examination.

One of the major challenges of presenting the dissertation in this format was that the length of individual chapters/articles was restricted in terms of the authors' guidelines of the scientific journal. This necessitated careful pre-meditation and control of structure and content. Chapters 5 and 6 eventually exceeded the recommended length for articles due to difficulty to reduce content without loss of essential information.

LITERATURE REVIEW

The relevant literature and reference lists are contained in each article instead of providing an integrated literature review and reference list for the study as a whole.

RESEARCH APPROACH AND METHODS

A study that intends to elicit a script for the acquisition of major household appliances is explorative in nature. The voluntaristic assumption was made that consumers are active agents who interact with their environments and thereby gain experience, generate knowledge, beliefs and intentions, which direct subsequent consumer behaviour. An emic, ideographic approach of enquiry was used where the importance of particular decisive events/actions were investigated rather than to make an attempt to generalize the findings to all purchasing events (Denzin & Lincoln, 2000:10, 158; Corsini, 1987:563). In this case an ideographic approach also referred to the rigorous analysis of data concerning the event of purchasing major household appliances in an attempt to formulate interpretive statements pertaining to the specific decision-making event (for a specific appliance, namely a washing machine) and to the class of phenomena represented by the event (major electrical household appliances). An ideographic study is characterized by a smaller sample and the use of multiple data-collection techniques (Denzin in Corsini, 1994:205).

Research techniques typical of the post positivist paradigm, namely projective techniques, interviews and focus-group discussions were used during five separate data-collection stages (Denzin & Lincoln, 2000:9,10; Hudson & Murray, 1986:347). A post positivist research approach was followed with the intention to construct a cognitive representation of consumers' actions from the point of view of the consumer during a specific purchasing event rather than to establish law like associations between data and to generalize in terms of all purchasing situations and across all consumer types. The research thus aimed to *understand the unique rather than the general* (Denzin & Lincoln, 2000:9; Nau, 1995:1; Hudson & Murray, 1986:343).

Data-collection commenced in August 2001 (stage 1) and was completed in February 2002 when the focus-group discussions were held to inter alia reflect upon the results obtained through the data of the previous data-collection stages.

STATISTICAL ANALYSIS AND RESULTS

Content analysis of data collected during every script-elicitation stage was done immediately before proceeding with the following stage that applied a different data-collection technique. Script norms and script characteristics unfolded during the analysis and interpretation of data towards the eventual generation of an empirical as well as a theoretical script. Script organization required simple statistical calculations to identify the position and sequence of script actions and to determine the level of agreement of the results of the various script-elicitation techniques. This is perfectly compatible with a post positivistic orientation (Denzin & Lincoln, 2000:9).

LIST OF REFERENCES FOR THE DISSERTATION

Due to the format of this dissertation, every chapter/article contains the list of references relevant to the specific chapter, instead of having an integrated list of references for the study as a whole.

REFERENCE LIST

- CORSINI, R.J. 1987. *Concise Encyclopedia of Psychology*. New York. John Wiley.
- DENZIN, NK & LINCOLN, YS. 2000. *Handbook of Qualitative Research*. 2 nd ed. London. Sage.
- HUDSON, LA & MURRAY, JB. 1986. Methodological limitations of the hedonic consumption paradigm and possible alternative: a subjectivist approach. *Advances in Consumer Research* XIII:343-348. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- NAU, DS. 1995. Mixing methodologies: can bimodal research be a viable post-positivist tool? *The Qualitative Report* 2(3):1-5. <http://www.nova.edu/ssss/OR/QR2-3/NAU.HTML>

2

INTRODUCTION AND STATEMENT OF THE PROBLEM

INTRODUCTION

Household appliances undoubtedly signify the extensive and impressive technological progress of the past few decades. Induction hobs, combination convection-microwave ovens, pyrolytic and catalytic self cleaning ovens, frost free household fridge-freezers and front loading automatic washing machines with variable programmes and sensitive touch control panels are only a few of the exciting products that await consumers in-store. Despite the undeniable impact of technology and especially household appliances on households in recent times, an understanding of consumers' choice processes in this regard remains fragmented and under researched (Venkatesh, 1985:193).

Arguments that could be used in support of an increased understanding of, and consequently more research in this particular field, are *inter alia* that:

Household appliances are no longer perceived to be luxury items. Appliances have a major impact on modern households and fulfill specific needs and goals that can not be ignored, for example improving task performance, contributing to cost savings and efficient use of time and human energy, to communicate emotions, to express family related values and to alter life styles. Many household decisions eventually evolve around household technology or at least the availability thereof (Badami & Chibat, 1998:36; McMeekin & Tomlinson, 1998:873; Cooper, 1994:4,12; Burton, 1992:383-394; Fournier, Antes & Beaumier, 1992:329-332; Joag, Gentry & Hopper, 1985:585, 586; Venkatesh, 1985:193). Consumers' needs in terms of household technology ultimately depend on circumstances and consumer characteristics but the increased importance and contribution of household appliances in modern households, cannot be denied.

Household technology has become advanced yet also more complex, leading to a bigger range and more sophisticated appliances to choose from. Consumers' choices have thus become more exciting, but also more problematic. Hill and King (1989:144) state that advances in new product technology have resulted in a well documented "information vacuum" that complicates consumer decision-making. Even higher educated consumers require increased cognitive effort to cope with continual change in household technology and consumers are seldom fully aware of the variety awaiting them in-store when they are confronted with a purchase (Bettmann, 1993:8; Fournier et

al, 1992:329–332). This has resulted in a situation where consumers often consider themselves incapable of evaluating the performance characteristics of new appliances (Niemeyer, Rai & Kean, 1997:46, 49; Hill & King, 1989:144).

The long-term implications of ownership of appliances have become a major issue. Replacements and repairs to household appliances often imply an outlay of large sums of money at unexpected times (Ahluwalia & Shackford, 1998:21-22). According to Srinivasan (1993:288) the purchase of an expensive product is usually characterized by an extensive decision-making process because consumers go through intensive cognitive effort while processing external information and all the influences imposed on them. The situation is further complicated (as seems typical during the acquisition of household appliances) when consumers are faced with limited and incomplete information to guide their decisions (Burke, 1990:250). Consumers consequently often consciously neglect objective evaluation criteria by choosing expensive products assuming that higher prices are indicative of high quality (Kanwar & Pagiavlas, 1992:589-595). Because higher prices simultaneously indicate affordability and status, not only rational, but emotional aspects also become prominent during the decision-making process (Schiffman & Kanuk, 2000:441).

Globalization has resulted in South African consumers having access to the same appliances (brand name and models) as in developed first world countries. Although there is no doubt that consumers find new ranges of appliances exciting, they generally experience more pressure when there are so many alternatives to choose from (Cooper, 1994:14; Dhar, 1992:735; Burke, 1990:253). Product variety, differences in price, design, functional aspects and performance characteristics therefore create confusion and complicate the decision-making process (Du Plessis & Rousseau, 1999:82-83).

In most cases when consumers are faced with the task of purchasing an appliance, explicit, well-defined probabilities rarely exist and are difficult to formulate. This creates uncertainty with regards to the outcome and specific benefits that will emerge from their purchase decisions. For products such as appliances that are expensive, that are regarded as socially visible products, that have to last for a considerable length of time and that are not bought frequently, consumers' uncertainties result in anxiety over the possibility of making errors that might negatively reflect on their ability to handle the purchasing decisions (Ungerer, 1999:28-30; McMeekin & Tomlinson, 1998:875; Hansen, 1992:175; Kanwar & Pagiavlas, 1992:589-595; Wright, Claiborne & Sirgy, 1992:316; O'Shaughnessy, 1985:310). As a result of the complexity of the purchase decision and the risk involved when purchasing major household appliances, consumers seldom make purchases without experiencing cognitive dissonance (Hansen, 1992:175; O'Shaughnessy, 1985:310). This often leads to reliance upon surrogate indicators such as specific brand names, higher priced appliances or impressive product features that could in some way serve as a defense mechanism (Toivonen, 1994:46; Wright *et al*, 1992:311-313).

From what have been reported with regards to the purchasing of complex, high-risk products, and accepting that the purchasing process is generally approached with caution, there is confusing evidence of how consumers handle complex decisions. Some reports indicate more extensive information search and product evaluation (Meyers-Levy & Maheswaran, 1990:532) indicating that purchases are made over a longer period of time to allow for more intensive information seeking and the evaluation of potentially suitable alternatives (Du Plessis & Rousseau, 1999:82; Bozinoff & Roth, 1983:655; Bozinoff, 1982:481). Other studies, however, indicate that consumers handle complex decisions by reverting to more simplistic decision-making strategies. It has for example been reported that for many products, consumers spend very little time or do not even engage in some of the sequential activities suggested as being important during decision-making. Many consumers in fact do little or no pre purchase information search and do the minimum planning prior to entering retail stores (D' Astous, Bensouda & Guindon, 1989:433).

Conflicting evidence on consumer decision-making strategies resulted in the so-called *rational* consumer becoming the subject of critics (D' Astous *et al*, 1989:433, Zajonc & Markus, 1982 in Lofman, 1991:729). Inevitably, traditional consumer decision-making models that were originally compiled with the intention to portray the consumer decision-making process and to reflect the various steps of the decision-making process became a focus of dispute because of their predominant positivist, rational approach.

Questions that came to mind, were:

- How do consumers handle the acquisition of major household appliances to eventually conclude decisions with potentially satisfying outcomes?
- Whether consumers in general are able to make informed choices from the spectrum of household appliances that are available in the market place. If an attempt is made to study consumers' acquisition of major household appliances, how could researchers structure and approach such studies taking into consideration that traditional consumer decision models probably do not satisfactorily reflect what happens in practice and keeping in mind that there is conflicting evidence regarding consumers' approach to and dealing with the purchasing task?
- Whether an alternative to traditional consumer decision models could be found/generated to serve as a more realistic portrayal of the consumer decision-making process so that research in this regard could be approached and structured more satisfactorily.

THE NEED FOR AN IMPROVED UNDERSTANDING OF CONSUMERS' ACQUISITION OF HOUSEHOLD APPLIANCES

An improved understanding of consumers' approach of the acquisition of major household appliances would be of interest to

- **Industry.** Modern communication such as informative web-site facilities are designed through the initiatives of industry and driven through corporative initiatives. Although there is ample chance for communication between consumers and salespeople (who act on behalf of, and represent the retail sector) on an *interpersonal* (e.g. with salespeople) and *impersonal* level (marketing efforts through mass media such as advertisements) (Schiffman & Kanuk, 2000:229), there is limited interaction between consumers and industry. An improved understanding of consumers' approach to the acquisition of major household appliances could be of use to industry in terms of their marketing strategies, the level of information and attention given and the supply of goods and services to the consumer market.
- **Retail.** In South Africa, retail (specifically salespeople), plays a prominent role in the sales of household appliances and in the interaction with consumers because catalogue and internet shopping has still not come off the ground. An improved understanding of consumers' acquisition of household appliances could contribute to constituting a consumer friendly in-store environment where the type of service that is provided and the interaction between salespeople and consumers would be in the interest of and to the benefit of all parties involved.
- **Consumers.** Limited experience of complex, expensive and highly sophisticated products cause consumers to be easy prey of their own ignorance, confusion or exploitation in the market place (due to a lack of information rather than deliberate misleading). By being able to detect shortcomings in consumers' handling of purchasing decisions, attempts could be made to assist consumers to make well informed, properly deliberated decisions that would address their specific needs.
- **Professionals and academics in the field of consumer science.** Consumer education and consumer facilitation can only be successful if approached and planned in the interest of consumers and based on actual consumer needs (Erasmus, 1998:145-149). Consumer science is a relatively young discipline that has and is still borrowing from the theory of disciplines such as economics and marketing, psychology, sociology and social psychology. Although multi disciplinary studies and theory building have many advantages, efforts to expand theory within the discipline of consumer science itself should be encouraged.

Household decision-making and consumer search behaviour were specifically mentioned as areas in consumer behaviour research identified by Sheth in 1981 (Sheth, 1981:668) that lacked proper understanding in the discipline and needed to be extensively researched. A few years later, Schurr (1986:498), in reaction to these recommendations, postulated "that *purchasing scripts* can result in accurate predictions of buyer attitudes and judgment". Because little evidence of the implementation of the suggestions could be found and because the study of consumers' acquisition of major household appliances seemed to have merit, an attempt to elicit and organize a script to be used as an alternative to traditional consumer decision-making models seemed to coincide with recommendations for future research in the study field of consumer behaviour that forms an integral part of the domain of consumer science.

The script concept is generally accepted to be a valid construct with wide application (Taylor, Cronin & Hansen 1991:17) and has been applied in areas such as cognitive, social developmental and clinical psychology and cognitive anthropology (Rummelhart 1980; Abelson, 1976; Den Uyl & Van Oostendorp, 1980; Leigh & Rethans, 1983:667; Bartlett, 1932, Bransford & Franks, 1971, Mandler, 1979, Minsky, 1975, Rumelhart & Ortony 1977, Schank & Abelson, 1977 in John & Whitney, 1982:75).

Scripts, due to their basic properties and characteristics and the fact that purchasing scripts by definition portray specific events from the view of consumers, have the potential to offer valuable insight into the bases of consumer behaviour (Taylor *et al*, 1991:16). Any further research in this regard will thus contribute to expanding theory in consumer behaviour.

OBJECTIVES

Based on formerly stated concerns regarding the use of traditional consumer decision-making models to inter alia reflect the consumer decision-making process of purchasing household appliances (Erasmus, Boshoff & Rousseau, 2001:88), the following research problem was formulated:

Can a script that conforms to the properties and structural characteristics of a script according to basic script theory be elicited and organized within the consumer behaviour context to portray the acquisition of major household appliances?

The following *research objective* and *sub objectives* were formulated:

- To elicit and organize a script for the acquisition of major household appliances within the consumer decision-making context that coincides with the basic properties and structural characteristics of a theoretical script.
- To *elicit the relevant script norms* for the organization of a script for the acquisition of major household appliances, i.e. to stimulate experienced consumers to spontaneously expose/identify the relevant:
 - *Person schemata*: everybody involved during the decision-making process
 - *Role schemata*: the contribution of participants during the decision-making process, i.e. so-called influencers, decision makers et cetera
 - *Object schemata*: the various objects involved in the decision-making process, e.g. information sources, retail outlets
 - *Decision-making schemata*: the actions taken/implemented during the decision-making process.
- To *generate a script* that coincides with the basic properties and structural characteristics of a script within basic script theory by integrating and ordering the relevant script norms and actions indicated as typical of the event (acquisition of major household appliances).

REFERENCE LIST

- AHLUWALIA, G & SHACKFORD, A. 1998. How long will components last? *Consumers' Research* 81(10):21-24.
- BADAMI, VV & CHIBAT, NW. 1998. Home appliances get smart. *IEEE Spectrum* 35(8):36-43.
- BETTMAN, JR. 1993. The decision maker who came in from the cold. *Advances in Consumer Research* XX:7-11. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L & ROTH, VJ. 1983. Recognition memory for script activities: an energy conservation application. *Advances in Consumer Research* X:655-660. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- BURKE, SJ. 1990. The effects of missing information on decision strategy selection. *Advances in Consumer Research* XVII:250-256. Seventeenth Annual Conference. New Orleans. Association for Consumer Research.
- BURTON, JR. 1992. Household technology: implications for research and policy. *Journal of Family and Economic Issues* 13(4):383-394.
- COOPER, T. 1994. *Beyond Recycling. The Longer Life Option*. London. New Economics Foundation.
- D'ASTOUS, A, BENSOUDA, I & GUINDON, J. 1989. A re-examination of consumer decision-making for a repeat purchase product: variations in product importance and purchase frequency. *Advances in Consumer Research* XVI:433-438. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- DHAR, R. 1992. To choose or not to choose: this is the question. *Advances in Consumer Research* XIX:735-738. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson Sigma.
- ERASMUS, AC. 1998. A suggested approach to educating consumers on the purchase of electrical household appliances. *Journal of Family Ecology and Consumer Sciences* 26(2):145-151. <http://www.up.ac.za/academic/acadorgs/saafecs/vol26/erasmus.html>
- ERASMUS, AC, BOSHOFF, E & ROUSSEAU, GG. 2001. Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences* 29:82-90. <http://www.up.ac.za/academic/acadorgs/saafecs/vol29/erasmus.html>
- FOURNIER, S, ANTES, D & BEAUMIER, G. 1992. Nine consumption lifestyles. *Advances in Consumer Research* XIX:329-337. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- HANSEN, DE. 1992. Issues in consumer choice with uncertain product outcomes. *Advances in Consumer Research* XIX:175-176. Twenty Second Annual Conference. [sl]. Association for Consumer Research.

- HILL, DJ & KING, MF. 1989. Preserving consumer autonomy in an interactive informational environment: toward development of a consumer decision aid model. *Advances in Consumer Research* XVI:144-151. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- JOAG, SG, GENTRY, JW & HOPPER, J. 1985. Explaining differences in consumption by working and non-working wives. *Advances in Consumer Research* XII:582-586. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial nature of scripts. *Advances in Consumer Research* IX:75-79. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- KANWAR, R & PAGIAVLAS, N. 1992. When are higher social class consumers more and less brand loyal than lower social class consumers? *Advances in Consumer Research* XIX:589-595. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- LEIGH, TW & RETHANS, AJ. 1983. Experiences with script-elicitation within consumer decision-making contexts. *Advances in Consumer Research* X:667-678. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- LOFMAN, B. 1991. Elements of experiential consumption: an exploratory study. *Advances in Consumer Research* XVIII:729-735. Twenty First Annual Conference. New Orleans. Association for Consumer Research.
- McMEEKIN, A & TOMLINSON, M. 1998. The diffusion of household durables in the UK. *Futures* 30(9):873-886.
- MEYERS-LEVY, J & MAHESWARAN, D. 1990. Message framing effects on product judgments. *Advances in Consumer Research* XVII:531-535. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- NIEMEYER, S, RAI, VK & KEAN, R. 1997. Older females' opinions about the functionality of home products and equipment. *Journal of Family and Consumer Sciences* (Spring):46-49.
- O'SHAUGHNESSY, J. 1985. A return to reason in consumer behaviour: an hermeneutical approach. *Advances in Consumer Research* XII:305-311. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- SCHIFFMAN, LG & KANUK, LL. 2000. *Consumer Behavior*. 7 th ed. New Jersey. Prentice Hall.
- SCHURR, PH. 1986. Four script studies: What we have learnt. *Advances in Consumer Research* XIII:498-508. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- SHETH, JN. 1981. Consumer behaviour: surpluses and short comings. *Advances in Consumer Research* IX:667-678. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- SRINIVASAN, N. 1993. Consumer judgments, decisions and framing dynamics: An informational viewpoint. *Advances in Consumer Research* XX:288-290. Twenty Third Annual Conference. [sl]. Association for Consumer Research
- TAYLOR, SA, CRONIN, JJ jr & HANSEN, RS. 1991. Schema and script theory in channels research. *Marketing Theory and Applications* (2):15-24. American Marketing Association Winter's Conference. [sl].
- TOIVONEN, T. 1994. Does consumption determine social class? On the changing pattern of consumption determination. *Journal of Consumer Studies and Home Economics* 18:45-63.

UNGERER, LM. 1999. Activities, life styles and status products of the newly emerging middle class in Gauteng. *Research Report* No. 262. Pretoria. Unisa.

VENKATESH, A. 1985. A conceptualization of the household/technology interaction. *Advances in Consumer Research* XII:189-194. Fifteenth Annual Conference. [sl]. Association for Consumer Research.

WRIGHT, ND, CLAIBORNE, CB & SIRGY, MJ. 1992. The effects of product symbolism on consumer self concept. *Advances in Consumer Research* XIX:311-318. Twenty Second Annual Conference. [sl]. Association for Consumer Research.

3

CONSUMER DECISION-MAKING MODELS WITHIN THE DISCIPLINE OF CONSUMER SCIENCE: A CRITICAL APPROACH

ABSTRACT

Consumer decision-making models are generally used in consumer behaviour research for the purpose of conceptualizing and to structure research. Some of the best-known models were developed in the 1960's and 1970's. Labeled the "grand models" of consumer decision-making, they visually reflect the consumer decision process in terms of the interrelationship of concepts and flow of activities as understood within the limited theoretical background that inspired model building at the time.

In the 1980's, theorists began to question the rational approach to consumer decision-making and suggested that consumer decision-making models do not necessarily reflect what actually happens in practice. A general concern is that these models are used without careful pre meditation of the context, purpose and alternative research perspectives that might better support specific studies.

Scripts as an alternative to consumer decision models per definition have certain structural characteristics that offer potential in this regard: scripts are composed of the common (generic) actions that represent a prototypical event and contain a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer. Scripts might also, due to the fact that they are context specific, based on real life experiences and only contain the generic details of an event, provide more realistic avenues for describing consumer decision-making.

OPSOMMING

Verbruikersbesluitnemingsmodelle word algemeen in verbruikersgedragnavorsing gebruik om die navorsing te struktureer en te konseptualiseer. Verskeie van die tradisionele modelle – wat in die laat sestiger en sewentigerjare saamgestel is – is in handboeke beskikbaar wat terselfdertyd die teorie ter ondersteuning bied en die stappe van die verbruikersbesluitnemingsproses definieer en bespreek. Verbruikersbesluitneming word meestal in terme van vyf stadia voorgehou. Die modelle verskil grootliks ten opsigte van die klem en konteks sowel as detail wat ingesluit word.

In die tagtigerjare het navorsers begin besef dat die tradisionele modelle van verbruikersbesluitneming nie noodwendig die korrekte beeld van die verbruikersbesluitnemingsproses weergee nie. Verskeie navorsers het resultate van studies gepubliseer om aan te toon dat alternatiewe tot die tradisionele verbruikersbesluitnemingsmodelle gevind moes word. Feitlik sonder uitsondering toon besware 'n oorbeklemtoning van eksterne en omgewingsfaktore op verbruikersbesluitneming sowel as 'n wanvoorstelling dat aktiewe beplanning en rasionele denke komplekse besluitneming rig. Verbruikersbesluitneming het oor jare baie meer kompleks geraak as gevolg van 'n groter verskeidenheid produkte wat beskikbaar is, ontwikkeling op die gebied van tegnologie, wêreldinvloede, groter bedingingsmag van werkende vroue wat ook op besluitnemingstrategieë in gesinsverband 'n invloed het. Veralgemening van verbruikersbesluitnemingsprosesse in terme daarvan om tradisionele besluitnemingsmodelle te gebruik om bepaalde prosesse voor te stel, is nie meer haalbaar nie.

Die positivisme wat algemeen as perspektief vir die beskouing van verbruikersbesluitneming beskou is (en nog steeds deur sommige beskou word) blyk nie al die moontlikhede te bied om die fenomeen te beskryf nie. Sterk steun vir die implimentering van subjektivistiese benadering en veral kwalitatiewe navorsingstegnieke in navorsing waar die verbruiker toegelaat word om gedagtes en idees spontaan te ontvou, word bepleit. In ooreenstemming met 'n voorstel van Sheth (1981) word navorsers op die gebied van verbruikersgedrag in die verbruikerswetenskap gemotiveer om kreatief te dink binne minder rigiede teoretiese raamwerke sodat daar deur middel van navorsingsmetodes en tegnieke wat groter ruimte vir die ontdek van die onverwagte, meer omtrent verbruikergedrag aan die lig kan kom. Indien bestaande teorie van verbruikersgedrag gekombineer word met produkspesifieke (byvoorbeeld behuising, kleding, huishoudelike toerusting) teorie kan nuwe insigte bekom word wat waardevol en rigtinggewend kan wees in verbruikersfasilitering.

Search words:

Consumer decision-making; consumer decision models; decision-making models; traditional models of consumer decision-making; models of consumer decision-making; consumer research; research perspectives in consumer behaviour; consumer behaviour.

INTRODUCTION

Consumer behaviour¹ and consumer decision-making² have become prominent research topics in the various fields of consumer science in recent years. Consumer science includes the former discipline of home economics and refers to a discipline that evolves around consumer behaviour and decision-making concerning foods and nutrition, clothing and textiles, housing and interior merchandise in everyday living in order to meet basic and higher order needs for physical, psychological, socio-psychological and financial satisfaction in a complex micro and macro environment. Of specific importance is that buying and consumer decision-making are complicated as a result of external influences that have to be handled within an internal frame of reference that has come about through consumer socialization (that may be/have been restricted). Consumer behaviour within the discipline of consumer science focuses on *consumption behaviour*³ where the humane aspect of decision-making and purchasing is of major importance as opposed to *buyer behaviour* - the domain of the marketing and business professionals who wish to understand buyer behaviour (Schiffman & Kanuk, 2000:5).

Consumer decision-making models are widely used in consumer behaviour research and study areas to structure theory and research. In a discussion of the consumer decision-making process, Engel, Blackwell & Miniard (1995:143) state, "a model is nothing more than a replica of the phenomena it is designed to present. It specifies the building blocks (variables) and the ways in which they are interrelated." Models are also described as flow charts of behavioural processes (Du Plessis, Rousseau & Blem, 1991:18).

Advantages offered by models include the possibility to grasp visually what happens as variables and circumstances change, that models provide conceptual frames of reference that logically indicate the interrelationship of variables for research purposes, that models provide the possibility to understand different consumer decision processes and marketing strategies and that models play an important part in the establishment of theory (Engel *et al*, 1995:143; Du Plessis *et al*, 1991:18). Walters (1978:43) even proclaimed consumer decision-making models to "specify exact cause and effect that relate to consumer behaviour".

¹ Consumer behaviour: those actions directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that precede and follow these actions (Engel, Blackwell & Miniard, 1995:G3)

² Consumer decision-making: the behaviour patterns of consumers, that precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services (Du Plessis, Rousseau & Blem, 1991:11).

³ Consumption behaviour: the style and process of consuming and possessing, collecting and disposing of consumer products and services including the resultant change of feelings, moods and attitudes toward the products and services (Schiffman & Kanuk, 2000:G3).

TRADITIONAL MODELS OF CONSUMER DECISION-MAKING

Background

Some of the best-known consumer decision-making models were developed in the 1960's and 1970's during a time characterized by limited theory on consumer behaviour and when theories from other disciplines were used. Until then, marketers rather than academics undertook research. This was all part of a developing discipline of consumer behaviour. Howard developed the first consumer decision-model in 1963 (Du Plessis *et al*, 1991:10). Others include the Nicosia-model (1966), Howard Sheth (1969), Engel, Kollat & Blackwell (1968), Andreason (1965), Hansen (1972) and Markin models (1968/1974). A concern was that consumer behaviour research did not grow from a pure theoretical basis and it is within this context that several theoretical models of consumer decision-making were developed (Du Plessis *et al*, 1991:9). These models, labelled the "grand models" of consumer decision-making (Kassarjian, 1982:20), tend to portray the process of proceeding through a major purchase decision¹ as a logical problem solving approach (Cherian & Harris, 1990:747). Furthermore, consumer decision-making is depicted as multi-staged and complex with several factors triggering problem-recognition before initiating a sequence of actions to reach an outcome of satisfaction or dissatisfaction (Harrel, 1990:740; Cox, Granbois & Summers, 1983:394). Differences between models lie primarily in their emphasis on particular variables and the manner of presentation (Du Plessis *et al*, 1991:32; Walters, 1978:42). The popularity of model building seemed to decrease after 1978 – especially in the case of comprehensive models (Van der Walt, in Du Plessis *et al*, 1991:39). The consumer decision-models that are still used today thus reflect the consumer decision process in terms of the interrelationship of concepts and flow of activities as understood within the limited theoretical background that inspired model building at the time.

Most of the consumer behaviour textbooks used as sources of consumer behaviour models for study and research purposes, refer to the elements (Harrel, 1990:740; Cox *et al*, 1983:394) of the consumer decision process in terms of the traditional five step classification, i.e. the cognitive decision sequence of *problem-recognition / pre-search stage, information search, alternative evaluation, choice, outcome evaluation* (Solomon, 1996:268; Schiffman & Kanuk, 1994:566-580; Du Plessis *et al*, 1991:27; Foxall, 1983:75). Some prefer to add one or more additional stages to place importance on certain phenomena/activities such as the inclusion of *blocking mechanisms, the disposal of the unconsumed product or its remains* (Du Plessis & Rousseau, 1999:83; Engel *et al*, 1995:142, 143; Du Plessis *et al*, 1991:38).

The classification in terms of various stages of consumer decision-making is typical of the rational approach to consumer decision-making (Punj & Srinivasan, 1992:493-495; D'Astous, Bensouda &

¹ Purchase decision: the process of weighing the consequences of product alternatives to come to a final product decision.

Guindon, 1989:433). A rational approach to consumer decision-making refers to the careful weighing and evaluation of utilization or functional product attributes to arrive at a satisfactory decision (Solomon, 1996:268; Engel *et al*, 1995:G12). Rational goals are based on economic or objective criteria such as price, size and/or capacity (Schiffman & Kanuk, 2000:G11).

Engel *et al* (1995:4), in their discussion of “what consumer behavior is all about,” identify the dominant research perspective in consumer behaviour as *logical positivism*. Positivism implies a research approach in which rigorous empirical techniques are used to discover generalized explanations and laws (Engel *et al*, 1995:G11). It is within this perspective that the “grand models” of consumer decision-making have been produced. When traditional models were later revised (1982 Engel, Kollat & Blackwell-model, versus the 1978 model), more emphasis was placed on cognitive aspects of buying behaviour than before. These were called the contemporary models, but although they include aspects of mental activity, it is still difficult to ascertain whether these models are accurate and whether they have predictive value (Du Plessis *et al*, 1991:18, 19).

CONSUMER DECISION-MAKING MODELS CRITICIZED

Objections against the indiscriminate use of consumer decision-making models have been voiced since their introduction. Apart from the limited theoretical background within which traditional consumer decision-making models were developed and revised, the different forms of criticism can broadly be categorized in terms of: an assumption of rational consumer decision-making behaviour; a generalization of the decision-making process; concern about the detail included in consumer decision-making models as well as limitations as a result of a positivistic approach to the development of consumer decision-making models.

Rational consumer decision-making criticized

In the 1980's, theorists began to question the rational approach to consumer decision-making because studies showed that for many products, consumers spend very little time or do not even engage in some of the sequential activities suggested as being important during consumer-decision-making. It was found (as discussed by Bozinoff, 1982:481 based on work by Lachman *et al*, 1979) that consumers are frequently engaged in *non-conscious behaviour* during consumer decision-making. This implies that consumer decision models in fact attempt to explain highly subconscious matter in a consciously oriented information paradigm.

Actual consumer decision-making processes might also, in some cases, appear to be haphazard and disorderly when in fact, they are functional and highly adaptive, although opportunistic (Hayes-Roth, 1982:132). An *opportunistic approach* does not coincide with structured and rigid traditional decision-making models. Some researchers concluded that many consumers undertake

little or no pre-purchase information search and undertake limited planning prior to entering retail stores (Solomon, 1996:269; D' Astous *et al*, 1989:433). It became clear that consumers possess and implement a repertoire of consumer decision-making strategies depending on the product, situation, context and previous experience (Solomon, 1996:269). Some researchers even added that consumers do not typically apply analytical decision rules to optimize decisions but relied on heuristics that would lead to satisfying decisions instead (e.g. an "acceptable" price or "trusted" brand name) (Solomon, 1996:287).

The so-called "rational" consumer became the subject for several critical analyses, which postulated that consumers engage in both *cognitive* and *emotional* information processing prior to a purchase (Schiffman & Kanuk, 2000:461; Zajonc & Markus in Lofman, 1991:729; D' Astous *et al*, 1989:433). Cognitive information processing refers to active, effortful planning and goal directed consumer behaviour that involves meditated intellectual activity, while emotional processing refers to the evaluation of product alternatives within more abstract parameters.

Ratchford and Vaughn (1989:298) suggested that ego gratification, social acceptance as well as sensory desires might imply different decision-making activities to those traditionally accepted and reflected in consumer decision-making models. Their concern was that one could easily, from the design of traditional consumer decision-making models, overemphasize the role and importance of external factors during consumer decision-making while neglecting or minimizing emotional aspects.

Bettman (1993:8) accentuates that an understanding of consumers' decision-making behaviour, not only has to focus on what products *do* (functional and performance attributes), but also has to consider what products *mean* to consumers. Driven by emotional needs/concerns, consumers are limited in the options they are willing to consider during the decision-making process and consequently adapt the decision-making strategy (Schiffman & Kanuk, 2000:461; Bettman, 1993:8).

Schiffman and Kanuk (2000:439, 440) describe a rational consumer decision as one where the consumer is aware of all the product alternatives, where the consumer has the ability to correctly rank product alternatives in terms of benefits and disadvantages and is able to identify the best alternative. Arguments against rational consumer behaviour include the fact that consumers operate in an imperfect world, that they possess limited knowledge and skills and that certain values might dominate their goals and decisions. Rational consumer behaviour thus seems too idealistic and simplistic.

A generalization of the consumer decision-making process

Consumer decision-making models provide broad, organized structures that reflect the basic process of consumer decision-making from certain viewpoints and within certain contexts (Walters, 1978:42). These models are often used to structure and interpret consumer behaviour research - even for product specific research. This inevitably means that the research approach, when implementing a specific decision-making model, has to coincide with certain assumptions made by the original authors. Generalizing the decision-making process to such an extent for any consumer product, might imply a biased view of, and approach to, the consumer decision-making process right from the start (Burns & Gentry, 1990:522).

Sirgy (1983:16-18), studying the progress of consumer behaviour research within the theory of social cognition, criticized the traditional interpretation of consumer behaviour and proposed a *level of analysis dimension*: classifying some consumer decision processes at a *micro level* (e.g. based purely on sensation, perception) some at the *micro-macro level* (including the five steps of decision-making, namely problem-recognition, information search, alternative evaluation, outcome evaluation) and others at a *macro level* (referring to repeat purchase behaviour and diffusion of innovation). Sirgy suggested a categorization of consumer decisions for discussion and research purposes rather than a generalization of the decision-making process over the spectrum.

D' Astous *et al* (1989:433, 434) carried on with the work of Hoyer (1984) who concluded that consumer decision-making should be viewed considering the relevant *dimensions* of a purchase, i.e. *frequency of purchase* and *importance of the purchase*. Although it is not a hard-and-fast rule, it is generally accepted that the more important a product, the more complex the decision-making process, for example, when higher social, personal and financial risks are implicated, consumers usually engage in external information search and a more deliberative decision process (Du Plessis & Rousseau, 1999:94-94; Du Plessis *et al*, 1991:27; Assael, 1989:31, 534). Consumers therefore devote more cognitive effort to the purchase of a product that is considered to be important.

Consumer decision-making models are also criticized as being somewhat *idealized* (Cox *et al*, 1983:394). Because extraordinary short planning periods for the purchasing of complex products are reported in some instances, a need for research to bring about a closer fit between theory and practice is suggested. Consumer decision-making models - due to their complexity and the detail included - give the impression that extended buying behaviour is the norm.

Within the constructivist framework it is argued that consumer attitudes and preferences - based upon previous experiences - are not *revealed*, but *elicited* during decision-making. Consumer goals are often imprecise - especially in situations of less frequent purchases - and are in fact constructed in a given situation within the boundaries of personal experiences. The assumption

made in hierarchical models of consumer decision-making, namely that the decision to choose is independent of which alternative to choose, and that the decision-making process necessarily proceeds through the various stages to come to a final decision, may not always be valid.

Consumers often decide to choose or not to choose depending on the existing situation (Dhar, 1992:735-737). This implies a more definite impact of *in-store search activities* during consumer decision-making rather than preparedness before entering the store. Traditional consumer decision-making models do not portray this possibility clearly.

Traditional models of consumer decision-making assume that the decision-making process occurs in a serial or sequential fashion (Martin & Kiecker, 1990:443). The English logician Alan Turing introduced the first of these in 1936. The basic assumption of most of these serial processing models, as delineated by Newell and Simon's theory of problem solving, requires that only one information process occurs at a time (Martin & Kiecker, 1990:443). New models in the field of cognitive science depict information processing in a more *parallel* way to make provision for the fact that some stages of the decision-making process occur simultaneously. All traditional consumer decision-making models are of serial nature and since model building has declined after 1978 (Van der Walt, 1978 in Du Plessis *et al*, 1991:39), one may well wonder whether further research in this regard should not be pursued.

In a commentary on new theoretical perspectives in consumer behaviour, Stewart (1990:751-753) argues that although a lot has been done in the field of consumer decision-making, the focus has only been on a narrow range of phenomena. He proposes a simple model of consumer decision-making and emphasizes that a general assumption, namely that the end point of the consumer decision is the *purchase*, may be overly simplistic. He provides an alternative model with no obvious beginning or ending. Stewart recommends studies where the starting point of the decision-making process is deliberately changed (for example confronting consumers with different situations, such as entering the store) and to explore what actually happens *before* and *after* that specific situation. He further states that consumers often do not know the reasons for their actions and behaviour because decisions become automated. He concludes by stating that much has still to be learnt about consumer decision-making.

Comments on the detail included in consumer decision-models

Olshavsky and Granbois (1979:93) are of the opinion that "the most pervasive and influential assumption in consumer behavior research is that purchases are preceded by a decision process". These consumer behaviouralists asserted that information processing was often performed with *previously acquired* and *stored information*. This implies that consumers probably proceed through the decision-making process much quicker than is suggested/proposed by traditional consumer decision-making models (John & Whitney, 1982:75). Some researchers are therefore of the opinion

that consumer decision-making models often complicate a situation that is fairly straightforward. This argument supports the fact that consumer decision-making models tend to generalize conditions that are specialized, product and situation specific. Although the Engel Blackwell-model that was designed in 1982 (after the original Engel, Kollat & Blackwell-model of 1968) (Du Plessis *et al*, 1991:25) approaches decision-making in terms of high and low involvement, it still seems very detailed and complex. Little has changed since the introduction of these models in the early years to accommodate the fore mentioned arguments.

Srinivasan's view (1993:290) seems to contradict the previous arguments when he states that consumers may, in the course of the decision-making process, be educated and inspired to upgrade their decision-making behaviour through implementing extensive information search.

Unfortunately *too much* and *too difficult* information - due to an information overload - often has the opposite effect. The information may then be rejected because it becomes a threat to a consumer's self-concept and confidence. The generation of information could also be very time-consuming and information search might even have financial implications. Consumers might find it less threatening, easier, quicker and cheaper to rely/draw upon a prior information base. In Srinivasan's view, even extensive product search might not always be as elaborate as is suggested in traditional consumer decision models.

Consumers' choice processes vary according to the *type of product* involved, the *timing* and the *people* involved (Burns & Gentry, 1990:520). No one consumer decision-making model could fully reflect all purchase decisions or all complex consumer decisions. Using consumer decision-making models to discuss or interpret consumer decision-making in general is therefore an oversimplification of the true situation. Although Walters (1978:42) emphasizes that consumer decision-making models are an oversimplification of the reality, traditional consumer decision-making models - as a result of the detail included - might still be perceived as complex and elaborate to the inexperienced researcher and might give the impression that they have been designed to accommodate most aspects of decision-making.

Other concerns mentioned by Harrel (1990:739, 740), is that the multi-attribute models so frequently used to study and explain consumer decision-making, are founded on the assumption that attributes are important and that many of these models have a strong or even *overemphasis on brand choice* (e.g. the Howard Sheth-model as well as the Engel, Kollat & Blackwell-model) (Sheth & Garrett in Harrel, 1990:739). Although brand decision-making represents a fair amount of deliberation during consumer decision-making, it does not represent the whole consumer decision-making process (Harrel, 1990:739).

Presumed decision-making strategies

In real world situations consumers are often faced with incomplete information and in most consumer decision situations, explicit, well-defined probabilities rarely exist and/or are difficult to formulate. This makes elaborate, rational decision-making as suggested by traditional consumer decision-making models almost impossible (Burke, 1990:250). Under such less than ideal conditions, *decision shortcuts* become the alternative. It is also suggested that even under ideal conditions, consumers actually “gamble” product alternatives as if they are forming statistical expectations based on probability-weighted outcomes of gambles which imply the use of a compensatory choice process. Much of the descriptive research on how consumers make decisions under uncertainty shows that consumers are highly concerned with negative information or losses. Consumers seem to think in terms of losses and gains relative to some neutral point and presume that losses tend to be stronger than gains. As a result, consumers eventually opt for the alternative with the smallest potential loss. This is a non-compensatory strategy that only focuses on losses and might be ascribed to consumers’ inability to consider concepts/features of importance that would result in a satisfactory outcome (Hansen, 1992:175). Such decision-making behaviour deviates from the route of rational decision-making and cannot be described within a traditional consumer decision-making model.

Sharing the same views as Chhabra and Olshavsky (1986:12) who reported that *alternative choice rules* have been uncovered by researchers and that the evaluation of products is done holistically, based on preferences retrieved from memory, Burke (1990:250) recognizes the possibility of the use of *alternative decision-making strategies* (to those suggested in detailed consumer decision-making models) in situations where consumers are confronted with a lack of information. According to Burke, “missing information” forces consumers to opt for an alternative approach to consumer decision-making. This is probable in the case of complex decision-making that require higher levels of understanding (as would be the case with technologically complex products) and where products are purchased less frequently so that consumers lack the relevant experience to proceed through the decision-making process as is portrayed in traditional models. When confused or overwhelmed, consumers tend to take alternative decision-making routes (Solomon, 1996:297; Burke, 1990:251).

In Chhabra & Olshavsky’s opinion (1986:12), a consumer’s retrieval of experience from memory strongly refers to so-called *scripts* and previous experience in decision-making activities. Olshavsky further proposes that consumers can even “decide not to decide”, thus subcontracting a choice to another person such as the spouse. Alternatively, hybrid strategies could be used where consumers combine personal information with recommendations from sources such as friends. All these possibilities are difficult to detect from consumer decision-making models.

Bettman (1993:8) states that two major goals of decision-makers are to *make a good decision* and to *conserve cognitive effort*. Consumers generally trade-off the accuracy a given strategy might attain in a particular choice environment and the cognitive efforts required and as a result choose a strategy that represents a reasonable accuracy/effort trade-off for that task. This is a *constructive view* of choice where individuals change their processing to exploit what they have learnt (Bettman, 1993:8). Consumers use different decision-making strategies in different situations and this is not reflected in traditional consumer decision-making models.

Logical positivism used as theoretical approach to develop traditional consumer decision-making models

Traditional models of consumer decision-making predominantly reflect the philosophy of classical economics (with the emphasis on ways and mechanisms to influence consumers) with evidence that the economic rationale has been enriched with especially psychological rationales (especially in the contemporary decision-making models) (Du Plessis *et al*, 1991:5; Firat, 1985:3). The theoretical approach, however, remains one of logical positivism.

In consumer decision-making models, predictions of consumer behaviour to help business best exploit and gain from trends in these behaviours, gain precedence over the understanding and explanation of consumer decision behaviour. Traditional models reflect a technological-managerial orientation with the emphasis on influencing, controlling and managing certain phenomena (Firat, 1985:4). From the way these models have been developed, they have little concern about *why* certain actions occur despite a proclamation in this regard (as reported in Engel *et al*, 1995:143; Walters, 1978:42).

Both the disciplines of marketing and consumer behaviour have tended to investigate *buyer* behaviour rather than *consumption* behaviour. Apart from the fact that a study of buyer behaviour is of particular importance in business and marketing, a study of buyer behaviour requires more easily applicable and comprehensible measurements and scales. Engel, Kollat and Blackwell as well as Nicosia have admitted this (Firat, 1985:5). A study of *consumption* behaviour on the other hand may contribute to suggestions for better satisfaction of consumer needs – an aspect that is of major concern to consumer scientists, while *buyer* behaviour is more conducive to a marketing approach.

Concluding remark

Almost two decades ago Firat (1985:5) pointed out that traditional consumer decision-making models and theories were developed within certain contexts, time frames and social situations. He explicitly warned that when the same models were applied in other contexts and with other product categories, they become forced and cause imbalances. Although consumer behaviour theory has

since grown considerably, the popularity of model building has decreased after 1978 (Du Plessis *et al*, 1991:39) – almost as if the initial efforts are generally being accepted as “acceptable/the ultimate/flawless”. Continued research is proposed to address concerns to eventually gain an improved understanding of the consumer decision-making process. Within the discipline of consumer science, this would provide more focused guidelines for efforts aimed at educating, assisting and facilitating consumers.

IMPLICATIONS OF CRITICISM FOR CONSUMER DECISION-MAKING RESEARCH

Introduction

Coinciding with Sheth’s proposals for future research within the discipline of consumer behaviour (Sheth, 1981:667), arguments in favour of a reconsideration of a rational approach to consumer decision-making have been summarized above. Consumer behaviour as a scientific discipline was originally closely tied to the marketing concept (Schiffman & Kanuk, 2000:6; Du Plessis *et al*, 1991:4; Sirgy, 1983:8). Sheth’s ideal - later supported by Olson (1982:v) as well as Harrel (1990:737) - was that researchers in the field of consumer behaviour should ultimately attempt to contribute to concept formation and theory within the discipline itself, rather than to blindly borrow from disciplines such as marketing or social psychology. They also proposed that researchers explore alternatives to the logical positivistic research paradigm so that other theories and conceptual frameworks could be used instead of reliance upon traditional consumer decision-making models. This is in contrast with the view of Engel *et al* (1995:4, G11) who still believe the dominant research perspective in consumer behaviour to be *logical positivism*.

Suggestions for research based on the criticism of traditional consumer decision-making models

Reconsidering a rational approach to consumer decision-making Many of the objections against traditional consumer decision-making models refer to the fact that consumers do not necessarily embark upon extensive, active, cognitive laden, realistic and goal directed decision-making behaviour when purchasing complex, high-risk consumer products (Lofman, 1991:729). Consumer decision-making models should be more representative of what happens in real life situations without building on preconceived assumptions of what happens during the decision-making process and what is (supposed to be) important. Rassuli and Harrell (1990:737) *inter alia* suggest allowance for non-rational consumer behaviour and warn against the assumption that product attributes (functional aspects) as well as external factors are considered important in the decision outcome.

Scripts (event schemata) as cognitive structures in memory that have been stored through experience, have been found to be used by individuals in situational context to automatically direct behaviour (at any stage) when activated (Sutherland, 1995:413; Stratton & Hayes, 1993:173; Whitney & John, 1983:662; Bozinoff, 1982:481). The particular usefulness of a script is that a consumer primarily wants to conserve effort in buying behaviour and a script enables an individual to act instead of relearning the steps of appropriate buying behaviour with every purchase (Martin, 1991:225). Turning to consumers who have experienced purchasing situations and have them share their experiences and including qualitative research techniques to prompt them to recall their decision-making activities might provide valuable information on consumer decision-making within the context of consumer science. Such an approach will simultaneously conform to proposals made by researchers such as Bettman (1993:7,8), Lofman (1991:729), D'Astous *et al* (1989:433-435, 436), Bozinoff (1982:481), Sheth (1981:667-668), and others.

Context and product specific consumer decisions Rather than generalizing complex consumer decision-making, it is suggested that a study of consumer decision-making behaviour should be *context specific* and *product specific* to provide new insights and to contribute to theory building in the domain of consumer science. As early as 1956, Koch concluded that consumer behaviour might either be extrinsically or intrinsically motivated and that the objective usefulness of a product only partially explains a specific purchase (Lofman, 1991:729). Ahtola (1984) and Hirschman and Holbrook (1982) (in Lofman, 1991:730; Hudson & Murray, 1986:343) emphasized that emotional desire often overrides utilitarian motives even for highly functional commodities such as household appliances.

Scripts as an alternative to consumer decision models have certain structural characteristics that offer potential in this regard (Puto, 1985:404).

Simplifying consumer decision-models Consumers often have to cope with complex, high-risk decisions that involve a sizable outlay of money, within a short period of time and without extensive information seeking. Traditional decision-making models imply the opposite (Ozanne, 1988:574). It is therefore suggested that a subjectivist approach be used to focus on *consumption* behaviour rather than *purchase/decision-making/buyer* behaviour (Holbrook & Hirschman, 1982 in Lofman, 1991:730; Hudson & Murray, 1986:345) in order to accommodate the influence of emotional and non-rational aspects on consumer behaviour.

One of the prominent characteristics of a script is that it contains only the generic details of an event and does not include details of an event (Whitney & John, 1983:662; Abelson, 1981:723). This could result in concept formation and theory building specifically within the domain of consumer behaviour and consumer science while at the same time reducing the possibility of too much and irrelevant detail.

Allowing for alternative decision-making strategies Traditional consumer decision-making models are based on the premise that for complex, high-risk products, extensive decision-making takes place. Various researchers have reported quite the opposite. Reasons given, *inter alia*, include situations where information is either incomplete (Burke, 1990:250, 251) or confusing because it is irrelevant, too difficult, or there is too much information to interpret (Hansen, 1992:175). It has also been found that consumers follow alternative decision-making strategies to conserve cognitive effort (Bettman, 1993:8, 10). Chhabra and Olshavsky (1986:12-13, 16) attributed this to pre-conceived scripts in memory that direct the decision-making experience, resulting in proceeding much faster through the decision-making process.

The suggestion that a script is elicited from memory when an individual is confronted with a specific decision-making experience and that the individual then reacts on previous experiences captured in memory might provide more realistic avenues for describing consumer decision-making (Abelson, 1981:723).

Implementing an alternative theoretical approach A positivistic tradition presumes consumers to be passive entities who respond to the push and pull of past impressed forces and current situational stimuli ($S \rightarrow R$; $S \rightarrow O \rightarrow R$)¹ with a causal type of explanation for actions (Schiffman & Kanuk, 2000:462). A positivistic approach does not allow for intentional action mediated by meaning, deliberation of consequences of various alternatives and formation of intentions (Du Plessis *et al*, 1991:21; O' Shaughnessy, 1985:305). Theorists began to question the assumption of the rational consumer in the early 1980's and postulated that consumers engage in both cognitive and emotional processing during consumer decision-making (Zajonc & Markus, 1982 in Lofman, 1991:729). The revised Engel Kollat Blackwell-model is an example of an attempt to include this phenomenon (Du Plessis *et al*, 1991:25). The hedonic consumption paradigm was suggested as an alternative for the study of consumer behaviour. This is based on psychological theories and is more concerned with those aspects of consumption that relate to the multisensory images, fantasies and emotive aspects of product usage (Lofman, 1991:729).

Due to the abundance of work done on rational consumer decision-making models, more research that acknowledges behaviour that may have underlying cognitive structure is suggested (Sheth, 1981:667). Harrel (1990:737) confirms Sheth's proposals and suggests considering a subjectivist approach for consumer behaviour research: thus a change from logical positivism to humanism and recommending the use or incorporation of qualitative research techniques to allow for more than the obvious. Qualitative research methods and techniques allow for the true views of consumers to unfold and allow for the unexpected - an important prerequisite for theory building and concept formation (Schiffman & Kanuk, 2000:14, 15).

¹ S: stimulus; R: response; O: cognitive interpretation

A *subjectivist approach* does not view the discovery of causal laws, but rather examines the meaning of human action with the goal of attaining understanding. From the subjectivist perspective, credible knowledge is generated through making *anti-positivist* and *ideographic* assumptions. The world is thus considered to be essentially perceptual and is understood or studied from the point of view of individuals who are directly involved in the activities which are to be studied (Burrell & Morgan, 1979 in Hudson & Murray, 1986:344).

An advantage of implementing a subjectivist approach is that there is no initial reduction of variables. Research techniques allow and encourage participants to spontaneously unfold their experiences and purchase-related behaviour and fantasies (Hudson & Murray, 1986:345). Script-elicitation procedures meet these recommendations.

CONCLUSION

Consumer behaviour as a discipline originated in the mid- to late 1960's. Many of the early theories were based on the economics theory presuming that consumers act rationally to maximize satisfaction in their purchase of goods and services (Schiffman & Kanuk, 2000:6). The consumer decision models and theories developed in the early years are still being used to structure research in the field of consumer behaviour and consumer sciences despite evidence that consumer decision-making is a more complex phenomenon and that it can not be generalized over the wider spectrum of consumer goods.

Consumer facilitation, however, assumes an understanding of the consumer as a prerequisite. Researchers within the field of consumer science with an interest to contribute to the theory and understanding of consumer behaviour will have to focus on consumption behaviour that includes the intricacies of emotions, situational factors as well as personal influences under specific circumstances rather than buyer behaviour per se. Although widely published and used, traditional models of consumer behaviour should not be regarded the norm for organizing research and the interpretation of research findings. An exploratory approach with the intention to unfold the "truth" might provide exciting, inspiring opportunities for the understanding of the complexity of specific decision-making circumstances such as first-time home purchasing, purchasing of household appliances, regular food purchasing activities, personal and family clothing selection.

The potential of scripts to "provide behavioral guidance" (Searleman & Herrmann, 1994:126; Stoltman, Tapp & Lapidus, 1989:385; Weisberg, 1980:56) and to reflect on the interaction of individuals and information in decision-making (Taylor, Cronin & Hansen, 1991:17) seems promising. Unfortunately, since the introduction of scripts within the area of consumer behaviour in the late 1970's, and the first script-elicitation studies done by Whitney and John (shopping

script, 1983) and Stoltman and co workers (examination of shopping scripts in 1989) within this area, little has been done to extend and implement the script concept in practice. Consumer decision-making and relating theory provide exciting opportunities for future research by professionals in the consumer science discipline. Adding to what has been done in the field of marketing sciences, consumer scientists could contribute their product specific knowledge and experience towards a more holistic understanding of consumer behaviour to ultimately contribute to theory building to the benefit of all.

BRUNER, J.S. 1986. A script-oriented approach to information processing in memory. *Journal of Experimental Psychology: Applied*, 2, 1-16.

BRUNER, J.S. 1987. The structure of memory. *Journal of Experimental Psychology: Applied*, 3, 1-16.

BRUNER, J.S. 1988. The structure of memory. *Journal of Experimental Psychology: Applied*, 4, 1-16.

BRUNER, J.S. 1989. The structure of memory. *Journal of Experimental Psychology: Applied*, 5, 1-16.

BRUNER, J.S. 1990. The structure of memory. *Journal of Experimental Psychology: Applied*, 6, 1-16.

BRUNER, J.S. 1991. The structure of memory. *Journal of Experimental Psychology: Applied*, 7, 1-16.

BRUNER, J.S. 1992. The structure of memory. *Journal of Experimental Psychology: Applied*, 8, 1-16.

BRUNER, J.S. 1993. The structure of memory. *Journal of Experimental Psychology: Applied*, 9, 1-16.

BRUNER, J.S. 1994. The structure of memory. *Journal of Experimental Psychology: Applied*, 10, 1-16.

BRUNER, J.S. 1995. The structure of memory. *Journal of Experimental Psychology: Applied*, 11, 1-16.

BRUNER, J.S. 1996. The structure of memory. *Journal of Experimental Psychology: Applied*, 12, 1-16.

BRUNER, J.S. 1997. The structure of memory. *Journal of Experimental Psychology: Applied*, 13, 1-16.

BRUNER, J.S. 1998. The structure of memory. *Journal of Experimental Psychology: Applied*, 14, 1-16.

BRUNER, J.S. 1999. The structure of memory. *Journal of Experimental Psychology: Applied*, 15, 1-16.

BRUNER, J.S. 2000. The structure of memory. *Journal of Experimental Psychology: Applied*, 16, 1-16.

BRUNER, J.S. 2001. The structure of memory. *Journal of Experimental Psychology: Applied*, 17, 1-16.

BRUNER, J.S. 2002. The structure of memory. *Journal of Experimental Psychology: Applied*, 18, 1-16.

REFERENCE LIST

- ABELSON, RP. 1981. Psychological status of the script concept. *American Psychologist* 36(7):715-729.
- ASSAEL, H. 1989. *Consumer Behavior and Marketing action*. 3 rd ed. Boston. Kent.
- BETTMAN, JR. 1993. The decision maker who came in from the cold. *Advances in Consumer Research* XX:7-11. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- BURKE, SJ. 1990. The effects of missing information on decision strategy selection. *Advances in Consumer Research* XVII:250-256. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- BURNS, AC & GENTRY, JW. 1990. Toward improving household consumption behavior research: avoidance of pitfalls in using alternative household data-collection procedures. *Advances in Consumer Research* XVII:518-523. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- CHERIAN, J & HARRIS, B. 1990. Capricious consumption and the social brain theory: why consumers seem purposive even in the absence of purpose. *Advances in Consumer Research* XVII:745-749. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- CHHABRA, S & OLSHAVSKY, RW. 1986. Some evidence for additional types of choice strategies. *Advances in Consumer Research* XIII:12-17. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- COX, A, GRANBOIS, DH & SUMMERS, J. 1983. Planning, search, certainty and satisfaction among durables buyers: a longitudinal study. *Advances in Consumer Research* X:394-399. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- D'ASTOUS, A, BENSOUA, I & GUINDON, J. 1989. A re-examination of consumer decision-making for a repeat purchase product: variations in product importance and purchase frequency. *Advances in Consumer Research* XVI:433-438. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- DHAR, R. 1992. To choose or not to choose: this is the question. *Advances in Consumer Research* XIX:735-738. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson Sigma.
- DU PLESSIS, PJ & ROUSSEAU, GG & BLEM, NH. 1991. *Consumer Behaviour. A South African Perspective*. Pretoria. Sigma.
- ENGEL, JF, BLACKWELL, RD & MINIARD, PW. 1995. *Consumer Behavior*. International ed. Florida. Dryden.
- FIRAT, AF. 1985. A critique of the orientations in theory development in consumer behavior: suggestions for the future. *Advances in Consumer Research* XII:3-6. Fifteenth Annual Conference. New Orleans. Association for Consumer Research.
- FOXALL, GR. 1983. *Consumer Choice*. London. MacMillan.

- HANSEN, DE. 1992. Issues in consumer choice with uncertain product outcomes. *Advances in Consumer Research* XIX:175–176. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- HARREL, GD. 1990. A new perspective on choice. *Advances in Consumer Research* XVII:737- 745. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- HAYES-ROTH, B. 1982. Opportunism in consumer research. *Advances in Consumer Research* IX:132–135. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- HUDSON, LA & MURRAY, JB. 1986. Methodological limitations of the hedonic consumption paradigm and possible alternative: a subjectivist approach. *Advances in Consumer Research* XIII:343–348. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial nature of scripts. *Advances in Consumer Research* IX:75-79. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- KASSARJIAN, HH. 1982. The development of consumer behavior theory. *Advances in Consumer Research* IX:20-22. Twelfth Annual Conference. San Francisco. Association for Consumer Research.
- LOFMAN, B. 1991. Elements of experiential consumption: an exploratory study. *Advances in Consumer Research* XVIII:729–735. Twenty First Annual Conference. New Orleans. Association for Consumer Research.
- MARTIN, D & KIECKER, P. 1990. Parallel processing models of consumer information processing: their impact on consumer research methods. *Advances in Consumer Research* XVII:443-448. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- MARTIN, I. 1991. Expert novice differences in complaint scripts. *Advances in Consumer Research* XVIII:225-231. Twenty First Annual Conference. Association for Consumer Research.
- OLSHAVSKY, RW & GRANBOIS, DH. 1979. Consumer decision making–fact or fiction. *Journal of Consumer Research* (6):93-100.
- OLSON, JC. 1982. Presidential address: toward a science of consumer behavior. *Advances in Consumer Research* IX:v – x. Twelfth Annual Conference. San Francisco. Association for Consumer Research.
- O'SHAUGHNESSY, J. 1985. A return to reason in consumer behaviour: an hermeneutical approach. *Advances in Consumer Research* XII:305-311. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- OZANNE, JL. 1988. Keyword recognition: A new methodology for the study of information seeking behaviour. *Advances in Consumer Research* XV:574-579. Eighteenth Annual Conference. [sl]. Association for Consumer Research.
- PUNJ, G & SRINIVASAN, N. 1992. Influence of problem-recognition on search and other decision process variables: a framework for analysis. *Advances in Consumer Research* XIX:491-497. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- PUTO, CP. 1985. Memory for scripts in advertisements. *Advances in Consumer Research* XII:404. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- RASSULI, KM & HARREL, GD. 1990. A new perspective on choice. *Advances in Consumer Research* XVII:737-744. Twentieth Annual Conference. [sl]. Association for Consumer Research.

- RATCHFORD, BT & VAUGHN, R. 1989. On the relationship between motives and purchase decisions: some empirical approaches. *Advances in Consumer Research* XVI:293-299. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- SCHIFFMAN, LG & KANUK, LL. 1994. 5 th ed. *Consumer Behavior*. London. Prentice Hall.
- SCHIFFMAN, LG & KANUK, LL. 2000. 7 th ed. *Consumer Behavior*. London. Prentice Hall.
- SEARLEMAN, A & HERRMANN, D. 1994. *Memory from a Broader Perspective*. New York. McGraw Hill.
- SHETH, JN. 1982. Consumer behaviour: surpluses and short comings. *Advances in Consumer Research* IX:667-678. Twelfth Annual Conference. [sl]. Association for Consumer Research. .
- SIRGY, MJ. 1983. *Social Cognition and Consumer Behavior*. New York. Praeger scientific.
- SOLOMON, MR. 1996. *Consumer Behavior. Buying, Having and Being*. 3 rd ed. London. Prentice Hall.
- SRINIVASAN, N. 1993. Consumer judgments, decisions and framing dynamics: An informational viewpoint. *Advances in Consumer Research* XX:288-290. Twenty Third Annual Conference. [sl]. Association for Consumer Research
- STEWART, DW. 1990. A commentary on new theoretical perspectives on consumer behavior. *Advances in Consumer Research* XVII:750. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- STOLTMAN, JJ, TAPP, SR & LAPIDUS, RS. 1989. An examination of shopping scripts. *Advances in Consumer Research* XVI:384-391. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- STRATTON, P & HAYES, N. 1993. *A Student's Dictionary of Psychology*. New York. Edward Arnold.
- SUTHERLAND, S. 1995. *The Macmillan Dictionary of Psychology*. New York. Macmillan
- TAYLOR, SA, CRONIN, JJ jr & HANSEN, RS. 1991. Schema and script theory in channels research. *Marketing Theory and Applications*:(2):15-24. American Marketing Association Winter's Conference. [sl].
- WALTERS, CG. 1978. *Consumer Behavior. Theory and Practice*. Ontario. Richard D Irwin.
- WEISBERG, RW. 1980. *Memory, Thought and Behavior*. New York. Oxford University Press.
- WHITNEY, JC & JOHN, G. 1983. An experimental investigation of intrusion errors in memory for script narratives. *Advances in Consumer Research* X:661-666. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.



THE POTENTIAL OF USING SCRIPT THEORY IN CONSUMER BEHAVIOUR RESEARCH

ABSTRACT

The term “schema” was introduced in 1932 by Bartlett, a psychologist, as a mental representation of experience. He postulated that an individual’s experiences undergo processes of rationalization, elaboration and distortion within pre-existing schemata in memory (Shute, 1996:410).

Unfortunately his work only gained appreciation two decades later and again in the cognitive psychology in the 1970’s. Schank and Abelson (1977 in Eysenck, 1994:316) extended the idea of schemata to explain how knowledge of more complex “event sequences” is represented in memory: such knowledge structures were referred to as “scripts”.

Several definitions for scripts exist: Puto (1985:404) for example defines a script as a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer, while a script is also described as a “mental picture plus caption” – representing the action sequences, participants, and physical objects found in a situation (Abelson, 1981 in Schurr, 1986:498).

Scripts as form of declarative knowledge refer to the structural nature of scripts and also refer to how scripts are organized in memory (Matlin, 1998:231, 232). Scripts have certain **properties** (Bower *et al*, 1979 in Bozinoff & Roth 1983:656) and several **structural characteristics** that differentiate them from other memory presentations (Thorndyke & Yekovich in Smith & Houston, 1986:504) and make them exceptionally useful in terms of the study of consumer behaviour.

The fact that scripts contain generic information and that scripts are temporal in nature and sequentially ordered, open the prospects of exploring scripts as representations of specific events - even purchasing events. One of the major advantages of a script is that it is compiled from the perspective of the consumer. By definition a script specifies all participants and role players so that a more realistic scenario of a specific event could be inferred. In this literature overview, script theory is discussed and presented as an alternative to reveal consumer decision-making behaviour instead of relying on traditional consumer decision models that researchers and academics have become so familiar with and accustomed to.

OPSOMMING

Die schema-konsep is in 1932 deur Bartlett, 'n sielkundige, bekendgestel as 'n denkbeeldige voorstelling van 'n bepaalde ondervinding. Hy het beweer dat 'n individu se ondervindinge in die geheue gerasionaliseer, aangepas en verdraai word binne die raamwerk van bestaande schemata (Shute, 1996:410). Ongelukkig is daar eers twee dekades later aan sy werk aandag gegee en toe weer in die 1970's in die kognitiewe sielkunde. Schank en Abelson (1977 in Eysenck, 1994:316) het die idee van schemata uitgebrei om te verduidelik hoe kennis van meer komplekse gebeure in 'n bepaalde orde in die geheue vasgelê word. Daar is na hierdie kennisstrukture as "tekse/geskifte" verwys.

Tekse word op verskeie maniere gedefinieer: Puto (1985:404) definieer 'n teks as 'n aantal verbandhoudende gebeure wat deur 'n individu - as deelnemer of waarnemer - in 'n bepaalde konteks verwag word. 'n Teks word ook beskryf as 'n denkbeeld met byskrifte wat die volgorde van aksies, deelnemers en fisiese objekte wat in die situasie teenwoordig is insluit (Abelson, 1981 in Schurr, 1986:498).

Tekse as 'n vorm van verklarende kennis verwys na die strukturele aard daarvan en ook die wyse waarop tekse in die geheue georganiseer is (Matlin, 1998:231, 232). Tekse het bepaalde **eienskappe** (Bower *et al*, 1979 in Bozinoff & Roth 1983:656) en verskeie **strukturele kenmerke** wat hulle van ander denkraamwerke onderskei (Thorndyke & Yekovich in Smith & Houston, 1986:504) en hulle besonder bruikbaar maak vir die bestudering van verbruikersgedrag.

Die feit dat tekse generiese inligting bevat wat in terme van die volgorde van aktiwiteite/aksies saamgestel is, bied die moontlikheid om tekse te ondersoek om spesifieke gebeure - selfs aankoopgebeurtenisse - voor te stel. Een van die voordele van 'n teks is juis dat dit op die perspektief van die verbruiker gebaseer is. Per definisie spesifiseer 'n teks al die deelnemers en rolspelers sodat 'n meer realistiese scenario van die gebeurtenis gestel kan word. In hierdie literatuuroorsig word die teorie van tekse bespreek en voorgestel as 'n moontlikheid om verbruikersbesluitnemingsgedrag bloot te lê in plaas daarvan om tradisionele verbruikersbesluitnemingsmodelle te gebruik waaraan navorsers en akademici al so gewoon geraak het.

Search words

Scripts; script theory; consumer decision-making; properties and characteristics of scripts; script-elicitation; schemata; event schemata; information processing

INTRODUCTION

The purchasing of household appliances (durables) is typically categorized as a complex, high-risk consumer decision. Because of the fact that there are very few decision-making models that reflect specific purchasing events¹ such as the acquisition of household appliances, traditional consumer decision-making models are generally used to structure and interpret consumer behaviour research - even for product specific research. These models provide broad, organized structures that reflect consumer decision-making from different viewpoints and within different contexts but inevitably mean that the research approach has to coincide with the assumptions of the original authors. Generalizing consumer decision-making to such an extent for any consumer product unfortunately implies a biased approach to consumer decision-making from the start (Burns & Gentry, 1990:522).

Researchers have become increasingly critical in recent times objecting to the use of traditional consumer decision-making models without careful premeditation of the context and purpose within which it is used. Since 1978 several arguments against the general use of traditional consumer decision-making models have been raised. Schurr (1986:498), in reaction to such objections, for example postulated that *purchasing scripts could result in accurate predictions of buyer attitudes and judgment.*

Scripts, also known as event schemata, are memory structures that are well-known in the field of cognitive psychology. By definition scripts – if elicited and generated for specific events – could also be of value in the field of consumer science because of a script's potential to be used to describe and even predict consumer behaviour in specific circumstances. The potential of scripts to *provide behavioral guidance* (Searleman & Herrmann, 1994:126; Stoltman, Tapp & Lapidus, 1989:385; Weisberg, 1980:56) and to reflect on the interaction of individuals and information in decision-making (Taylor, Cronin & Hansen, 1991:17) has been raised before. Various researchers in the field of consumer behaviour have found memory schemata to be important in the structure of consumer knowledge (Leigh & Rethans, 1983:668; Whitney & John, 1983:661-663; John & Whitney, 1982:75). From these reports it seems that scripts could be used to reflect specific types of consumer/buyer behaviour. There is substantial evidence that people form and use scripts from a very early age (Searleman & Herrmann, 1994:126; Hoy, 1991:387). These scripts are stored in long-term memory and are activated and used automatically to guide behaviour in specific circumstances (Bozinoff, 1982:481).

¹Rousseau developed a model of adult purchase decision-making process for furniture (Du Plessis & Rousseau, 1999:91).

A study of consumer decision-making for major household appliances, and more specifically an attempt to elicit and organize a specific script to be used as an alternative to traditional consumer decision-making models, therefore seems to coincide with recommendations for future research in the field of consumer behaviour. The script concept is generally accepted to be a valid construct with wide application (Taylor *et al*, 1991:17) and has been applied in areas such as cognitive, social, developmental and clinical psychology as well as cognitive anthropology as noted by Rummelhart (1980) and Abelson (1976) in Leigh & Rethans (1983:667) as well as Bartlett (1932), Bransford and Franks (1971), Minsky (1975), Rummelhart and Ortony (1977), Schank and Abelson (1977) and Mandler (1979) as cited by John and Whitney (1982:75). Despite the popularity of the script concept in psychology, no empirical use of scripts in the study of consumer decision-making has been reported until the early 1980's (Leigh & Rethans, 1983: 667; Whitney & John, 1983:661). Since the introduction of scripts within the domain of consumer behaviour and since the first script-elicitation studies by Whitney and John in 1983 (*shopping script*) and Stoltman *et al* in 1989 (*examination of shopping scripts*), little has been done to extend and implement the concept in practice (Stoltman *et al*, 1989:384).

Script theory's potential application in consumer behaviour research lies in the possibility that scripts (per definition) could shed light on consumers' expectations, pro-active planning as well as situational decision-making processes and behaviour. The purpose of this literature review is to give an overview of basic script theory and consequently to explain the potential of scripts to serve as a representation of specific purchasing events. Scripts must however at this point be differentiated from *frames*: according to Collins, Gathercole, Conway and Morris (1993:41-43) both represent the structural properties of human knowledge in memory, although frames specifically refer to the recursive decomposition of specific components (concepts) in a memory structure (for example STORE VISIT can be divided into INFORMATION SEARCH and COMPARING PRODUCT ALTERNATIVES while both can be further decomposed into separate frames, for example LISTING PRICE DIFFERENCES; STUDYING DIFFERENT BRAND NAMES).

The purpose of this overview is to discuss the possible existence of a script for a specific purchasing event in memory and to deliberate the structure and content of such a script rather than to focus on a detailed breakdown of each of the elements of the script into specific frames. This could, however, become the focus of a follow-up study.

BACKGROUND OF THE SCRIPT THEORY

The term *schema* as used in psychology, originated through work of Piaget (1926) and Bartlett (1932). It was Bartlett who described schemata as hypothetical mental constructs (abstract knowledge structures) that control attention and the reconstruction of memory and enables one to recognize and recall things that you have been exposed to before (Abelson, 1981:715). The formation of schemata is for example described as *an early memory occurrence that provides a young child with a basic representational system to cope in real life situations* (Hoy, 1991:387). Bartlett further postulated that an individual's original experience of an event undergoes processes of rationalization, elaboration and alteration within pre-existing schemata in memory over time within the limitations of one's cognitive development (Shute, 1996:410). He thus proposed memory to be a reconstructive process that involves interpretation of stimuli, and more importantly, the continual transformation of the original schemata (Matlin, 1998:6). Unfortunately an overriding dedication to the use of experimental methods of behaviourism in research during that time caused Bartlett's work to be ignored until American cognitive psychologists regained interest in the schema theory almost two decades later.

Contemporary cognitive psychology that includes themes such as attention, memory, concept formation and problem solving dates back to 1956. Cognitive psychology is part of a broader field, namely Cognitive Science that has particular interest in the human mind (Matlin, 1998:10). When the schema concept once again attracted interest in the cognitive psychology in the 1970's, Schank and Abelson (1977) as reported by Eysenck (1994:316) extended the idea of schemata to explain how knowledge of more complex event sequences is represented in memory. Such knowledge structures were referred to as scripts and represent elements indicative of repeated experiences of events. According to script theory - that is a specific elaboration of Minsky's frame theory (Bower, Black & Turner, 1979:178) - a script consists of a sequence of goal directed actions that are causally and temporally ordered and includes the relevant people, objects and locations (Sutherland, 1995:413; Bower *et al*, 1979:178).

Experimental evidence of the psychological reality of schemata and scripts has accumulated since (Vosniadou, 1996:403; Eysenck, 1994:316, 317; Searleman & Herrmann, 1994:125). Modern versions of the schema theory play a prominent role in current theories of memory (Eysenck, 1994:316). Of specific importance for this article, is that theorists within the broad field of cognitive science propose that thinking involves the manipulation of internal representations (mental models) of the external world (Matlin, 1998:10). The schema concept, as developed by Bartlett in 1932, still forms an integral part of the paradigm of cognitive psychology.

SCRIPTS AS A SPECIFIC FORM OF SOCIAL SCHEMATA

Categories of schemata

Social schemata are cognitive structures that are categorized into four groups (Taylor *et al*, 1991:15), namely *self schemata* (that contain information about one's own personality, appearance, behaviour); *person schemata* (that focus on traits and behaviours common to types of people); *role schemata/person-in-situation schemata* (that include information about people and their typical behaviour in specific social situations) and *event schemata/scripts* (that include knowledge about the expected sequence of events in a given situation). A script therefore is a social schema with specific characteristics. To fully understand scripts, the relevant concepts are defined and discussed first.

Definition and discussion of relevant and related concepts

Schema/ta According to the *standard theory* in cognitive psychology, schemata are stored frameworks (cognitive structures) of knowledge about specific objects or topics and are represented by nodes in semantic memory¹ (Brown, 1992:787). Schemata thus contain units of information that are interconnected to form an integrated whole (Alba & Hasher, 1983; Bartlett 1932; Fiske & Dyer, 1985 in Taylor *et al*, 1991:15) and can be described as *abridged, generalized, corrigible organizations of experience that serve as initial frames of reference for action and perception of similar experiences* (Weick in Schurr, 1986:498). A schema in part consists of a defined stimulus domain, is linked to a specific experience and contains general/generic knowledge about that domain including the relationships among its attributes and examples of instances of the stimulus domain. When one is exposed to any object or situation, a schema is retrieved from long-term memory into working memory to serve as a frame of reference so that one is able to interpret, accept and understand the object/situation (Brown, 1992:787; Hoy, 1991:387).

A schema assumes the operation of four mental processes: the *selection* of incoming stimuli for *mindful presentation* and *interpretation* using prior knowledge to support the *comprehension* and *integration* for *storage* in the memory (Schurr, 1986:498). Individuals eventually rely upon stored, generic concepts/events in a schema to solve problems, to set goals, select behaviour or to provide direction for further information search (Leigh & Rethans, 1983:667; Whitney & John, 1983:661). According to the schema theory, we summarize the regularities in our lives and after a while, any single *event* can no longer be distinguished from other similar events. We in fact reconstruct generic representations of similar events (Matlin, 1998:158). Schema theory thus refers to the *interpretation* of experience rather than the *exact representation* of experiences (Thagard, 1998:60; Shute, 1996:410).

¹ Semantic memory refers to so-called *general* knowledge.

Schema theories have been proposed as a means whereby individuals deal with the overwhelming amount of information in the environment: a schema enables selective perception in every day living by controlling information selection and focusing attention on a limited portion of stored knowledge (Schurr, 1986:498).

Schemata in terms of knowledge and cognitive structures A cognitive process refers to the way in which consumers (human beings) process information (Schurr, 1986: 498; White, Curbow, Constanzo & Pettigrew, 1983:636). According to the *standard theory of cognitive structure*, knowledge is stored in long-term memory as schemata. Schemata refer to large sets of well-structured cognitions that have been learned over time with experience (Lindsay & Norman, 1975, Norman & Bobrow, 1975 in Bozinoff & Roth, 1983:655; Abelson, 1981:715) and consist of frameworks for organizing information about a concept into a meaningful structure (Ashcraft, in Brown, 1992:787; Bozinoff & Roth, 1983:655; Bozinoff, 1982:481). One would therefore not be able to recognize an object such as a washing machine unless one has a conception or schema of what a washing machine is (Taylor & Crocker, 1981 in Whitney & John, 1983:662). Schemata are regarded as the building blocks for cognition (Leigh & Rethans, 1983:667) but they are not static: they are the result of a continuous cognitive process and change with experience (Whitney & John, 1983:661).

Any information that an individual is exposed to is organized in memory through schemata, to give meaning to stimuli and to enable interpretation and comprehension of any situation as new, familiar or unique. According to Lord and Foti (1986, in Taylor *et al*, 1991:15) people depend on such highly structured knowledge systems to conclude appropriate subsequent behaviours. Schemata in essence provide a knowledge base that serves as a control mechanism to facilitate (or limit) one's understanding of the world and events and to assist individuals to effectively deal with complex tasks (Fayol & Monteil, 1988, Lord & Foti, 1986 in Taylor *et al*, 1991:16).

According to Fayol and Monteil (1988, in Taylor *et al*, 1991:16) schemata can be executed automatically when needed while Langer, Blanck and Chanowitz (1978, in Taylor *et al*, 1991:16) concluded that individuals unconsciously categorize facts they are confronted with and then act upon them automatically. However, when an individual is exposed to an unfamiliar situation where stimuli do not correspond with his expectations of the situation, mental thought becomes conscious and the semantic content (general knowledge) will dominate (Leyens, 1983 in Taylor *et al*, 1991:16).

Scripts Scripts are a specific form of schemata, namely *event* schemata and can be described as temporally and sequentially ordered schemata (hypothetical knowledge structures) in long-term memory that contain series of actions which are arranged in the hierarchical or causal ordering of their elements (Whitney & John, 1983:662). A number of more detailed definitions for scripts exist,

all referring to the same phenomenon but emphasizing different dimensions. Puto (1985:404) for example defines a script as *a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer*. A restaurant script, for example, may therefore contain scenes/elements such as *entering, being seated and ordering* and certain schemata, such as the *waiter* may represent certain significant components of that script. Abelson (1981:718) describes scripts as *rich packages of information* and preferred a more visual definition: he regarded a script as *a mental picture plus caption – representing the action sequences, participants, and physical objects found in a situation*.

Because a script is a structure that consists of interconnected elements, the actions in one slot affect the contents of the other (Schank & Abelson, 1977 in Whitney & John, 1983:662; Den Uyl & Van Oostendorp, 1980:278). Scripts that have been stored in an individual's memory include routine, well-practiced event sequences and over time. Through continuous learning, the application of scripts in real life situations becomes automatic (Speck, Schumann & Thomson, 1988:70; Bozinoff & Roth, 1983:655,656; Whitney & John, 1983:661). In practical terms it means that scripts are used in situational context to direct behaviour when activated (Sutherland, 1995:413; Stratton & Hayes, 1993:173; Whitney & John, 1983:662; Bozinoff, 1982:481). Scripts are particularly valuable because they conserve effort. A script for example enables someone to act instead of relearning the steps of appropriate buying behaviour with every subsequent purchase (Martin, 1991:225). Individuals can consciously extract from their scripts when asked to describe familiar activities. The result is an automatic process although the initial development of scripts is conscious. A situation therefore triggers the appropriate script or part of a script (subscript) and guides behaviour (Stoltman *et al*, 1989:384) as it specifies the events that can normally be expected to occur (Taylor *et al*, 1991:18; Puto, 1985:404).

In psychology, attempts have been made to broaden and define script content by identifying the common and unique properties of scripts (Stoltman *et al*, 1989:384). Scripts were found to be *a function of the context*. A generic restaurant script should thus be replaced by *a fine dining* script or *a fast food* restaurant script to fully capture the unique characteristics of the different events. Of special interest to the discipline of consumer science, is the premise that the development of a generic script for any specific consumer decision-making situation will provide a basic scenario that could be adapted for similar decision-making situations – thus establishing a whole new avenue to explore.

Metascripts In addition to the script concept, so-called *metascripts* or *memory organization packages (MOPs)* exist (Abelson, 1981:726). These refer to a family of knowledge structures that are stored as reminders or to facilitate understanding through previous experiences. For any individual, separate experiences (for example buying experiences) may contain sufficient subjective similarity to achieve coherence despite differences in detail (shopping for clothes would include a

scene for *fitting of clothes* while shopping for appliances will not). Ultimately, the presence of salespeople, the display of appliances/ garments will evoke similar cognitive representations and these will form part of a metascript. The metascript concept provides the opportunity to adapt a script to portray other, similar events (Forrest-Pressley, MacKinnon & Waller, 1985:111-115).

Scripts versus frames, habits and stories

There is a distinction between scripts, frames, habits and stories in terms of cognitive involvement and detail provided.

- Both scripts and frames can be described as representations of knowledge in memory with multiple levels of hierarchical structure. A script more specifically refers to event schemata that consist of various elements in a specific hierarchical order while any single element of a script (for example STORE VISIT can be interpreted as a frame that can be further divided into COMPARISON OF PRODUCTS which is a frame in itself and DELIBERATION OF ALTERNATIVES which is another frame of knowledge) (Collins *et al*, 1993:41-43). Frame theory is popularly implemented in artificial intelligence and has potential in production systems while scripts specifically refer to event schemata (Collins *et al*, 1993:43).
- According to Langer and co-workers (1978, 1979 in Whitney & John, 1983:662), script processing requires a certain amount of conscious thinking (e.g. where to sit in the restaurant and what to order). It is only when the sequence of actions are disturbed or when the actions differ from what is expected (for example when no menu is provided in the restaurant), that conscious thinking takes over and the consumer calls upon the waiter for assistance so that a meal may be ordered (thus for scripted activities to proceed). Although a script is activated automatically it does not imply mindless behaviour. For scripts, the cognitive aspect that is involved is explicit in the specified event sequences and when one is confronted with variations to constancies and needs to adapt (Abelson, 1981:722). There can for example be different script paths/tracks offering different alternatives to normal procedures: if the menu is on the table, the waiter need not be asked for one (restaurant script); if payment options are displayed obviously in the store, a salesperson need not be asked for such details (buying script).
- Habits, on the other hand, do not provide for such variations and refer to (mindless) response behaviour (for example paying by credit card for the meal every time you go to a restaurant). A script could in some instances become a habit, for example when someone always sits in the same corner and always orders the same meal (Whitney & John, 1983:662).
- In contrast to a script that is generic in nature with no detail included, *stories* contain more detail relating to specific experiences (Whitney & John, 1983:662; Abelson, 1981:723).

EMPIRICAL EVIDENCE FOR SCRIPTS

Since the introduction of scripts, various efforts have been made to find empirical evidence for scripts. Bartlett (1932) found that when subjects were given stories to memorize, they tended to adapt the stories to conform to their own ideas/scripts, in other words to coincide with existing knowledge. Bozinoff and Roth (1983:656) suggest that subjects store experiences in the form of scripts and then draw upon their own scripts to complete stories. Other studies cited by Bozinoff and Roth (1983:656, 657) confirm this: for example Brandsford, Barclay and Franks (1972) found that when questioned, subjects tend to construct semantic descriptions of situations rather than to remember the details of information that were presented to them. Baggett (1975 quoted by Bozinoff & Roth, 1983:656, 657) also found that during a memory task, subjects filled in missing details based on their own experience to complete a story. This means that scripted information stored in memory, is used to fill in missing information.

Parental descriptions of toddlers' pretended shopping behaviours (Hoy, 1991:387) suggest the emergence of script-related knowledge at a very early age: child-development literature in fact suggest that children at the age of 24 months already possess sufficient cognitive and social skills to acquire rudimentary consumer knowledge. The script framework has also been used to describe children's socialization as consumers (Schank & Abelson, 1977 in Hoy, 1991:387; Forrest-Presley *et al*, 1985:45).

The formation of scripts, however, is an individual phenomenon. Scripts for the same event (e.g. the purchasing of a house or major household appliances) will therefore differ from person to person although such scripts will agree on the most significant aspects so that a so-called shared script could be inferred. This is ascribed to the fact that scripts are developed through interaction with the environment (Nottenburg & Shoben, 1980:330).

SCRIPTS AS PERFORMANCE STRUCTURES AND IN TERMS OF INFORMATION PROCESSING CAPACITY

Scripts are knowledge structures that play a dual role: they can be categorized as scripts in *understanding* and scripts in *behaviour* (Abelson, 1981:719; Bower *et al*, 1979:178). By retaining and then retrieving actions from previous experiences, scripts facilitate the understanding of events/situations and also direct behaviour so that new actions need not be learned for similar situations (Bozinoff & Roth, 1983:655). According to Taylor *et al* (1991:16), scripts also contribute to the understanding of the behaviour of others. Scripts consequently guide behaviour as well as the appropriate sequence of actions in a specific context so that the individual does not have to

devote full attention to incoming stimuli (Puto, 1985:404; Whitney & John, 1983:663, 664). Scripts thus contribute to comprehension (Gibbs & Tenney, 1980:275-284; Nottenberg & Shoben, 1980:330) by providing a structure of how the world operates from personal or explicit experiences by guiding lower-order information processing (Leigh & Rethans, 1983:667; Abelson, 1980 & Martin, 1980 in Whitney & John 1983:662). Because a script signifies stereotypic conception, it facilitates the ordering of incoming information. Individuals thus use scripts as an aid to plan, handle and understand situations and activities (Bower *et al*, 1979:178).

Although scripts are initially developed in a *conscious* learning context, an activated script will probably result in automatic or routine response with little conscious effort required due to the fact that familiar activities, through over learning, eventually become automatic (Speck *et al*, 1988:70; Bozinoff & Roth, 1983:655, 656; Whitney & John, 1983:661). The situation therefore triggers the appropriate script in memory and provides behavioural guidance (Stoltman *et al*, 1989:384). When an individual has to react to a stimulus that differs from what is preserved in the script in memory, the script will dominate so that the individual will be inclined to act in terms of the script. Of specific interest for the theory of consumer decision-making is the characteristic of a script to conserve a consumer's limited information processing capacity and to reduce cognitive strain due to encoding and retrieval processes from memory. A script facilitates action by minimizing effort and it reduces information overload by stimulating selective attention to information/stimuli (Taylor *et al*, 1991:16; Leigh & Rethans, 1983:667; Whitney & John, 1983:662; Bozinoff, 1982:481).

PROPERTIES AND STRUCTURAL CHARACTERISTICS OF SCRIPTS

Although different scripts exist in memory as a function of contextual cues and also as a result of core and peripheral actions (Stoltman *et al*, 1989:384), studies have indicated that scripts possess certain **properties** (Bozinoff & Roth, 1983:656; Bower *et al*, 1979:177-179):

- There are **script norms**: a script for a specific event always contains the same *characters (people)*, *props (objects)* and *actions* and is further characterized by *a specific order of events*, thus a specific bundle of expectations about the event. Script norms are also referred to as sets of *vignettes* (Abelson, 1981:717). (*Example of a vignette*: The waiter (character) presents (action) the menu (object) to the client (character).
- Within a script, series of action sequences are always grouped into **segments/scenes/elements** in a similar way so that any script contains several elements that represent the characteristic grouping of actions. Each element has a definite *main conceptualization or MAINCON* (Abelson, 1981:717), *in other words one or more central or top-level events that always take place* (Den Uyl & Van Oostendorp, 1980:278) (*Examples of MAINCONS in a restaurant script*: Ordering the meal; Paying the bill) (Bozinoff & Roth, 1983:656).

- Script elements are always **organized in a common order**. Research has shown that when the series of actions for a specific event are scrambled out of order, subjects tend to use a **common order** to unscramble and organize them.

- Subjects are **not conscious** of scripted activities due to the automatic nature of scripts and the fact that scripts are stored in long-term memory, which make it rather difficult to retrieve in an experimental situation. As a result, when confronted, subjects often remember exceptional actions rather than scripted ones (Graesser, Gordon & Sawyer, 1979 and Graesser, Woll, Kowalski & Smith, 1980 in Bozinoff & Roth, 1983:656). Subjects do however have the ability to draw upon scripts to describe familiar activities on condition that they have to be prompted very specifically within a specific context to successfully elicit scripted activities.

Several **structural characteristics** differentiate scripts from other memory presentations (Thorndyke & Yekovich in Smith & Houston, 1986:504):

- Scripts only contain the **common (generic) actions** for a prototypical event and can be described as a network of generic actions that are combined according to certain rules - almost like a model or framework that needs to be elaborated with detail (Morris, 1987:189; Abelson, 1980 in Bozinoff & Roth, 1983:655). Scripts thus contain a specific nature of knowledge (*concept abstraction*) excluding the details of the event.

- **Scripts possess a set quality**: when access is gained to any component action (element) of a script, access to the entire group of actions constituting an event is obtained because the various elements are linked and interconnected. An individual will thus automatically respond to the situation taking into account the entire event including the preceding actions (Smith & Houston, 1986:505).

- **Temporal or causal sequence** is typical of a script's organization. Certain actions must therefore precede other actions in time in a particular set to provide the enabling conditions for the latter actions to occur (for example *reading the menu* before *ordering the meal*) (Thorndyke & Yekovich in Smith & Houston, 1986:504).

- Scripts possess a **hierarchical structure** that determines the relationships among actions of varying levels and how they interconnect to constitute an event (Smith & Houston, 1986:504). Abbott and Black (1980, in Smith & Houston, 1986:504) describe this hierarchy in three levels namely a *script header*, *scene headers* and *scene actions*. A *script header* represents the macro level of the hierarchy and summarizes the entire event (e.g. *dining in a restaurant*). The event consists of several scenes, identified by *scene headers* (e.g. *entering the restaurant*) that exist at an intermediate level of the hierarchy and contain more detailed information/scene actions.

The scene actions are at the lowest level of the hierarchy and include the individual actions relevant to a specific scene (*Example: The Ordering scene in the restaurant script may consist of Reading the menu; Discussing the choices; Placing an order*) (Smith & Houston, 1986:504).

- Scripts may also **vary in strength**: strong scripts are more explicit and contain several scene constraints, in other words many actions that *must* occur. Weak scripts, on the other hand, are vague and have fewer scene constraints so that some scenes do not have a high probability of occurring (*Example: A strong restaurant script (fine dining) will always have a waitress while a weak script (fast foods restaurant) need not*) (Bozinoff & Roth, 1983:655; Abelson, 1981:717).
- Script events may also **vary in degree of centrality**: more central events are referred to as *main conceptualizations* around which other aspects of the script are organized. Idiosyncratic differences would be expected for less central events that reflect unique personal experiences (Whitney & John, 1983:662).

RELEVANT LEARNING THEORY

In cognitive psychology it is understood that people interpret the world in terms of concepts that are organized into large conceptual structures within memory (Vosniadou, 1996:402; Lai, 1994:491). It is further proposed that people comprehend complex sequences of events in memory structures known as *schemata*, *scripts* and *frames*. Schemata (and scripts) are presumed to be represented in memory in an abstract form (bearing no direct relationship to a given form of perception e.g. visual, auditory, tactile). They are further presumed to be stored as frameworks of knowledge in long-term memory with their defining characteristics contained in a propositional format, organized according to specific rules for use in subsequent acquisition of *declarative knowledge* (Shute, 1996:416; Vosniadou, 1996:404; Brown, 1992:787; Bozinoff, 1982:481). Scripts as form of *declarative knowledge* refer to the *structural nature* of scripts, i.e. how scripts are organized in memory (*if this happens, then that follows*) (Matlin, 1998:231, 232).

Declarative knowledge more specifically refers to the organization of propositions, concepts and schemata in the various conceptual structures in memory (Matlin, 1998:230; Shute, 1996:414; Vosniadou, 1996:404). According to Andersen's ACT* (ACT star) theory declarative knowledge refers to knowledge about facts and things. It further proposes that the declarative network consists of *an interconnected set of propositions*. An example would be washing machines sold at specific stores in specific departments. Another example would be visual images in-stores, of all the washing machines displayed together or information about the order of events for example deciding what type of washing machine is required before buying (Matlin, 1998:230). Associative processes and inductive reasoning are used to produce declarative knowledge outcomes.

According to the *constructive model of memory*, schemata facilitate memory abstraction so that one is able to understand and interpret an event even without details about the original event (Matlin, 1998:256). A script is considered to be a *prototype of a sequence of events* (Matlin, 1998:245) and creates strong expectations about the event that affect and enable the interpretation of information. There is evidence that scripts (stereotypical event schemas) influence the way in which people remember information and make inferences in complex situations (Vosniadou, 1996:403).

The use of scripts to recognize situations, refer to *top-down cognitive processing (concept driven processing)* and refers to the influence of concepts, expectations and memory to conclude appropriate behaviour (Matlin, 1998:21). These conceptual structures in memory are continuously modified to incorporate experience and this explains why individual scripts for the same event will differ in certain aspects (Matlin, 1998:165; Shute, 1996:416; Vosniadou, 1996:404): *enrichment* refers to the addition or deletion of concepts in memory; *tuning* refers to the evolutionary changes in the application of schema to interpret data; *accretion* refers to gradual accumulation of information, while *restructuring* refers to the creation of new knowledge structures.

Script theory is based upon the existence of higher order memory structures and involves unique access to entire sets of knowledge in memory. Speck *et al* (1988:70) refer to Brewer and Namakura (1984) and Alba and Hasher (1983) who explain script theory in terms of selective attention, encoding and retrieval, information processing and then emphasize relational context as the basis of meaning. The implication of the learning theory (more specifically the basic theories of cognition) for schema research, is that *experience* is an important prerequisite for participation in a script-elicitation study to ensure that participants have been exposed to conditions over time that would have allowed for the formation of the desired complex, abstract schemata/scripts in long-term memory.

RATIONALE FOR THE ELICITATION OF SPECIFIC SHOPPING SCRIPTS

A major advantage of a script is that it contains a sequence of events from the point of view of the consumer (Abelson, 1981:715) and ultimately has the potential to offer valuable insights into consumer behaviour (Taylor *et al*, 1991:16). Taylor *et al* (1991:17) refer to Barsalou and Hutchinson (1986) who investigated the role of schemata in planning and concluded that consumers use the most general aspects of schema knowledge on most occasions while other types of information tend to be more variable and context specific. From this it seems that scripts could provide a mechanism for linking expectations (assumed to be based on scripts) with both proactive planning as well as the situational decision-making process. In contrast to consumer decision-making models, scripts categorically identify principle actions, the people (actors) and the objects involved in a recurring situation/event. Scripts thus have the advantage over consumer decision-making models in the sense that scripts facilitate the study of individuals (consumers and other role

players), objects and roles within specific decision-making contexts (Calder & Schurr, 1981 in Speck *et al*, 1988:70; Schurr, 1986:498-501). Because scripts reflect consumers' mental representation of an event (i.e. actual behaviour in the minds of consumers) (Bozinoff, 1982:485), scripts could provide valuable guidelines on how to go about changing/adapting consumer behaviour. An understanding of script theory also serve as a reminder that consumers tend to act on what they are familiar and comfortable with and are reluctant to learn/accept new ideas so that they are inclined to revert to scripted activities that are somewhat related to routine response behaviour (Bozinoff & Roth, 1983:659).

It is suggested that research on scripts and more specifically an effort to successfully elicit and organize scripts for specific consumer decision-making activities, will contribute to expanding theory in consumer/buyer behaviour. This will be to the benefit of:

- consumers. Scripts identify the people and objects involved in an event as well as the actions taken. The elicitation of scripts for specific events/ activities will result in an improved understanding of actual buyer behaviour. Consequently consumer assistance could be planned and directed more effectively instead of it being irrelevant, haphazard, confusing and even overwhelming.
- retail and industry. Scripts can provide an avenue to plan more effective marketing strategies in the sense that a script provides a more realistic reflection of the decision-making process as it is generated from the view of the consumer. The relevant people can be targeted and the type of assistance can be provided, where and when it is needed most.
- consumer advisors. Because scripts reflect buyer behaviour from the perspective of consumers, it will be possible for consumer advisors employed by suppliers of goods and services to provide assistance where and when required rather than to focus on what is *assumed to be* important.
- the market-place. Scripts have the potential to shed light on buyer behaviour so that the inputs and contributions of the parties involved in the process can be planned and coordinated to the benefit of all.
- consumer education. Scripts provide information (for example on information search and financial decision-making) that may assist or serve as guidelines in consumer-education programmes at school or tertiary institutions.

CONCLUSION

It must be appreciated that traditional consumer decision-models have, up to now, made an important contribution to concept formation and theory building and have been valuable in marketing and in the field of consumer science in providing theoretical frameworks for the study of various aspects of consumer behaviour. They have however been criticized in a number of ways in recent years (Erasmus, Boshoff & Rousseau, 2001:83-87) and the need to explore alternatives is inevitable.

The fact that scripts contain generic information (thus free from cluttering) and that it is temporal in nature and sequentially ordered, provide the opportunity to elicit and organize a more specific representation of a consumer decision-making event. Because scripts reflect the perspective of the consumer and specify all participants and role players (Schurr, 1986:498-501; Abelson, 1981:715-718) a more realistic scenario of a specific event such as consumer decision-making could be deduced from a script. Scripts are hereby proposed as an alternative to or, at least, the enhancement of traditional consumer decision-models in an effort to address many of the problems associated with traditional models (Erasmus *et al*, 2001:83-87).

REFERENCE LIST

- ABELSON, RP. 1981. Psychological status of the script concept. *American Psychologist* 36(7):715-729.
- BOWER, GH, BLACK, JB & TURNER, TJ. 1979. Scripts in memory for text. *Cognitive Psychology* 11:177-220.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L & ROTH, VJ. 1983. Recognition memory for script activities: an energy conservation application. *Advances in Consumer Research* X:655-660. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- BROWN, TJ. 1992. Schemata in consumer research: a connectionist approach. *Advances in Consumer Research* XIX:787-794. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- BURNS, AC & GENTRY, JW. 1990. Toward improving household consumption behavior research: avoidance of pitfalls in using alternative household data-collection procedures. *Advances in Consumer Research* XVII:518-523. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- COLLINS, AF, GATHERCOLE, SE, CONWAY, MA & MORRIS, PE. 1993. *Theories of Memory*. Hove. Lawrence Erlbaum.
- DEN UYL, M & VAN OOSTENDORP, H. 1980. The use of scripts in text comprehension. *Poetics* 9:275-294.
- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson Sigma.
- ERASMUS, AC, BOSHOFF, E & ROUSSEAU, GG. 2001. Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences* 29:82-90. <http://www.up.ac.za/academic/acadorgs/saafecs/vol29/erasmus.html>
- EYSENCK, WM. 1994. *The Blackwell Dictionary of Cognitive Psychology*. London. Blackwell.
- FORREST-PRESSLEY, DL, MACKINNON, GE & WALLER, TG. 1985. *Metacognition. Cognition and Human Performance*. Vol. 1: *Theoretical Perspectives*. London. Academic.
- GIBBS, RW & TENNEY, YJ. 1980. The concept of scripts in understanding stories. *Journal of Psycholinguistic Research* 9(3):275-284.
- HOY, MG. 1991. The emergence of script related knowledge. Marketing theory and applications 2:387-394. *American Marketing Association Winter's Conference*. [sl].
- JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial nature of scripts. *Advances in Consumer Research* IX:75-79. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- LAI, AW. 1994. Consumption schemata: their effects on decision-making. *Advances in Consumer Research* XXI:489-494. Twenty Fourth Annual Conference. [sl]. Association for Consumer Research.

- LEIGH, TW & RETHANS, AJ. 1983. Experiences with script-elicitation within consumer decision-making contexts. *Advances in Consumer Research* X:667-672. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- MARTIN, I. 1991. Expert novice differences in complaint scripts. *Advances in Consumer Research* XVIII:225-231. Twenty First Annual Conference. [sl]. Association for Consumer Research.
- MATLIN, MW. 1998. *Cognition*. 4 th ed. London. Harcourt.
- MORRIS, P. 1987. *Modeling Cognition*. New York. John Wiley.
- NOTTENBURG, G & SHOBEEN, EJ. 1980. Scripts as linear orders. *Journal of Experimental Social Psychology* 16:329-347.
- PUTO, CP. 1985. Memory for scripts in advertisements. *Advances in Consumer Research* XII:404-409. Fifteenth Annual Conference. [sl] Association for Consumer Research.
- SCHURR, PH. 1986. Four script studies: What we have learnt. *Advances in Consumer Research* XIII:498-503. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- SEARLEMAN, A & HERRMANN, D. 1994. *Memory from a Broader Perspective*. New York. McGraw-Hill.
- SHUTE, VJ. 1996. Learning processes and learning outcomes. In DE CORTE, E & WEINERT, FE. 1996. *International Encyclopedia of Developmental and Instructional Psychology*. Munchen. Pergamon.
- SMITH, RA & HOUSTON, MJ. 1986. Measuring script development: an evaluation of alternative approaches. *Advances in Consumer Research* XIII:504-508. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- SPECK, PS, SCHUMANN, DW & THOMSON, CT. 1988. Celebrity endorsements – scripts, schema and roles. *Advances in Consumer Research* XV:69-75. Eighteenth Annual Conference. [sl]. Association for Consumer Research.
- STOLTMAN, JJ, TAPP, SR & LAPIDUS, RS. 1989. An examination of shopping scripts. *Advances in Consumer Research* XVI:384-391. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- STRATTON, P & HAYES, N. 1993. *A Student's Dictionary of Psychology*. New York. Edward Arnold.
- SUTHERLAND, S. 1995. *The Macmillan Dictionary of Psychology*. New York. Macmillan.
- TAYLOR, SA, CRONIN, JJ jr & HANSEN, RS. 1991. Schema and script theory in channels research. *Marketing Theory and Applications* (2):15-24. American Marketing Association Winter's Conference.
- THAGARD, P. 1998. *Mind. Introduction to Cognitive Science*. London. MIT Press.
- VOSNIADOU, S. Knowledge representation and organization. In DE CORTE, E & WEINERT, FE. 1996. *International Encyclopedia of Developmental and Instructional Psychology*. Munchen. Pergamon.
- WEISBERG, RW. 1980. *Memory, Thought and Behavior*. New York. Oxford University Press.
- WHITE, TW, CURBOW, BA & COSTANZO, MA & PETTIGREW, TF. 1983. Social psychological approaches to promoting lifestyle and device oriented conservation behaviors. *Advances in*

Consumer Research X:636-640. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.

WHITNEY, JC & JOHN, G. 1983. An experimental investigation of intrusion errors in memory for script narratives. *Advances in Consumer Research* X:661-666. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.

A SCRIPT-ELICITATION PROCEDURE FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES

ABSTRACT

Scripts for the acquisition of major household appliances for the purpose of eliciting script narratives were developed. The procedure for eliciting script narratives was described and the results of a pilot study were reported. The procedure was found to be a reliable and valid method for eliciting script narratives. The procedure was found to be a reliable and valid method for eliciting script narratives.

Although the concept of eliciting script narratives was one of the concepts that were developed as part of an effort to understand the structure of a script plan (Schank, 1975; Schank, 1976; Schank, 1977), the concept was not widely used until the late 1980s when it was used for the purpose of consumer research on shopping behavior. The use of narrative structures in consumer research has been widely acknowledged and studied (e.g., Allen, 1984-91-98; Coates, Brock, & Haxel, 1992:423-454).

Two issues are raised in this discussion. First, the concept of eliciting scripts for practical use in consumer behavior research is brought to an appropriate remedy. A script-elicitation procedure for the acquisition of major household appliances for the purpose of eliciting script narratives is presented. Problems that were reported in previous studies eliciting scripts were addressed in an effort to produce a procedure that is reliable and valid. A script-elicitation procedure for the acquisition of major household appliances will open the way for many other studies in the consumer behavior field that can be used to the benefit of consumers, retail and industry.

5

A SCRIPT-ELICITATION PROCEDURE FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES

ABSTRACT

Scripts for events such as visiting a doctor, attending a lecture, eating in a restaurant and getting up for school were elicited and developed during the early years of script-elicitation studies when the whole idea of cognitive structures, and more specifically event schemata in long-term memory stimulated the curiosity of psychologists.

Although a script for shopping in a grocery store was one of the scripts that were developed as part of an attempt to identify the characteristics of a script (Bower, Black & Turner, 1979:180, 181) little evidence could be found of attempts to elicit and generate shopping scripts for the purpose of portraying consumers' purchasing behaviour. The role of memory structures in information search behaviour, in brand familiarity and product knowledge has however been acknowledged by several researchers (Kent & Allen, 1994:97-98; Ozanne, Brucks & Grewal, 1992:452-454).

Two issues are addressed in this discussion. Firstly, the potential of eliciting scripts for practical use in consumer behaviour research is brought to the attention. Secondly a script-elicitation procedure for the acquisition of major household appliances for theoretical confirmation of schema theory is suggested. Problems that were reported in previous script-elicitation studies were addressed in an effort to produce trustworthy, authentic data. A script for the acquisition of major household appliances will open the way for many other related script-elicitation studies that could be used to the benefit of consumers, retail and industry.

OPSOMMING

Tekse/geskryfte vir gebeure soos 'n besoek aan 'n dokter, die bywoon van 'n lesing, eet in 'n restaurant en opstaan en gereedmaak vir skool is in die vroeë jare van die ontwikkeling van tekse saamgestel toe die bestaan van kognitiewe strukture, veral gebeure-schemata in die langtermyn geheue, sielkundiges se belangstelling geprikkel het.

Hoewel aankope in 'n kruidenierswinkel een van die tekse is wat aanvanklik ontwikkel is in 'n poging om die eienskappe van tekse te bepaal kon geen bewys gevind word dat tekse vir aankoopaktiwiteite as onderwerp gekies en saamgestel is met die spesifieke doel om verbruikers se implimentering van die aankoopproses bloot te lê ter wille van beter begrip van wat in die praktyk gebeur nie.

Twee sake word in hierdie artikel aangeraak. Eerstens word die potensiaal van tekse in terme van die praktiese aanwending daarvan in verbruikersgedragnavorsing voorgehou. Tweedens word 'n prosedure vir die ontwikkeling van 'n teks vir die aankoop van groot huishoudelike toerusting voorgestel met in agneming van besware en probleme wat tydens vorige navorsing met tekse geopper is in 'n poging om data te verkry wat betroubaar en waar is. 'n Teks vir die aankoop van groot huishoudelike toerusting kan die weg baan vir soortgelyke studies met betrekking tot ander aankooppraktyke tot voordeel van verbruikers, die handel en industrie.

Search words:

Script-elicitation procedure; scripts; decision-making for major household appliances; script-elicitation procedure; script-elicitation techniques; properties of scripts; characteristics of scripts; household decision-making research

INTRODUCTION

This study is a result of a study of the basic script theory (Erasmus, Boshoff & Rousseau, 2002:1-8) and the consequent idea to suggest an appropriate script-elicitation procedure for purchasing major household appliances as an example of a shopping/buying script. Experience gained through previous script-elicitation studies was used as background and critique and recommendations were incorporated to compile the final script elicitation procedure. It is suggested that this procedure could also be used to elicit purchasing scripts for other commodities within the domain of consumer science with the intention to extend theory on consumer decision-making behaviour towards an appreciation and improved understanding of consumers' actions.

A script is defined as *a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer* (Puto, 1985:404). Scripts can be described as long-term memory structures that develop in an evolutionary way in memory with a person's development and with experience through repeated exposure to a particular activity (Hoy, 1991:387; John & Whitney, 1982:75, 76). A script eventually becomes part of one's declarative knowledge framework in long-term memory to serve as a frame of reference so that an individual is able to act under specific as well as similar circumstances by *referring* to experiences in the past for *appropriate behaviour*.

Scripts as a *tool of understanding and the interpretation of events and situations* thus seem very useful in people's coping with everyday situations. Several scripts (of which the *restaurant script* probably is the best known) have thus been developed over the years – more often to prove the existence of scripts than to utilise their potential in practice. It is unfortunate that little has been done since the first script-elicitation studies to explore the script concept in terms of buying and shopping behaviour, while the potential of such investigation seems to have merit.

SCRIPT DEVELOPMENT IN MEMORY

It seems that children, even at an early age, possess fairly accurate and sequentially ordered reports of familiar events (Searleman & Herrmann, 1994:126). However, multiple experiences, combined with cognitive development allow for more complex scripts to develop as an individual's ability to organize and abstract from consumer experiences matures (Hoy, 1991:387; Price & Goodman, 1990 in Hoy, 1991:387; Nottenburg & Shoben, 1980:329). A once-off experience, for example a first time purchase of a major household appliance, may be temporarily stored as *episodic memory*, but unless the experience is repeated through the purchase of other major appliances to allow for the purchasing event to become generic script like knowledge, its prominence in memory will fade (Collins, Gathercole, Conway & Morris, 1993:373). New information about familiar events is continually integrated into one's general knowledge system,

which means that existing schemata/scripts are continually *updated* (Collins *et al*, 1993:372).

Script development in memory progresses through three stages:

- At the *episodic (basic)* level, a single experience forms the basis of knowledge structure (Abelson 1976, in Hoy, 1991:387).
- At the *categorical* level, an individual is able to make some generalizations but will still focus on details of a specific incident.
- At the *hypothetical* stage, abstract generalizations as well as conditional statements become significant so that an experienced individual will have a more complex (although still generic) script of a particular event (Abelson, 1976 in Hoy, 1991:387).

THEORY ON SCRIPT ACTIVATION AND ELICITATION

Different perspectives of script activation in memory

In cognitive psychology it is assumed that people understand the world in terms of concepts that are organized into larger conceptual structures in one's memory (Vosniadou, 1996:402). *Complex sequences of events* are for example proposed to be stored in structures known as schemata (more specifically event schemata/scripts) and frames. According to the *standard theory of cognitive structure*, schemata (and scripts) are presumed to be represented in long-term memory in an abstract form where they are stored as frameworks of knowledge with their defining characteristics in a propositional format and organized according to specific rules for use in subsequent acquisition of *declarative knowledge* (Matlin, 1998:230; Shute, 1996:416; Vosniadou, 1996:404; Sutherland, 1995:366; Brown, 1992:787; Bozinoff, 1982:481). According to Andersen's ACT* (Act star) theory of cognition declarative knowledge refers to knowledge about facts and things and the declarative network is described as consisting of *an inter connected set of propositions*¹, *visual images*² and *information about the sequence of events*³ (Matlin, 1998:230). Scripts as form of declarative knowledge thus refer to the structural nature of scripts and how scripts are organized in memory (*if this happens, then that follows*) (Matlin, 1998:231,232).

The *connectionist* approach, on the other hand, which has drawn a considerable amount of attention in recent years and refers to parallel distributed processing models (PDP models), postulates that schemata are implicit and created at the time an individual needs them. According to the connectionist approach, *schemata per se* are not actually stored in memory. Instead, schemata are created as a result of patterns of activation along a vast network of units in the brain that make it possible to think laterally. In connectionist models, storage in memory does not

¹ (For example "washing machines are sold at specific stores in specific departments")

² (For example "in-stores, all the various types of washing machines are displayed together"),

³ (For example "one has to decide what type of washing machine is required first, before buying")

involve the actual storage of episodic information in the form of nodes. It is proposed that strengths and weights between units are stored and recreated in a particular situation when individuals need them. An individual thus stores *hypotheses* about the presence of certain features or attributes e.g. *features that represent status/prestige* and when recognized in a certain context, the relevant schemata are activated (Brown, 1992:791, 792). A consumer might thus attach many associations to a product as a result of particular schemata. The connectionist approach further postulates that knowledge at all levels (concrete as well as abstract) can be represented in schemata. Schemata are regarded as active processes instead of static patterns in memory: connection strengths between units may adjust over time as a result of experience and exposure (Collins *et al*, 1993:36; Brown, 1992:793). Elicitation of schemata will thus depend upon the presence of stimuli in a specific context that would successfully activate, retrieve and recreate the relevant schema through the connection of the appropriate units.

The different perspectives therefore differ on how the schemata are stored, activated and organized in memory but in principle do not differ in acknowledging the role of schemata in guiding behaviour in a specific situation. The elicitation of a script – as is the intention and aim of this discussion – concerns itself with the contents and format of the script itself rather than how the script is activated and organized in memory and will thus not make an effort to prove any of the perspectives as being more relevant or acceptable.

Different approaches to script activation

Individuals have more information in their memory than could ever be processed efficiently for a given problem situation. Part of this reservoir of information, is tapped by a script (Schurr, 1986:504, 505). Scripts are however not elicited very easily. It is therefore recommended to plan a script-elicitation procedure in various stages to ensure that the schemata in long-term memory are sufficiently activated.

It is of utmost importance to select suitable candidates for participation in a script-elicitation study.

Three general conditions have to be met for script activation and elicitation to occur:

- Firstly, an individual must have a *cognitive representation* of a particular script, i.e. experience of the activity over time. An individual should thus have been involved in the purchasing of several major appliances over a period of time to have developed a script of the particular event (Schurr, 1986:505).
- Secondly, an *evoking context* such as a task environment is needed to serve as a trigger for script-elicitation. This could either be an actual purchasing situation or a simulated event. The situation will in part determine *what information stored in memory will be activated* and also *what information from the environment will be selectively perceived*. The task environment also provides information relevant to role behaviour and problem solving (Schurr, 1986:505).

- Thirdly, the script - or any part of the script – can only be activated when it is physically or mentally *entered* (Speck, Schumann & Thomson, 1988:70; Schurr, 1986:505; Abelson, 1981:719). An individual thus has to be confronted with a specific task/situation (the reality or a simulated situation) to take action of some kind.

Two approaches may be used to physically enter and prompt script activation:

- A *concept driven (top-down)* strategy refers to the creation of a situation where an individual's thinking is guided by concepts or images at a higher level than the chosen objects/situation. A consumer can for example be confronted with the idea that *appliance X needs to be replaced* and the consumer is then allowed to make the inferences to deal with the situation.
- A *data driven (bottom-up)* strategy on the other hand, provides limited clues about the event on which individuals have to react. A consumer is for example shown a range of appliances and then asked to explain *how one would go about to select a replacement for appliance X that has broken down*. The individual then constructs a meaningful pattern of behaviour, based upon script like information in a personal memory base (Collins *et al*, 1993:260; Hoy, 1991:391).

Stages of script-elicitation and script generation

Script development Script development in the first instance has to focus on the elicitation of the relevant script norms, namely the *object schemata*, *person schemata*, *role schemata* as well as the *decision-making schemata* that are relevant to the event (Abelson, 1981:717).

Script generation is done in a specific format and entails the organizing of *script norms* in terms of *script elements* and *scenes* in particular sequential order to maintain the structural characteristics of a script. Within a script, series of action sequences (vignettes) are grouped into *segments/elements/ scenes* that are arranged in a specific order. Every scene contains the relevant individuals (person schemata), objects (object schemata) and specifying the interaction (role actions and decision-making schemata) and is characterised by a definite *main conceptualization* (Abelson, 1981:717). This refers to a central or top-level activity in the scene that occurs without exception (Den Uyl & Van Oostendorp, 1980:278), for example *ordering the meal* in a restaurant script. The *scene header* identifies the main activities in a specific scene.

PROCEDURE FOR SCRIPT-ELICITATION

Theoretical approach

A study that intends to elicit a script for the acquisition of major household appliances is explorative in nature. The intention will firstly be to elicit script norms from memory by using multiple methods to capture as much of the reality as possible (Denzin & Lincoln, 2000:9,10; Hudson & Murray, 1986:347). Research techniques typical of the post positivist paradigm, namely projective techniques, interviews and focus-group discussions will be applied (Denzin & Lincoln, 2000:9; Hudson & Murray, 1986:345). The research will reflect a post positivist character in its intention to construct an event from the point of view of the consumer or as stated by Denzin and Lincoln (2000:10), *to abstract information from the world*. The intention is to construct a cognitive representation of consumers' actions during a specific purchasing event rather than to establish law like associations between data and to generalize in terms of all purchasing situations and across all consumer types (Denzin & Lincoln, 2000:9; Hudson & Murray, 1986:343). Nau (1995:1) refers to it as *an understanding of the unique rather than the general*.

The ontologic dimension of the research will adhere to the voluntaristic assumption that proposes that consumers are active agents who interact with their environments and thereby gain experience, generate knowledge, beliefs and intentions which direct subsequent consumer behaviour (Hudson & Murray, 1986:344). Experience is therefore considered an important prerequisite for participation in the study. On the epistemological level, it will be required to follow an emic (seeking to expose cognitive frameworks/schemata that consumers use: an insider view), ideographic approach of enquiry (Denzin & Lincoln, 2000:10, 158; Corsini, 1987:563). Ideographic assumptions stress the importance of particular decisive events/actions rather than to generalize the findings to all purchasing events (Hudson & Murray, 1986:345). In this case an ideographic approach refers to the rigorous analysis of a specific decision-making event, namely the acquisition of major household appliances in an attempt to formulate interpretive statements pertaining to that specific decision-making event (a specific appliance) or to the class of phenomena represented by the event (major household appliances). An ideographic study is characterized by a smaller sample and it is advisable to use multiple data-collection techniques (Denzin in Corsini, 1994:205; Corsini, 1987:563). Multiple, less structured data-collection techniques are recommended to facilitate triangulation and to contribute to a rich data base where information is induced from the view of the participants in their own language without rigid and preconceived expectations of what information is expected to be generated (Denzin in Corsini, 1994:204).

Content analysis is done immediately after completion of every data-collection stage, before proceeding to the next stage that applies a different data-collection technique. Script norms and

script characteristics will unfold during the analysis and interpretation of data towards the eventual generation of a script (Schwandt, 1994:129; Sauer, Dickson & Lord, 1992:826). Script organization will necessitate simple statistical calculations, which are perfectly compatible with a post positivistic orientation (Denzin & Lincoln, 2000:9; Nau, 1995:1).

Sampling

A script-elicitation study for the acquisition of major household appliances would require the inclusion of individuals who have had the responsibility or participated in the purchasing of household appliances for their own households over several years to ensure the existence of relevant schemata in their declarative memory.

Age Experience facilitates referral to *semantic memory*⁴ from which solutions to a choice problem as well as context appropriate actions can be deduced (Warlop & Ratneshwar, 1993:377-379). A study by Aldershoff (1985:209) in the Netherlands revealed an increased expenditure on household appliances in later stages of the life cycle (middle adulthood) with a definite decline after the age of 65 years. The age of respondents will to a certain extent thus be indicative of probable level of experience, familiarity⁵, involvement and interest in the subject. The inclusion of participants between the ages of 30 and 60 years who have had the responsibility of managing their own households over a period of at least five years is suggested.

Gender Sex role norms and task allocation in families have changed considerably in recent years to the extent that traditional generalizations about family decision-making may be obsolete. A more egalitarian approach with husbands and wives sharing decision tasks is implied. One view would then be to include *both men and women* in a script-elicitation study for household appliances (Buss & Schaninger, 1983:439, 440). Another view is that modern oriented women would dominate the decision-making process for household appliances irrespective of the orientation of the family (Maddill & Bailey, 1999:235). Due to conflicting evidence, men as well as women should be included in a script-elicitation study for household appliances on the condition that an individual is willing to participate.

⁴ According to the *standard theory* in cognitive psychology, semantic memory refers to so-called *general* knowledge about specific objects or topics (Brown, 1992:787; Sutherland, 1995:367)

⁵ Familiarity is defined as the number of accumulated product related experience (Mano & Davis, 1990:275; Zaichowski, 1985:296, 297). Product familiarity determines a consumer's cognitive structures. Familiarity for the purpose of a study of this kind, taking into account the relatively long service life of household appliances, is determined by the age of respondents assuming that individuals above the age of 30 years would have had at least a reasonable amount of experience with major electrical household appliances in their own households to have enabled them to develop consistent cognitive configurations (Mano & Davis, 1990:280).

Financial and socio-economic status It is reported that families in middle and higher income categories⁶ spend more money on appliances in general (Du Plessis & Rousseau, 1999:54-72) and that expenditure on household appliances tends to increase with income level (Aldershoff, 1985:209). Individuals in higher income levels will thus potentially be more suitable candidates for a script-elicitation study because of an increased exposure to, and familiarity with the purchase situation that would have resulted in them having developed more established event schemata. *Income status* or *socio-economic status* (as an indication of income status) should thus be taken into consideration when selecting participants for a script-elicitation study.

Sample framework Participants for a script-elicitation study for the acquisition of major household appliances should therefore be selected from middle to higher income groups (Aldershoff, 1985:209) including men and women between the ages of 30 to 60 years (Menon & Johar, 1993:108), irrespective of marital status or race (Mano & Davis, 1990:280; Aldershoff, 1985:209; Buss & Schaninger, 1983:439, 440) but with the pre requisite that a participant should have been responsible for his/her own household for at least five years.

Sample The sample size is eventually determined by the research procedure and the specific research techniques used. Participants should be recruited independently from one another to limit the chance of having an excessively homogeneous group.

Recruitment of participants Voluntary participation is favourable for the generation of trustworthy information. It is suggested that participants are not informed about the precise aims of the study to prevent them from preparing "impressive" answers before the time. Participants should however be given the opportunity to withdraw once they have received their instructions to encourage spontaneous, uninhibited and truthful responses by willing individuals. A debriefing session at the end is recommended to put participants in perspective.

Multiple data-collection techniques

Multiple data-collection techniques that are implemented in different stages are suggested for script elicitation so that the specific disadvantages of one technique could be overcome by another and to maximize content of thought elicitation. Responses of one data-collection procedure can then be used to direct subsequent data-collection stages (Huberman & Miles, 1994:429). Projective techniques seem particularly suitable to elicit information from the participants' perspective. Frank (1939), quoted by Rabin (in Corsini, 1994:127) described projective techniques as *methods used to*

⁶ Income level (potential spending power) for the purpose of a script-elicitation study can be associated with specific socio-economic status determinants, e.g. the value of respondents' homes, whether rented or owned

confront a subject with a situation to which he will respond according to what the situation means to him.

Five data-collection stages are suggested to maximize the opportunity to induce the relevant cognitive configurations for the elicitation of the relevant script norms from long-term memory as well as for triangulation:

- *Reconstruction* as well as *discrimination* data-collection techniques are recommended. Reconstruction techniques seem to be informative with respect to the temporal sequence of scripts (Smith & Houston, 1986:505). Discrimination techniques refer to the use of visual stimuli to induce recall of knowledge from memory and tend to elicit detailed information without exerting excessive cognitive load on participants (Smith & Houston, 1986:505, 506). The use of both techniques will provide the opportunity for triangulation.
- Inclusion of *written* as well as *oral* elicitation techniques are recommended. Written responses have shown to produce more thoughtful processing while oral reports can be useful to elaborate on issues that were apparently under reported in written procedures.

Although each of these procedures is valuable in terms of providing specific script detail, the information can be regarded trustworthy if there is agreement on the main conceptualizations of the script (Lichtenstein & Brewer, 1980 in Smith & Houston, 1986:505).

DATA-COLLECTION STAGES AND PROCEDURES

Motivation for different data-collection stages

Taking into consideration the findings and recommendations of other researchers in the field of script-elicitation studies (Stoltman, Tapp & Lapidus, 1989:389; Smith & Houston, 1986:506; Leigh & Rethans, 1983:669), the following stages of data-collection were designed as a suggested integrated method to elicit a script for the acquisition of major household appliances within the consumer decision-making context.

Data-collection stages

Stage1: Script-elicitation through a concept driven, written reconstruction technique

A written technique is chosen to start with because it is expected to produce more thoughtful processing than oral reports. Reports that are based on experience generally also produce longer, more detailed descriptions of an event (Yoon, Meyers-Levy & Tybout, 1990:533). Adapting a script-elicitation method used by Bower *et al* (1979:177-215) it is recommended that participants be invited to participate as part of a well-selected group in a formal setting to describe in written form

how people in general go about to replace a washing machine that has broken down after ten years of service. The exact domain of their responses should be clearly stipulated (e.g. to report from the moment that they decide to make a replacement purchase, until the appliance is delivered at home). Respondents should be assured that responses will be treated confidentially and must be reminded that there are no correct or incorrect answers. Although instructions refer to *people in general*, respondents will inevitably refer to an existing personal database of schemata when describing the event in their own words and style (Bozinoff & Roth, 1983:655-658; John & Whitney, 1982:75-77; Leigh & Rethans, 1983:668; Smith & Houston, 1986:504; Whitney & John 1983:661-664).

Contents of written reports should then be analysed to identify the relevant script norms, which should then be coded in the sequential order indicated by participants. A well-trained research assistant should independently repeat the procedure of content analysis to determine inter rater reliability. This is required as indication of trustworthiness of the results.

Stage 2: Script-elicitation through a concept driven, oral reconstruction technique

Cognitive theory postulates that the unconscious nature of schemata in long-term memory makes it difficult to retrieve. Individual interviews are thus suggested as an ideal opportunity to follow up on aspects that seem to have been *under reported* in the written reports (Touliatos & Compton, 1988:178). If a new group of participants are used, this technique also provides opportunity for triangulation. With the permission of participants, interviews should be tape recorded for transcription. Using a semi-structured interview technique, interviewees can initially be given the same instructions as for stage 1 but specific questions can be included to induce response on selected aspects. This is a concept driven approach.

Stage 3: Elicitation of script sub-actions and role expectations, through a data driven, discrimination technique

The techniques used during stages 1 and 2 are used to identify *person-, object- and decision-making schemata*. Imagery processing (a data driven/bottom-up technique) is a useful addition to stimulate recall of very specific information such as role schemata from memory (Bone & Ellen, 1990:449). Visual stimuli (clip art drawings) that reflect variations of different steps of the decision-making event can be designed from information captured in stages 1 and 2 as realistic but minimal clues. These can then be presented to individuals for interpretation. Captions can be added to identify some of the people in the scenes and participants can be asked to identify the rest for the purpose of specifying person- and role schemata. Pictures should be on separate sheets of paper with enough space for written commentary so that participants could select and organize them as they wish.

Based on the cognitive assumption that individuals will try to make sense of stimuli within real world experiences, it is anticipated that when individuals are given a set of pictures and asked to select those relevant to the event, to arrange them in order of occurrence and to discuss their selection, they would select and interpret the pictures (semi-ambiguous stimuli) in terms of their own cognitive frameworks (a form of imagery processing) (Donoghue, 2000:48; Lichtenstein & Brewer, 1980 in Smith & Houston, 1986:505). This is a projective technique through which the researcher prompts the participants and enters their private worlds in an indirect way (Donoghue, 2000:47). Because the clues will stimulate thought and because the technique requires *discrimination* instead of *reconstruction* of an event, it reduces cognitive load and has the potential to maximize script content through the extraction of contextually rich data (Donoghue, 2000:50; Stoltman *et al*, 1989:384; Smith & Houston, 1986:505).

A pre-test where a few individuals (who meet the requirements for a script-elicitation study) are requested to interpret the selected pictures, is recommended. Participants' reaction to the range of pictures, their response time (in the possible event of the task being too lengthy, tiring or complicated) and general comments in terms of the instructions given as well as acceptability of the pictures can then be used to finalize the procedure. A discrimination technique results in lower cognitive strain than a recall technique, which allows for the inclusion of a good variety of pictures so that participants do not feel constrained in their responses. An attempt should be made to include as many of the activities mentioned in previous elicitation stages as possible without causing confusion.

For the purpose of triangulation, it is recommended that the same group of participants used in the second stage, be requested to take part in this procedure.

Stage 4: Elicitation of sub-actions and role expectations through a data driven, written reconstruction technique

Previous studies have indicated that a script is not an undifferentiated linear chain, but is organized into major chunks/scenes, which are identified by so-called scene headers (Stoltman *et al*, 1989:384). The mention of a scene header or main concept can act as a powerful probe to call up a script from memory (Leigh & Rethans, 1983:671; Den Uyl & Van Oostendorp, 1980:278; Bower *et al*, 1979:183). Participants can thus be prompted at specific entry levels of the event (these can be identified in stages 1 to 3) to elaborate on specific aspects of the decision-making process (Barnes, 1993:63, 64 based on work by Corsaro & Heise, 1990). Confronting someone with an entering situation at any point in the script as a specific level of abstraction (for example *entering the store*) would be ideal to specify the task environment. This could then act as a trigger for recall of the appropriate script and consequently the activation of schemata in memory to enable the individual to specify actions *prior to* and *after* that scene/element (a level of abstraction) to complete the event (Schurr, 1986:505-507).

Participants (those who participated in stage 1, for the purpose of triangulation) can for example be asked to give a detailed written description of *in-store activities* (a prominent entering position/scene) *in the event of purchasing a washing machine*. Upon completion, they can be asked to describe in sequential order, the purchase related actions *before* arrival at the store or *thereafter* depending on what additional information is required after the analysis of data generated in stages 1 to 3. Assuming a hierarchical order for script elements, it is expected that although requested and reported out of the *natural order* the final result of participants' reports will correspond with the sequential description in the previous elicitation exercises but that the specific activity (element) at the specific level of abstraction will be discussed in more detail.

Stage 5: Focus-group discussions

Definition, advantages and disadvantages A focus-groups is generally defined as a collective brainstorming session where a small group of people partake in a carefully planned discussion so that the group interaction produces insights relating to a specific topic/ issue (Morgan, 1988 in Macun & Posel, 1998:114). Although focus-groups have certain disadvantages over individual interviews (for example social influence and conformity pressures) several hypotheses explain the paradox of the success of focus-groups in data-collection. Participants *inter alia hide in the midst of the lonely crowd*: group members provide some form of security and group members have a lowered feeling of identifiability than participants in individual interview situations. As a consequence, participants are more willing to volunteer information than during a personal interview. Focus-groups also create the norm *that makes it okay to speak out in front of others*. Less inhibited individuals who tend to share their experiences more easily, seem to encourage others to share theirs and this leads to self-reinforcing and self-maintaining of the group discussion. Fern (1982:444) adds that increased excitement in a group encourages participants to expose their own ideas.

Motivation for the inclusion of focus-group discussions As a concluding stage of the script-elicitation procedure, focus-groups could be used to evoke active, spontaneous in depth discussions and the illumination of a limited number of topics/issues that were raised during previous elicitation stages and might need some kind of clarification. It can also serve as opportunity for triangulation (Macun & Posel, 1998:118-120; Stoltman *et al*, 1989:390).

Focus-group discussions are recommended because:

- Groups tend to spend more time discussing ideas that are *common and of interest to all* – an aspect that is highly preferable for a script generation study where generic information should be differentiated from detail, and where scenes and script elements have to be finalized. Focus-groups are ideal to bring to the surface common practice/the stereotype/shared view through

listening to the discussion of others and to exclude unique actions that should not to be included in a typical script (McQuarrie & McIntyre, 1988:584). Individual interviews, in contrast, provide little time to think and mainly produce personal ideas/opinions (McQuarrie & McIntyre, 1988:583, 584; Lautman, 1982:52, 53). Fern (1982 in McQuarrie & McIntyre, 1988:582, 584) reminds that although group discussions produce fewer ideas than individual interviews they are successful in producing *shared* thoughts.

- Focus-group discussions *minimize the role of the researcher/interviewer* as opposed to the situation during individual interviews (see stage 2 procedure) (Macun & Posel, 1998:116, 122, 124) and allow time for spontaneous interaction of participants (McQuarrie & McIntyre, 1988:584).
- Because some individuals might find it easier to speak out than to put their thoughts in writing, specific issues could even be debated (Stoltman *et al*, 1989:389).

Assumptions Focus-group discussions should be conducted understanding that:

- Only a relatively small number (probably up to twelve) of characteristic responses to the event can be expected per focus-groups discussion (Fishbein & Ajzen's theory, 1975 in McQuarrie & McIntyre, 1988:582). Focus-group discussions should thus rather be held at the end of this research project to illuminate a limited number of issues.
- Although most group members will be capable of more than one response to an issue, group interaction will provide the opportunity to debate differences of opinion.
- Focus-groups members have to be carefully selected to ensure that the responses represent the ideas of the population of consumers one wishes to study: if members of the population are represented in the focus-groups session, the responses of the group are more likely to be representative of the bigger population.

Focus-groups procedures Although focus-groups can not be planned according to rigid, hard and fast rules, certain control measures are required to optimize data generation and the authenticity of the data generation situation (Shimp, 1983:127). Of the three distinct focus-groups approaches defined by Calder (in Fern, 1982:449), a phenomenological approach is typically used to investigate consumer behaviour and seems more suitable to uncover everyday knowledge, as well as everyday language (as opposed to scientific knowledge) (McQuarrie & McIntyre, 1988:581).

Following a phenomenological approach, attention should be given to

- inclusion of a brief "warming up session" to encourage active participation in discussions.
- neutralize any apparent differences in social status within a group to ensure that participants are socially and intellectually compatible (Macun & Posel, 1998:124; Fern, 1983:121, 123, 125). Nicknames on nametags can be used to control the degree of anonymity (Cook, 1982:62).
- planning of a comfortable seating arrangement that will improve group interaction (McQuarrie & McIntyre, 1988:580).
- the participation of both spouses during the focus-groups discussions to prevent one speaking

on behalf of the other and thereby excluding participation of half of the group (Cook, 1982:62).

Number of participants Limited “air time” for each participant within a group discussion means that there has to be enough time for each individual to participate and express his/her views without stretching the length of the session. Eight to ten participants (maximum) per group discussion – all selected from previous data-collection sessions would be practical (Payne & Levy, 1975 and Well, 1974 in Lautman, 1982:54).

Room layout Seating around a round table is recommended to encourage a flow of conversations, to allow eye contact within close proximity, and physical support despite the psychological distance between participants (Lautman, 1982:54).

Discussion topics and data-collection Limited “air time” necessitates the formulation of specific goals and questions for the focus-groups discussion to restrict the discussion time (Macun & Posel, 1998:121). A response oriented rather than a question-oriented approach is recommended to provide for free flow of discussions without excessive control and manipulation (Robson, 1989:29). Group responses should be captured through tape-recording and note taking by the facilitator and the assistant (Macun & Posel, 1998:126).

Recordings should be transcribed and interpreted taking into consideration that *common ideas*, i.e. those ideas that are *widely shared* would surface frequently and might be mentioned by all/most of the participants. Data analysis and interpretation should be done following the same procedure as in the previous elicitation exercises.

PROCEDURE FOR SCRIPT GENERATION

Data analysis and interpretation

Data generated through stages 1 to 3 are analysed to identify script norms. Data is firstly captured by analysing stage 1 written reports and coding statements in the sequence in which they were mentioned. This process is repeated by a well-trained assistant and inter-rater reliability is calculated by determining the level of agreement, as follows (Touliatos & Compton, 1988:121, 122): $[n / (n+a)] \times 100 = \% \text{ agreement}$ [n: number of agreements; a: number of disagreements]. Differences in interpretation should be discussed so that an agreement is reached before final coding of data for statistical analysis.

Frequency of script actions is used to determine stronger (prominent) and weaker script actions from which so-called main concepts are identified. In accordance with previous script studies (Bozinoff, 1982:483; Bower *et al*, 1979:181), the *density of grouping of frequencies* as calculated statistically, is useful to differentiate and categorize the *strength* of actions in the various script

protocols. It is suggested that a final decision as to the categorization and exclusion of script actions be determined by spontaneous density grouping of activities. It was decided to omit all activities indicated by 25% and less of the participants and to accept those mentioned by 75% and more of the participants as main concepts. This should however not be taken as a hard and fast rule for every script-elicitation study and it is recommended that the frequency of statement are studied before a final decision is made. The mean positions of actions will determine the sequence of actions for script generation. Results should be tabulated, indicating script actions in sequential order and specifying script norms. In accordance with previous script studies, different font styles are used when compiling the empirical script to simultaneously reflect the strength of the different script actions (Table 5.1).

TABLE 5.1: SUGGESTED PRESENTATION OF ACTION FREQUENCIES

| Indicative style of presentation | Frequency⁷ (%) |
|---|----------------------------------|
| <i>action</i> | 25-39 |
| action | 40-59 |
| <i>ACTION</i> | 60-74 |
| ACTION | 75+ |

The trustworthiness of data can be determined by randomly splitting the stage 1 sample into two groups and using the Mann Whitney rank sum test for two independent groups to compare the mean positions of actions for the two separate groups within the same sample (Steyn, Smit, Du Toit & Strasheim, 1994:594).

Stage 2 interviews that were done with a new group of participants should first be transcribed and thereafter be analysed, interpreted, coded, statistically interpreted and tabulated in the same way as stage 1 reports. Once again the trustworthiness of data can be determined using the Mann Whitney rank sum test to compare the action sequences of the stage 2 and stage 1 results.

The stage 3 technique will produce statements in written format and in specific sequence. When analysed, interpreted and tabulated following the same procedure as for the previous data-collection procedures, trustworthiness of data can be determined using the Wilcoxon rank sum test (Steyn *et al*, 1994: 594) to compare the results of the stage 2 and stage 3 procedures. The Wilcoxon test is used to compare results gathered from the same participants.

The written reports of the stage 4 technique should once again be analysed and interpreted following the same procedure as for stages 1 to 3 although the reports will only provide information on certain aspects of the event as requested. The objective of the technique used in this stage is to determine whether scripts have a set quality, in other words that participants will be able to reconstruct the sequence of actions of the event when they are prompted to describe parts of the

⁷ This is only an indication of how categories can be formed. Data and density groupings should be used to form final categories.

event out of the natural order. When coding and interpreting data, attention should be given to coding of statements in the order indicated by participants. The Wilcoxon rank sum test can be used to determine the level of agreement of the action sequences as indicated by stage 4 and stage 1 responses (done by the same respondents).

Differences in results (script norms, script actions and sequence of actions) obtained through the various elicitation techniques should be carefully analysed to determine whether differences could be ascribed to possible error or to the potential of the specific technique that was used. The stage 3 discrimination technique is for example expected to produce more comprehensive scenarios because participants are required to *recognize* actions (the technique provides the opportunity of being reminded of actions), rather than to *remember/recall* information off hand as is required in stages 1 and 2.

Data generated during the focus-group discussions should be used to clarify any uncertainties through intense discussion of selected topics and carefully formulated questions before generating the final script from the individual script protocols generated in the various stages of script-elicitation. Recordings of focus-group discussions should be transcribed. Transcripts will have to be worked through back and forth to come to concluding statements (Denzin & Lincoln, 2000:831). The contribution of the assistant who co-facilitated the discussions is crucial in the analysis and interpretation of the data to ensure trustworthy interpretation.

Script generation

Following the rules for the presentation of a script (Weisberg, 1980:55; Bower *et al*, 1979:179), an *empirical script* is written indicating all script actions, in sequential order and grouped into elements with a clear distinction of stronger and weaker script actions by using different font styles to indicate the strength of script actions. A *theoretical script* is written in paragraph format, clustering script actions into scenes and clearly indicating scene headers through the use of conventional headings.

Script evaluation according to the properties and characteristics of a script

The conclusive step is to evaluate the generated script in terms of the basic properties and structural characteristics of a script (Bozinoff & Roth, 1983:656 and Bower *et al*, 1979:179 as discussed in Erasmus *et al*, 2002:1-8) before it can be typified as a script and to determine whether the script can be accepted and acknowledged for further use within the theoretical framework of a discipline.

The following *properties* should be identifiable:

Script norms The person; object; role and decision-making schemata for the specific event should be evident (data collected in stages 1 to 3).

Action sequences Actions should be grouped into coherent scenes/elements with prominent/stronger actions as a logical indication of scene headers (Den Uyl & Van Oostendorp, 1980:278).

Script elements Script elements should be organized in a common, logical order (Bozinoff & Roth, 1983:656) (deducted from stages 1 to 3).

The following structural characteristics (Bozinoff & Roth, 1983:656 and Bower et al, 1979:179 as discussed in Erasmus *et al*, 2002:5, 6) should be confirmed:

Only generic actions should be contained in the script. This will be characterized by a limited number of scenes and activities in the final script excluding elaborative descriptive detail.

A script possesses a set quality. Respondents should be able to complete a script when they are confronted with a specific action that is positioned somewhere in the middle of the script by filling in actions prior to that action or to complete the script by listing the rest of the actions in sequential format. The stage 4 procedure is supposed to confirm this characteristic.

A strong temporal sequence of script activities. A statistical comparison of the empirical script protocols drawn from the various elicitation techniques will indicate the trustworthiness and authenticity of data in terms of how the data correlate in terms of contents and sequence of actions. This can also be confirmed through the focus-group discussions.

A hierarchical structure should be evident. Smith and Houston (1986:504) mentioned that this would be indicated by scenes/elements, main concepts and script actions that are present in a logical order. The level of agreement between the script protocols deducted during stages 1 to 3 will determine the trustworthiness of the hierarchical structure finally generated.

ISSUES OF TRUSTWORTHINESS AND AUTHENTICITY

In order to increase the *trustworthiness* (reliability) and *authenticity* (accuracy) of data, any factor that may introduce error into elicitation and analysis procedures should be addressed.

The following should be attended to:

The **reputation and experience** of the **researcher** and the **assistant** and the **venue** where the data-collection is done for instance in a home environment versus a formal setting. The environment will influence participants' perception of the importance of the research project and consequently how serious they will be about their contributions and participation (Mouton, 1996:149) especially when they have to participate more than once without remuneration. The facilitator's contribution in terms of data analysis and his/her acting as supervisor during focus-will contribute to the elimination of bias in interpretations and discussions. If written exercises are done anonymously, it will encourage uninhibited response that will contribute to trustworthiness of the data.

Selective recruitment of participants to ensure active participation on a voluntary basis and application of minimum cognitive effort due to well-developed memory structures based on experience of the event. It is important that participants are selected taking into consideration age and financial status to ensure a certain level of familiarity⁸ with the event and to improve the chances of activating comprehensive and truthful schemata (Gardner & Raj, 1983:142-144). Experience will facilitate recall by directing retrieval from memory towards context appropriate actions (Warlop & Ratneshwar, 1993:377). It is suggested that responses would be more objective and truthful as participants are not informed about the exact aims of the study (Bozinoff, 1982:485).

Multiple data-collection techniques are recommended when using a post positivist approach to capture as much of reality as possible (Denzin & Lincoln, 2000:9; Touliatos & Compton, 1988:127) and to provide opportunity for triangulation. This was also recommended by Bower and co-workers (1979:217) after completion of a script-elicitation study that was based on a written, reconstruction elicitation technique only. It is thus proposed that the stage 2 procedure (reconstruction technique) and the stage 3 procedure (discrimination technique) - two different but equal versions of data-collection that are similar in content and level of difficulty - be done by the same individuals. This will allow for triangulation and to determine the trustworthiness of responses. By subjecting

⁸ "[Participants with a certain level of experience (familiarity) will be selected. 'Familiarity' for the purpose of this study, taking into account the relatively long service life of household appliances, is determined by the age of respondents assuming that individuals above the age of 30 years would have had at least a reasonable amount of experience with major household appliances in their own households to have enabled them to develop consistent cognitive configurations (Mano & Davis, 1990:280)].

respondents to two different but equal techniques instead of repeating the same procedure, the recall effects of the test-retest method where participants may be tempted to prepare so-called acceptable answers, is overcome (Touliatos & Compton, 1988:120). By randomly subdividing the responses from the first stage elicitation procedure into two halves (thus separate independent groups) and comparing the results of the two groups as if they are two independent groups. The level of agreement of responses of the two groups will be indicative of the trustworthiness of the script-elicitation technique.

Environmental and context effects can be attended to by choosing a laboratory setting for data-collection stages 1,3,4 and 5 to refrain participants from being interrupted or influenced by others (Touliatos & Compton, 1988:117). Various measures can be taken to eliminate error:

Instructions should only be given and explained immediately before commencing the data-collection activities to prevent participants from discussing the matter beforehand. Individuals who then feel that they cannot or do not wish to participate, should at that point be given the opportunity to withdraw. Participants should be given the opportunity to respond in Afrikaans or English to eliminate verbalization difficulties. No time pressure should be exerted during formal data-collection exercises. If no personal questions are asked (e.g. income) participants will not feel threatened.

If participants are reminded that there are no correct or incorrect responses, their responses have a better chance of being truthful. For a script-elicitation study participants should be requested to react upon specific instructions rather than to refer to *personal experience* to prevent answers that *seem to be correct/appropriate*. It is preferable that participants report anonymously rather than to perform certain activities while being observed, once again to prevent *acting* (Hempel & Daniel, 1993:273-25; La Tour, 1986:696).

Inter-rater reliability can be determined by using a well-trained assistant to analyze the data independently and to compare that with the interpretation of the researcher. Considerable agreements between the judgments will indicate high inter rater reliability (Touliatos & Compton, 1988:121,122).

Constant reflexive practice and a **skeptical approach** of the ongoing research process will add to authenticity of data (Wainwright, 1997). By completing the data analysis and interpretation of data collected during one stage before proceeding to the next so that pitfalls and short-comings are addressed in time, error is reduced.

To eliminate bias and ambiguity, instructions given to participants should clearly stipulate the specific situational cues and conditions, e.g. *replacement purchase for a washing machine after ten*

years of service. Instructions should clearly indicate the range of statements required, for example *from the moment the store is entered until the purchase is finalized.* On the basis of research by Cox, Granbois and Summers (1983:395) the intention to elicit a script for major household appliances can initially be limited to an evaluation of the purchasing process of a single appliance in that category, namely *a washing machine.* This is acceptable since a washing machine is generally considered a high priority appliance in a household and since research has shown that laundry appliances reflect a very low percentage of unplanned purchases (Cox *et al.*, 1983:395, 396). Within script theory this is further warranted by the principle of memory transfer (Abelson, 1981:723) that implies that someone with more extensive experience of another major appliance will transfer that knowledge to the specified situation. Participants can thus be asked to specifically reflect on a *replacement purchase* where responses could be based on experience within their frame of reference.

CONCLUSION

Taking into consideration prior research in the field of script-elicitation procedures and focusing on the elicitation of a script for a specific purchasing event within a consumer decision-making context, namely the acquisition of major household appliances, a script-elicitation procedure that consists of a combination of script-elicitation techniques, is proposed. It is hoped that the combination of techniques and efforts to increase trustworthiness and authenticity of data will result in the successful elicitation of a buying script that would coincide with the basic characteristics and properties of a theoretical script. It is thus recommended that the procedure be implemented so that the success of the suggested procedure and techniques could be determined.

REFERENCE LIST

- ABELSON, RP. 1981. Psychological status of the script concept. *American Psychologist* 36(7):715 – 729.
- ALDERSHOFF, DE. 1985. Final food consumption level based on expenditure and household production. *Advances in Consumer Research* XII:209-214. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- BARNES, JH. 1993. Ethno: A methodology to studying process of information. *Advances in Consumer Research* XX:63-69. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- BONE, PF & ELLEN, PS. 1990. The effect of imagery processing and imagery content on behavioral intentions. *Advances in Consumer Research* XVII:449-454. Twentieth Annual Conference. [sl]. Association for Consumer Research.
- BOWER, GH, BLACK, JB & TURNER, TJ. 1979. Scripts in memory for text. *Cognitive Psychology* 11:177-220.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L & ROTH, VJ. 1983. Recognition memory for script activities: an energy conservation application. *Advances in Consumer Research* X:655-660. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- BROWN, TJ. 1992. Schemata in consumer research: a connectionist approach. *Advances in Consumer Research* XIX:787-794. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- BUSS, WC & SCHANINGER, CM. 1983. The influence of sex roles in family decision-making. *Advances in Consumer Research* X:439-444. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- COLLINS, AF, GATHERCOLE, SE, CONWAY, MA & MORRIS, PE. 1993. *Theories of Memory*. Hove. Lawrence Erlbaum.
- COOK, WA. 1982. Turning focus groups inside out. *Advances in Consumer Research* IX:62-65. Twelfth Annual Conference. New Orleans. Association for Consumer Research.
- CORSINI, RJ. 1987. *Concise Encyclopedia of Psychology*. New York. John Wiley.
- CORSINI, RJ. 1994. *Encyclopedia of Psychology*. Vol.2. New York. John Wiley.
- COX, A, GRANBOIS, DG & SUMMERS, J. 1983. Planning, search, certainty and satisfaction among durables buyers: a longitudinal study. *Advances in Consumer Research* X:394-399. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- DEN UYL, M & VAN OOSTENDORP, H. 1980. The use of scripts in text comprehension. *Poetics* 9:275-294.
- DENZIN, NK & LINCOLN, YS. 2000. *Handbook of Qualitative Research*. 2 nd ed. London. Sage.

- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson Sigma.
- DONOGHUE, S. 2000. Projective techniques in consumer research. *Journal of Family Ecology and Consumer Sciences* 28: 47-53.
<http://www.up.ac.za/academic/acadorgs/saafecs/vol28/donoghue.html>
- ERASMUS, AC, BOSHOFF, E & ROUSSEAU, GG. 2002. The potential of using script theory in consumer behaviour research. *Journal of Family Ecology and Consumer Sciences* 30:1-9.
<http://www.up.ac.za/academic/acadorgs/saafecs/vol30/erasmus.html>
- FERN, EF. 1982. Why do focus-groups work: a review and integration of small groups theories. *Advances in Consumer Research* IX:444-451. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- FERN, EF. 1983. Focus-groups: a review of some contradictory evidence, implications and suggestions for future research. *Advances in Consumer Research* X:121-129. Thirteenth Annual Conference. [sl]. Association for Consumer Research.
- GARDNER, MP & RAJ, SP. 1983. Responses to commercials in laboratory versus natural settings: a conceptual framework. *Advances in Consumer Research* X:142-146. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- HEMPEL, DJ & DANIEL, HZ. 1993. Framing dynamics: measurement issues and perspectives. *Advances in Consumer Research* XX:273-279. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- HOY, MG. 1991. The emergence of script related knowledge. Marketing theory and applications. *American Marketing Association Winter's Conference* 2:387-394.
- HUBERMAN, AM & MILES, MB. 1994. Data management and analysis methods. In DENZIN, NK & LINCOLN, Y. 1994 *The Handbook of Qualitative Research*. Thousand Oaks. Sage.
- HUDSON, LA & MURRAY, JB. 1986. Methodological limitations of the hedonic consumption paradigm and a possible alternative: a subjectivist approach. *Advances in Consumer Research* XIII: 343-348. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial nature of scripts. *Advances in Consumer Research* IX:75-79. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- KENT, RJ & ALLEN, CT. 1994. Competitive inference effects in consumer memory for advertising: the role of brand familiarity. *Journal of Marketing* 58(July)97-100.
- LA TOUR, SA. 1986. Reliability and validity in consumer research: where do we go from here? *Advances in Consumer Research* XIII:696-698. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- LAUTMAN, MR. 1982. Focus groups: theory and method. *Advances in Consumer Research* IX:52-55. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- LEIGH, TW & RETHANS, AJ. 1983. Experiences with script-elicitation within consumer decision-making contexts. *Advances in Consumer Research* X:667-678. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- MACUN, I & POSEL, D. 1998. Focus groups: a South African experience and a methodological reflection. *South African Sociological Review* 2(1):114-135.

- MADDILL, JM & BAILEY, S. 1999. Household decision-making: the relative influence of husbands and wives in the 1990's. *European Advances in Consumer Research* 4:232-237.
- MANO, H & DAVIS, SM. 1990. The effects of familiarity on cognitive maps. *Advances in Consumer Research* XVII:275-282. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- MATLIN, MW. 1998. *Cognition*. 4 th ed. London. Harcourt.
- McQUARRIE, EF & McINTYRE, SH. 1988. Conceptual underpinnings for the use of group interviews in consumer research. *Advances in Consumer Research* XV:580-586. Eighteenth Annual Conference. New Orleans. Association for Consumer Research.
- MENON, G & JOHAR, G. 1993. "Yes I remember it well...." The role of autobiographical memory in consumer information processing. *Advances in Consumer Research* XX:108. Twenty Third Annual Conference. Association for Consumer Research.
- MOUTON, J. 1996. *Understanding Social Research*. Pretoria. Van Schaick.
- NAU, DS. 1995. Mixing methodologies: can bimodal research be a viable post-positivist tool? *The Qualitative Report* 2(3):1-5. <http://www.nova.edu/ssss/QR/QR2-3/NAU.HTML>
- NOTTENBURG, G & SHOBEEN, EJ. 1980. Scripts as linear orders. *Journal of Experimental Psychology* 16:329-347.
- OZANNE, JL, BRUCKS, M & GREWAL, D. 1992. A study of information search behavior during the categorization of new products. *Journal of Consumer Research* 18(March)452-463.
- PUTO, CP. 1985. Memory for scripts in advertisements. *Advances in Consumer Research* XII:404-409. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- RABIN, AI. In CORSINI, RJ. 1994. *Encyclopedia of Psychology*. Vol. 3. New York. John Wiley.
- ROBSON, S. 1989. Group discussions. In ROBSON, S & FOSTER, A. *Qualitative Research in Action*. [sl]. Edward Arnold.
- SAUER, PL, DICKSON, PR & LORD, KR. 1992. A multiphase thought elicitation coding scheme for cognitive response analysis. *Advances in Consumer Research* XIX:826-833. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- SCHURR, PH. 1986. Four script studies: What we have learnt. *Advances in Consumer Research* XIII:504-508. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- SCHWANDT, TA. 1994. Constructivist, interpretivist approaches to human enquiry. In DENZIN, NK & LINCOLN, Y. 1994 *The Handbook of Qualitative research*. Thousand Oaks. Sage.
- SEARLEMAN, A & HERRMANN, D. 1994. *Memory from a Broader Perspective*. New York. Mc Graw-Hill.
- SHIMP, TA. 1983. A potpourri of consumer research methods. *Advances in Consumer Research* X:127-129. Thirteenth Annual Conference. [sl]. Association for Consumer Research.
- SHUTE, VJ. 1996. Learning processes and learning outcomes. In DE CORTE, E & WEINERT, FE. 1996. *International Encyclopedia of Developmental and Instructional Psychology*. Munchen. Pergamon.

- SMITH, RA & HOUSTON, MJ. 1986. Measuring script development: an evaluation of alternative approaches. *Advances in Consumer Research* XIII:504-508. Sixteenth Annual Conference, [sl]. Association for Consumer Research.
- SPECK, PS, SCHUMANN, DW & THOMSON, CT. 1988. Celebrity endorsements – scripts, schema and roles. *Advances in Consumer Research* XV:69-75. Eighteenth Annual Conference. [sl]. Association for Consumer Research.
- STEYN, AGW, SMIT, CF, DU TOIT, SHC & STRASHEIM, C. 1994. *Modern Statistics in Practice*. Pretoria. Van Schaick Academic.
- STOLTMAN, JJ, TAPP, SR & LAPIDUS, RS. 1989. An examination of shopping scripts. *Advances in Consumer Research* XVI:384-391. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- SUTHERLAND, S. 1995. *The Macmillan Dictionary of Psychology*. London. Macmillan.
- TOULIATOS, J & COMPTON, NH. 1988. *Research Methods in Human Ecology*. Iowa. Iowa State University Press.
- VOSNIADOU, S. 1996. Knowledge representation and organization. In DE CORTE, E & WEINERT, FE. 1996. *International Encyclopedia of Developmental and Instructional Psychology*. Munchen. Pergamon.
- WAINWRIGHT, D. 1997. Can sociological research be qualitative, critical and valid? *The Qualitative Report* 3(2). <http://www.nova.edu/ssss/QR/QR3-3/wain.html>
- WARLOP, L & RATNESHWAR, S. 1993. The role of usage context in consumer choice: a problem solving perspective. *Advances in Consumer Research* XX:377-382. Twenty Third Annual Conference. Association for Consumer Research.
- WEISBERG, RW. 1980. *Memory, Thought and Behavior*. New York. Oxford University Press.
- WHITNEY, JC & JOHN, G. 1983. An experimental investigation of intrusion errors in memory for script narratives. *Advances in Consumer Research* X:661-666. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- YOON, C, MEYERS-LEVY, JM & TYBOUT, A. 1990. Exploring temporal perspective framing effects. *Advances in Consumer Research* XVII:533. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- ZAICHOWSKY, JL. 1985. Familiarity: product use, involvement or expertise? *Advances in Consumer Research* XII:296-299. Fifteenth Annual Conference. Association for Consumer Research.



ELICITATION AND GENERATION OF A SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES WITHIN A CONSUMER DECISION-MAKING CONTEXT

ABSTRACT

Although the script concept is generally accepted to be a valid construct with wide application in disciplines such as cognitive psychology, little has been done to develop and explore the potential of buying/shopping scripts and to implement the concept in practice since the first initiatives in 1983 and 1989. The main objective of this study was to elicit and organize a script for the acquisition of major household appliances within the consumer decision-making context that could be used as a realistic portrayal of the actual buying process.

In the selection of specific data-collection procedures, prior research and recommendations were taken into consideration (Erasmus, 2002b) to optimize the opportunity to explore data in terms of the properties of a script and to determine how well the results coincide with script theory. An emic, ideographic approach of enquiry was used (Denzin & Lincoln, 2000:10, 158) to obtain information spontaneously raised by participants. Multiple data-collection techniques were used to prevent mono-method bias. Less structured techniques were chosen and responses from one data-collection procedure directed the subsequent data-collection procedures. Data-collection was closely interwoven with data analysis to ensure that the type and amount of information collected were useful in terms of a script-elicitation procedure.

The attempt to elicit and generate a script for purchasing major household appliances proved successful. The selection, combination and order of executing the script-elicitation techniques were effective in eliciting the relevant script norms and in generating a script that coincides with the basic properties and structural characteristics of a script. The specific arrangement of script-elicitation techniques is recommended for future research: the written technique succeeded in eliciting all the relevant actions while subsequent techniques were useful to elaborate on specific aspects, to ascertain trustworthiness and authenticity of data and to design visual stimuli for the discrimination procedure. It is recommended that the format and content of the theoretical script be further analyzed for use as a representation of consumer decision-making behaviour for the acquisition of household appliances to the benefit of industry, retail and professionals in the field of consumer science who are actively involved in consumer education and facilitation.

OPSOMMING

Hoewel geskryfte as 'n geldige konstruk in verskeie dissiplines soos kognitiewe sielkunde erken en gebruik word, is min gedoen om die potensiaal van aankoopgeskryfte verder te ontgin sedert die eerste inisiatiewe op hierdie gebied in 1983 en 1989. Die primêre doel van hierdie studie was om 'n geskrif vir die aankoop van groot huishoudelike toerusting binne verbruikersbesluitnemingsverband te ontwikkel wat as 'n meer realistiese voorstelling van die aankoopproses kan dien as wat van tradisionele verbruikersbesluitnemingsmodelle afgelei kan word.

In die keuse van data-insamelingsprosedures is vorige navorsing op hierdie gebied bestudeer (Erasmus, 2002b) sodat data-insamelingsgeleenthede maksimaal benut kon word vir die generering van 'n geskrif wat aan die basiese eienskappe en strukturele vereistes van geskryfte sou voldoen. 'n Emiese, ideografiese navorsingsbenadering is gevolg (Denzin & Lincoln, 2000:10, 158). Veelvoudige data-insamelingstegnieke is gebruik om sydigheid te voorkom. Minder gestruktureerde tegnieke het verseker dat inligting wat in een fase ingesamel is, in opvolgende insamelingsgeleenthede benut kon word om maksimum stimulering van denke te verseker. Tegnieke wat gebruik is [en reeds ten opsigte van voordele en gebreke bespreek is (Erasmus, 2002)] is selektief gekombineer. Data is direk na insameling verwerk sodat die resultate in opeenvolgende insamelingsessies in aanmerking geneem kon word om leemtes uit te skakel.

Die poging om 'n geskrif vir die aankoop van groot huishoudelike toerusting binne verbruikersbesluitnemingsverband te genereer, was geslaagd. Die keuse, kombinasie en volgorde van implementering van die onderskeie data-insamelingstegnieke was suksesvol ooreenkomstig die identifikasie van die relevante norme asook in die saamstel van 'n geskrif binne die riglyne wat met betrekking tot die basiese eienskappe en strukturele eienskappe vir geskryfte voorgehou word. Die spesifieke volgorde van tegnieke kan vir soortgelyke studies aanbeveel word: die geskrewe tegniek was suksesvol in terme van die vroeë identifikasie van al die aktiwiteite (elemente), terwyl daaropvolgende tegnieke bygedra het om elemente uit te brei, om betroubaarheid en geldigheid te verseker en om visuele stimuli vir die diskrimineringsstegniek saam te stel.

Daar word aanbeveel dat die formaat en inhoud van die teoretiese geskrif evalueer word vir moontlike gebruik daarvan as 'n voorstelling van reële verbruikersbesluitneming vir die aankoop van huishoudelike toerusting voorhou. Dit sou vir die industrie, kleinhandel en veral professionele persone binne die dissipline van verbruikerswetenskap wat belang het by verbruikersopvoeding en -fasilitering, van praktiese nut wees.

Search words: *household appliances; scripts; event schemata; consumer decision-making; purchasing events; script-elicitation procedures*

INTRODUCTION

Despite the overwhelming impact of technology on household appliances in recent times, an understanding of consumers' choice processes in acquiring appliances is still fragmented and under-researched (Venkatesh, 1985:193). When judged within the framework of a traditional consumer decision-making model, decision-making for purchasing major household appliances - that is typically categorized as a complex, high-risk consumer decision - seems extensive and rather elaborate. A question that comes to mind is whether consumers really undertake extensive deliberation before purchasing household appliances.

Several objections against the use of traditional consumer decision-making models without careful pre-meditation of the context and purpose within which they are used, have been reported (Erasmus, Boshoff & Rousseau, 2001:83-87). Schurr (1986:498) inter alia suggested the possibility of generating and implementing *purchasing scripts* as alternative frameworks of consumer decision-making. In contrast to consumer decision-making models, scripts identify principle actions, the people (actors), their respective roles and the objects involved in a recurring situation/event (Calder & Schurr, 1981 in Speck, Schumann & Thomson, 1988:70; Schurr, 1986:498-501). Another advantage of a script is that it is a schematic portrayal of a consumer's mental representation of a specific event. It thus contains a sequence of actions *from the point of view of the consumer* (Abelson, 1981:715). Scripts consequently have the potential to offer valuable insights into consumer behaviour and to provide professionals in the field of consumer science with valuable guidelines for facilitating consumer behaviour (Lai, 1994:491; Taylor, Cronin & Hansen, 1991:16; Bozinoff, 1982:485).

An attempt to elicit and organize a script that could serve as a realistic portrayal of the process of purchasing major household appliances seems to coincide with recommendations for research in the field of consumer behaviour. The script concept is generally accepted to be a valid construct with wide application (Taylor *et al*, 1991:17) and is used in areas such as cognitive, social, developmental and clinical psychology as well as cognitive anthropology (Rummelhart, 1980 and Abelson, 1976 in Leigh & Rethans, 1983:667; Bartlett, 1932, Bransford & Franks, 1971, Mandler, 1979, Minsky, 1975, Rummelhart & Ortony 1977, Schank & Abelson, 1977 in John & Whitney, 1982:75). Unfortunately, since the introduction of scripts within the domain of consumer behaviour and since the first script-elicitation studies (Whitney & John's *shopping script*, 1983 and Stoltman, Tapp & Lapidus' *examination of shopping scripts* in 1989), little has been done to extend and implement the concept in consumer behaviour studies - especially to explore its potential to

reflect the consumer decision-making process for specific purchasing events such as the purchasing of major household appliances.

Based on previously stated concerns regarding the use of traditional consumer decision-making models to inter alia reflect the consumer decision-making process of purchasing household appliances (Erasmus *et al*, 2001:88), the following research problem was formulated:

Can a script that conforms to the properties and structural characteristics of a script according to basic script theory be elicited and organized within the consumer behaviour context to portray the acquisition of major household appliances?

RESEARCH DESIGN

Research objective and sub-objectives

The following *research objective* and *sub-objectives* were formulated:

- To elicit and organize a script for the acquisition of major household appliances within the consumer decision-making context that coincides with the basic properties and structural characteristics of a theoretical script.
- To elicit the relevant script norms for the organization of a script for the acquisition of major household appliances, i.e. to stimulate experienced consumers to spontaneously expose/identify the relevant:
 - person schemata: everybody involved during the decision-making process
 - role schemata: the contribution of participants during the decision-making process, i.e. so-called influencers, decision-makers, et cetera
 - object schemata: the various objects involved in the decision-making process, e.g. information sources, retail outlets
 - decision-making schemata: the actions taken/implemented during the decision-making process.
- To generate a script that coincides with the basic properties and structural characteristics of a script within basic script theory by integrating and ordering the relevant script norms and actions indicated as typical of the event (acquisition of major household appliances).

Conceptual framework and definition of concepts

Following an ideographic approach, no assumptions were made concerning the various elements of decision-making (as reflected in traditional consumer decision-making models) to be expected in a script, the concepts pertaining to the phenomena relevant to the study or their inter-relationship. These were to be elicited during the research process by allowing participants to share their cognitive representations of the event or parts of the event irrespective of any resemblance to traditional consumer decision-making models. Broad non-specific concepts that coincide with the topic of the research and basic script theory were however identified to set the parameters for the study in accordance with the objectives of the study.

Acquisition of household appliances The acquisition of household appliances refers to the decision-making process *from the point where the need to replace an appliance is acknowledged until the appliance is purchased and installed at home*. During the study no assumptions regarding typical/traditional stages of decision-making were made. Instead, participants were asked to reconstruct a purchasing event through various elicitation techniques.

Major household appliances include cooling, cooking, baking and laundry appliances and are in the trade referred to as *white goods*. These are the more expensive household appliances used in kitchens and laundries and are generally considered long-term purchases due to their expected service life. In this particular study, *washing machines* were used as an example of major household appliances because research indicates that washing machines are the most frequently purchased appliances in a household and are seldom purchased without prior deliberation (Cox, Granbois & Summers, 1983:395). Script theory postulates that a script for one event (the acquisition of a washing machine) will eventually be made applicable to a related event (other purchases in the same product category, for example stoves, tumble-driers). A script for the acquisition of washing machines can thus also be interpreted as a script for major household appliances.

Script For the purpose of this discussion a script for the acquisition of major household appliances is referred to as a written portrayal of the purchasing event (for household appliances) as it is reconstructed from the view of experienced consumers. Theoretically, scripts are also known as event schemata. Script content is stored in long-term memory as hypothetical knowledge structures. These schemata are developed through experience and over learning and are retrieved to direct behaviour when consumers are exposed to/confronted with the same or similar situations (Speck *et al*, 1988:70; Bozinoff & Roth, 1983:655,656; Whitney & John, 1983:661).

Script norms For any representation to be labeled a script, it has to coincide with certain characteristics and certain properties identified in basic script theory (Abelson, 1981:717). The so-called script norms that characterize scripts in terms of content and structure are the *characters (people)*, their respective *roles*, the *props (objects)* and *actions* that are present in the script in the form of person schemata, role schemata, object schemata and action/decision-making schemata respectively. Their integration and ordering eventually reflects the specific event.

Schemata Schemata are described as stored frameworks (cognitive structures) of knowledge about specific objects or topics in semantic memory (Brown, 1992:787) and can be defined as *abridged, generalized, corrigible organizations of experience that serve as frames of reference for action and perception of similar experiences* (Weick in Schurr, 1986:498). A schema is linked to a specific experience and contains general/generic knowledge about that domain. When one is exposed to any object or situation, a schema is retrieved from long-term memory into working memory to serve as a frame of reference so that one is able to interpret, accept and understand the object/situation (Brown, 1992:787; Hoy, 1991:387).

- **Person schemata** refer to trait-based impressions of specific people who participate in an event including their skills, competencies, and values. A person schema is not situation specific (e.g. husband).
- **Role (relational) schemata** specify the specific contribution of various individuals (actors) throughout the decision-making process, e.g. as influencer or decision-maker. A role schema is situation specific and relational because it defines the probable relations between people and objects in the event and their respective roles.
- **Object schemata** could, within the context of this study, refer to any object used or involved in the event (e.g. information sources). Object schemata are not situation specific.
- **Decision-making schemata** specify all the activities that form part of the event (e.g. evaluation, information seeking).

In a script for the acquisition of major household appliances one or more of person-, object and role schema/ta will always be integrated with a decision-making schema to represent an action/element. All the actions/elements contained in a script are organized/divided into a number of coherent scenes that are sequentially and hierarchically ordered to represent the event schema/script.

PROCEDURE

Theoretical approach

A script-elicitation study is explorative in nature. The research kept to the voluntaristic assumption that consumers are active agents who interact with their environments and consequently gain experience, generate knowledge, beliefs and intentions that affect and direct subsequent consumer behaviour (Hudson & Murray, 1986:344). Experience is thus considered an important prerequisite for participation in a script study.

An emic (seeking to expose cognitive frameworks/schemata that consumers use: an insider view), ideographic approach of enquiry was used (Denzin & Lincoln, 2000:10, 158). Ideographic assumptions limit the focus to particular events/actions rather than to generalize the findings to all purchasing events (such as clothing or housing purchases) (Denzin & Lincoln, 2000:9; Hudson & Murray, 1986:345). An ideographic approach is characterized by a smaller sample and refers to the rigorous analysis of a specific decision-making event through multiple data-collection techniques in an attempt to formulate interpretive statements pertaining to that specific decision-making event (a specific appliance) or to the class of phenomena represented by the event (major household appliances) (Denzin in Corsini, 1994:205). The specific research techniques that were chosen in an attempt to construct an event from the point of view of the consumer (Denzin & Lincoln, 2000:10) are typical of the post positivist paradigm, namely projective techniques, interviews and focus-group discussions (Denzin & Lincoln, 2000:9; Hudson & Murray, 1986:345). The implementation of multiple techniques facilitated triangulation.

Sample framework

A prerequisite for inclusion in the script-elicitation study for household appliances was experience in taking or sharing responsibility of purchasing major household appliances for a household over a period of at least five years (Menon & Johar, 1993:108).

Men and women, irrespective of marital status, between the ages of 30 and 60 years who were responsible or co-responsible for their own households were selected to exclude discriminatory issues of gender and marital status and to allow for a more egalitarian approach where husbands and wives share decision tasks (Mano & Davis, 1990:280; Aldershoff, 1985:209; Buss & Schaninger, 1983:439, 440). Middle and higher socio economic levels were targeted to ascertain experience of the purchase situation (Du Plessis & Rousseau, 1999:54-62; Aldershoff, 1985:209).

The approximate value of a residence – whether rented or owned – served as indication of socio economic status (instead of requesting sensitive household income information). Only participants whose housing was valued at more than R250 000 (approximate minimum monthly income per household R10 000) were included to ensure that participants had spending power and consequently relevant buying experience.

Sample Because script contents are generic in nature and will contain the same basic structure for a group of experienced consumers, *volunteers* were recruited for participation in the study. Potential participants were recruited for participation in a so-called *consumer decision-making research project* by approaching them personally or telephonically during working hours at businesses within a radius of ten kilometres from the University of Pretoria where the data-collection sessions were to be held. A convenience sample is defensible since the principal aim of the research is exploratory in nature and individual differences were of no theoretical interest (Bozinoff, 1982:482).

An effort was made to include an even distribution of individuals over different age and socio economic status levels. Participants were not informed of the precise aims of the study: they were asked to participate in a consumer decision-making research project to prevent them from preparing so-called *appropriate* answers (Bozinoff, 1982:485). Upon receiving the instructions on the day of data-collection, they were allowed to withdraw if they wished. Responses were made anonymously but participants submitted personal data separately. They were also asked to indicate their willingness to participate in further stages of the study (Table 6.1).

TABLE 6. 1: PROFILE OF PARTICIPANTS FOR THE VARIOUS SCRIPT-ELICITATION STAGES

| | Participants per value of homes (as indication of financial status) | | | | | Participants | | | | | | | | | | |
|--------------------|--|-------------------------|-------------------------|-------------------------|----------------|--------------|-------|-------|------|-----------|---------|--------|--------|---------------|-------|----------|
| | | | | | | Age (years) | | | | Language | | Gender | | Racial groups | | |
| | R250 000 – R350 000**** | >R350 000 – R450 000 | >R450 000 – R550 000 | >R550 000 – R650 000 | >R650 000***** | 30-39 | 40-49 | 50-59 | 60 + | Afrikaans | English | Male | Female | White | Black | Coloured |
| STAGE 1 n=57 | 13 | 12 | 10 | 10 | 12 | 17 | 19 | 18 | 3 | 30 | 27 | 20 | 37 | 45 | 9 | 3 |
| STAGE 2 n=25 | 4 | 6 | 6 | 5 | 4 | 8 | 7 | 9 | 1 | 16 | 9 | 8 | 17 | 17 | 6 | 2 |
| STAGE 3* n=22 | 4 | 6 | 4 | 5 | 3 | 7 | 7 | 7 | 1 | 15 | 7 | 7 | 15 | 15 | 5 | 2 |
| STAGE 4** n=25 | 3 | 5 | 6 | 6 | 5 | 8 | 8 | 8 | 1 | 17 | 8 | 7 | 18 | 20 | 4 | 1 |
| STAGE 5*** n=18 | | 8 | 2 | 4 | 4 | 8 | 4 | 6 | 0 | 14 | 4 | 7 | 11 | 18 | | |

*same respondents as stage 2

**** approximate minimum monthly income R10 000 per household

** sub group of stage 1

***** approximate monthly income exceeds R24 000 per household

*** sub group of stage 1

Data-collection site

Data-collection stages 1,2,3 and 5 were conducted in a laboratory setting at the University of Pretoria that is situated conveniently for participants coming from various areas. This provided an intellectual atmosphere that is said to be favourable for the activation of data-laden schema (Mouton, 1996:149; Gardner & Raj, 1983:142) and further allows some control over environmental and context effects by excluding interruptions and preventing participants from being influenced by others (Touliatos & Compton, 1988:117).

Data-collection and analysis

The first objective was to focus on the elicitation of the relevant script norms and thereafter to organize the script in accordance with script theory. Because schemata are stored as declarative knowledge in long-term memory and are consequently difficult to retrieve, multiple, less structured data-collection techniques were used (Huberman & Miles, 1994:429). The researcher conducted the data-collection stages personally. A well-trained assistant (in possession of a Master's degree with Consumer Behaviour as a major) assisted with the analysis and interpretation of the data on a continual basis and co-administered the fifth stage, i.e. the focus-groups sessions. It was hoped that the affiliation of both researcher and assistant as lecturers at the University of Pretoria would have a favourable influence on participants in terms of the perceived importance of their contribution towards the outcome of the study (Mouton, 1996:149).

Strategy for data-collection Data-collection was done in five stages. Multiple techniques were designed with the intention to create generous opportunities to elicit a pool of generic and relevant script elements. Data driven (bottom-up) as well as conceptually driven (top-down) strategies were used. This included written and oral techniques; group and individual sessions; reconstruction as well as discrimination techniques (Erasmus, 2002b).

Data analysis was done immediately after every data-collection stage so that results could be used to direct successive data-collection stages (Huberman & Miles, 1994:429).

Data-collection stages and techniques The stages of script-elicitation were implemented in the following order:

Stage 1: Script-elicitation through a concept driven, written reconstruction technique

Data-collection Participants were requested to describe in writing and in their own words and style *how people in general go about replacing a washing machine that has broken down after ten to twelve years of service* (method adapted from Bower, Black & Turner, 1979:177-215). They were asked to reflect on a *replacement purchase*. To clarify *decision-making/purchasing process* and to capture a very specific range of statements the **starting** and **concluding points** of discussion (*Start with.....End with.....*) were clearly indicated. Instructions also required the inclusion of actions, people and objects in the descriptions (Figure 6.1).

① "Please write a detailed list of actions describing what people generally do when they buy a new washing machine to replace an old one that has broken down after ten to twelve years of service".

☞ *I am interested in the common actions of buying a new washing machine and would like to have a detailed description of **the entire process** of replacing a washing machine, including all **individuals, objects and activities** that are part of, and are involved in the process up to making the final purchase. Please describe the process in as much detail as possible - explaining the role and contribution of each and everybody. Remember to describe the type of interaction that occurs through out.*

② **Start your list with:** Household X wants/decides to buy a new washing machine.....

③ **End your list with:** The washing machine is delivered and installed at home.

④ **Include about 20 actions/events.**

⑤ Describe the activities/events **in the order in which they occur**, mentioning all the **individuals, objects and activities** involved through out, stipulating the **extent** and **type** of **action** and **interaction** that occur.

FIGURE 6.1: INSTRUCTIONS FOR SCRIPT-ELICITATION THROUGH A CONCEPT DRIVEN, WRITTEN RECONSTRUCTION TECHNIQUE (STAGE 1)

Participants Sixty individuals were invited to participate in groups of 15 each in four separate sessions. Fifty-eight turned up of which 57 responses could be used (Table 6.1). Reports were written anonymously to make the situation less threatening and in language of choice (Afrikaans or English) to encourage unconstrained response.

Stage 2: Script-elicitation through a concept driven, oral reconstruction technique

Data-collection According to cognitive theory the unconscious nature of schemata in long-term memory makes it difficult to retrieve. Individual interviews provided the opportunity to use a moderately scheduled interview technique based on the results of stage 1 (written reports) but provided the opportunity to interrupt interviewees to elaborate on certain aspects to capture detail that seemed to have been under reported (Touliatos & Compton, 1988:178). A *concept driven/top down approach* was followed and the same instructions to that of stage 1 were used except that responses were oral instead of written. With participants' permission, the interviews were tape-recorded for transcription.

Participants Twenty-five new participants were interviewed during lunch-hour in their offices or after-hours in their homes. An attempt was made to include more or less the same ratio of participants from the various age and socio-economic groups as in stage 1 (Table 6.1).

Stage 3: Elicitation of script sub-actions and role expectations, through a data driven discrimination technique

Data-collection The discrimination technique used (as opposed to the association technique of stages 1 and 2) aimed at the reconstruction of an event, to evoke contextually rich data and to minimize cognitive load (Donoghue, 2000:50; Stoltman, Tapp & Lapidus, 1989:384). Responses to the previous data-collection stages were used to compile a combination of visual stimuli to reflect different scenarios of the decision-making process. Pictures that conveyed realistic but minimal clues (simple clip-art drawings) related to the event (e.g. interaction of individuals in the store) were intended to induce scripts from memory. Some pictures were irrelevant to the event to encourage participants to be selective in their choice of pictures. The pictures were more or less of even size, each on a separate piece of paper with enough space for written commentary.

A pre-test was done by giving 40 pictures to five individuals (who participated in stage 1) for interpretation to determine their reaction, their response times and general comments for possible improvement. Following a data driven strategy where clues were provided, they had to *select a minimum of 15 pictures¹ to construct a scenario depicting the purchasing of a new washing machine*. Pictures had to be arranged in sequence and a written description of what was happening in every scene had to be given. Some of the individuals in the scenes were identified by captions (e.g. salesperson, husband) while the rest had to be identified by the participants (Figure 6.2).

No negative comments about the task were received. The researcher and assistant analyzed and discussed the results and commentary of the pretest and selected 35 pictures for the final procedure.

Participants All 25 participants from the stage 2-elicitation procedure (Table 6.1) were invited for participation to allow for triangulation.

Dear participant

Thank you for your willingness to participate in the third round of my research project on consumer decision-making.

Please use the pictures included in the envelope in the following way:

1. **Choose any number of pictures (but not less than 15)** to compile a "story" that reflect the whole process of how a household will go about to PURCHASE A WASHING MACHINE to replace one that has broken down (Accept that the old machine can definitely not be fixed). **Your pictures must illustrate the process from the moment that the household decides to buy a new machine until the moment that the replacement is delivered and installed at home.**
2. Briefly write down – next to each picture – what is happening in that specific situation, *for example:*

The husband studies newspaper advertisements for prices of various machines

3. Please indicate **WHO** the people are in every situation. Remember that you are describing the situation in general - as you see it! Some of the individuals in the pictures have been identified already. Specify who the others are, *for example*



4. The pictures that are not included in your story, must clearly be marked and put aside, *for example:*
5. Put your pictures in SEQUENCE to specify how the process proceeds from start to finish. There are no correct or incorrect scenarios but please make sure of how you wish to organize the chosen pictures because that will affect the outcome of the study! Pin or staple the pictures (your story) together and put everything back in the envelope.

Thank you for your time.

FIGURE 6.2: INSTRUCTIONS FOR ELICITATION OF SCRIPT SUB-ACTIONS AND ROLE EXPECTATIONS THROUGH A VISUAL PROMPTING TECHNIQUE (STAGE 3)

¹ The average number of statements calculated for the previous data-collection stages

Stage 4: Elicitation of sub-actions and role expectations through a data driven, written reconstruction technique

Script-elicitation procedure Data generated in stages 1 to 3 produced *large chunks of activity* that were useful to identify script norms and key elements and to organize script elements. To overcome a possible neglect of subtle aspects of the decision-making process (Barnes, 1993:63, 64 based on work by Corsaro & Heise, 1990) *clued recall* (Stoltman *et al*, 1989:384; Smith & Houston, 1986:505) was used in the fourth stage. Here participants were confronted with a specific scene of the decision-making process namely *in-store activities* which had to be described in detail (scenes were identified according to results of previous stages). They then had to *specify in writing, all the actions that preceded that scene* (Schurr, 1986:505-507). They finally had to describe the financial decision-making process in detail (Figure 6.3).

Assuming a hierarchical order for script elements, it was expected that although requested and reported out of the *natural order*, the final result of their reports would correspond with their sequential description in the previous elicitation stages. Activities (elements) at the specific level of abstraction could however include more detail due to the nature of the instructions, which encouraged focus on specific aspects. Apart from allowing the opportunity to provide more detail of specific scenes of the event, this technique contributed to confirming the *temporal sequence* of events.

Participants Twenty-five volunteers from the stage 1 sample were recruited for the purpose of triangulation. Because the instructions differed from those in stage 1 and because participants were unaware of the exact objectives of the study, their responses were assumed to be truthful (Table 6.1).

Dear respondent

RESEARCH PROJECT: CONSUMER DECISION-MAKING

Thank you for participating in the fourth phase of this research project. Your inputs are invaluable in terms of the outcome of this study. I therefore highly appreciate the time that you are willing to contribute.

Please take note:

- Your contribution is regarded confidential. Your name will not be attached to your response. I do however need some demographic details to compile a profile of participants. This should be completed on the separate form and handed in please.
- There is no time limit for completion of this exercise. Please write at your own pace.
- There are NO right or wrong answers.
- Your view of HOW CONSUMERS GO ABOUT IN GENERAL is required. Your response therefore not necessarily reflects your own doing.
- Please do not discuss your response with someone else during the session.

REQUEST 1

Please describe in as much detail as possible what happens IN-STORE when consumers are in the process of buying a new washing machine to replace one that has broken down completely after ten to twelve years of service.

Please indicate all the people who are involved in the activities in the store

It is important to discuss the process from the point of **entering the store** until the time that the consumer/s leave

The role of the salesperson must be described in detail to explain when and in what way the salesperson becomes part of the discussion and deliberation process

You need not provide reasons for statements

REQUEST 2

Please describe WHAT consumers do BEFORE they go to the retail store to purchase a new washing machine. It is once again important to indicate WHO are involved and HOW every individual contributes to the process of purchasing the appliance.

REQUEST 3

Please describe a household's **handling of the financial decision** and any activities that surrounds the financial arrangements to purchase a new washing machine. Include a description of

- **Who take/s responsibility for the decision**
- **When it is done**
- **How it affects the decision-making process**

Thank you for your co-operation!

FIGURE 6.3: INSTRUCTIONS FOR ELICITATION OF SUB-ACTIONS & ROLE EXPECTATIONS THROUGH A WRITTEN RECONSTRUCTION TECHNIQUE (STAGE 4)

Stage 5: Focus-group discussions

Focus-groups were used as collective brainstorming sessions to evoke active, spontaneous discussions on certain elements of the purchasing process to conclude the script-elicitation process. Focus-group discussions provided opportunity to overcome the possible influence of verbalization difficulties that might have hampered reports during previous script-elicitation stages and to confirm the contents and structure of the final script (Morgan, 1988 in Macun & Posel, 1998:114; Stoltman *et al*, 1989:389). Focus-group discussions further provided an opportunity for triangulation (Macun & Posel, 1998:118-120; Stoltman *et al*, 1989:390). Specific discussions of a limited number of topics (script scenes) were planned (Macun & Posel, 1998:118, 119).

Data-collection A phenomenological approach to focus-group discussions was used to uncover *everyday knowledge* and *everyday language* (as opposed to scientific knowledge) and to expose generality of ideas (McQuarrie & McIntyre, 1988:581). A response-oriented rather than a question-oriented approach was followed (Robson, 1989:29) to encourage free flow of conversation without excessive control and manipulation of discussions. Following a phenomenological approach, participants were encouraged to discuss and debate topics in order to arrive at consensus statements or agreement within the groups. Instead of eliciting additional ideas or thoughts, the intention with the focus-groups was to reflect on data generated in previous stages, to debate issues and to conclude. Conversations were tape-recorded for transcription and particular attention was given to concluding remarks and -statements. The assistant kept note of individuals' participation to encourage participation whenever someone showed reluctance to participate in group discussions.

Participants Two sessions were held with eleven and seven participants respectively. All were from the first data-collection stage sample (Table 6.1) (Payne & Levy, 1975; Well, 1974 in Lautman, 1982:54). Strangers were grouped together in accordance with their financial status and nicknames were used to retain anonymity (Macun & Posel, 1998:124; Fern, 1983:121-125; Cook, 1982:62). To counteract language difficulties, the participants were encouraged to participate in either Afrikaans or English, as all participants understood both languages. Participants were seated around a square table to allow eye contact and for the purpose of uninhibited flow of the discussion (Lautman, 1982:54).

DATA ANALYSIS AND RESULTS

The profiles of the samples of the five script-elicitation stages are reflected in Table 6.1. Data was analyzed immediately after completion of a particular stage to make a concerted effort to capture missing or under reported content during the following stage.

Data was analyzed to

- isolate the relevant script norms and to order the script actions sequentially reflecting the script norms.
- generate the respective script protocols elicited through the various script-elicitation techniques.
- identify main concepts for the purpose of isolating scenes and scene headers.
- evaluate the level of agreement of the script protocols elicited through the various script-elicitation procedures to eventually generate a single theoretical script.

Isolation of script norms and elements and ordering of actions

The data of the first three script-elicitation procedures were used to identify script norms and elements and were eventually integrated. The fourth stage was intended to reflect on a basic characteristic of a script, namely that it possesses a set quality (the ability of an individual to restructure a script in sequential order when it is entered at any level out of the natural order of the script) while stage 5 focus-group discussions served to confirm conclusions and to clarify issues of uncertainty. The results were as follows:

Stage1: Script-elicitation through a concept driven, written reconstruction technique

The responses of 58 individuals (Table 6.1) were edited by the researcher to exclude non-relevant information. The response of one participant was rejected because it reflected a repair scenario and did not include any useful information. Content analysis of the remaining 57 responses was done. Actions and event statements were coded strictly in accordance with and in the order indicated by the participants. Confirming a report by Yoon, Meyers-Levy and Tybout (1990:533), individuals revealed during debriefing that they found it easier to reflect on hypothetical events, than to have anticipated a future purchase. The written reports of stage 1 were ideal as a starting point because they produced detailed and relevant descriptions of the event and also included information on sensitive financial matters that did not spontaneously surface during stage 2.

A total of 42 separate actions were identified from the responses of the 57 participants, ranging from 10 to 21 actions or an average of 15 actions per person. The fact that only 42 separate actions were identified within the group even in this early stage indicated extensive agreement on the type of actions contained in the event. Content analysis and coding was done by the researcher and thereafter independently repeated by a trained assistant. Inter rater reliability was calculated by comparing the interpretation of the responses as follows (Touliatos & Compton, 1988:121, 122):

$$[n / (n+a)] \times 100 = \% \text{ agreement}^2 \Rightarrow [832 / (832 + 23)] \times 100 = 97,3\%$$

(Indicative of a high inter rater reliability for stage 1).

A coding form that included all the concepts and actions mentioned by the participants was designed. Actions were transferred *in the specific order as these were identified* onto the coding form for statistical analysis. Frequencies were calculated for each action. Because of the low frequency of certain actions (11 actions were mentioned by less than 10% of the participants) and because some of the action statements were closely related, actions were clustered into related categories in accordance with concepts relevant within consumer decision-making theory. This is compatible with script theory that postulates that scripts contain *generic action statements* rather than detailed descriptions of an event. The 42 actions were thus clustered into generic statements, which reduced the number of actions to 20 (Table 6.2).

TABLE 6.2: EXAMPLES OF CLUSTERED ACTION STATEMENTS

| Actions mentioned by participants | Initial interpretation | Clustered category |
|--|--|--------------------|
| <ul style="list-style-type: none"> odecides whether the same brand as the previous one will be purchased o It has to be decided what the household needs first, for example the capacity needed and where the machine will be installed o Everybody has certain preferences that influences the type of machine purchased, for example if you are used to a top loader..... o It is not necessary to look at so many models because one knows beforehand which are more reliable | Preference Requirements Preference, experience Attitude; Experience | Needs assessment |
| <ul style="list-style-type: none"> odecides who is going to pay for the machine o ...one has to determine how much you are prepared to spend o first a budget must be decided on o .. and if it is going to be purchased on HP or paid for in cash o One goes to the bank or Buying Association (Pretorium Trust) to arrange for credit facilities | Payment strategy Budgeting Budgeting Method of payment Financial arrangements | Financial decision |
| <ul style="list-style-type: none"> o Prices of different stores are compared o One has to compare the services provided by different stores o The advantages and disadvantages of various products have to be considered..... o Makes a shortlist to compare products... | Compare prices Compare stores Compare products Compare products per shortlist | Evaluation |

Responses were however coded in terms of the original 42 statements and in terms of their respective positions as mentioned (in sequential order). The mean positions of the generic statements (clusters of the original statements) (Table 6.2) were then calculated positioning them in sequential order in the script protocol. The script protocol for stage 1 (Table 6.3) indicates the mean position of every generic action as well as the frequency of mention from which main concepts and the strength of actions were determined.

² n: number of agreements; a: number of disagreements

TABLE 6.3: RESULTS: STAGE 1 (CONCEPT DRIVEN, WRITTEN RECONSTRUCTION TECHNIQUE)

| Mean position | Variable (action) | n = 57 | % | Std dev | P-value* |
|---------------|---|--------|-----|---------|----------|
| 3.6 | Use of non personal information: written form | 24 | 42 | 2.31869 | 0.4678 |
| 4.1 | Needs assessment | 38 | 67 | 2.50064 | 0.0567 |
| 4.5 | Use of personal information sources: friends, family | 33 | 58 | 3.61715 | 0.1037 |
| 5.5 | Use of personal information: phoning stores | 33 | 58 | 2.41370 | 0.1815 |
| 5.6 | Store visits: to acquire product information | 50 | 89 | 2.62752 | 0.9767 |
| 5.7 | Store visits: to compare products | 35 | 61 | 3.12431 | 0.5036 |
| 5.8 | Store visits: to compare prices | 29 | 51 | 3.28040 | 0.4137 |
| 6.4 | Use of non personal information: product specifications | 20 | 35 | 3.21130 | 0.9388 |
| 6.65 | Financial decisions | 44 | 77 | 3.51655 | 0.8230 |
| 6.7 | Making a shortlist of suitable alternatives | 17 | 30 | 2.99509 | 0.0647 |
| 7.7 | Evaluation of alternatives | 24 | 42 | 3.65263 | 0.5044 |
| 7.8 | Store visits: to compare retailer benefits | 29 | 51 | 2.68903 | 0.9122 |
| 9.9 | Final decision: product | 53 | 93 | 2.96802 | 0.1499 |
| 10.2 | Final decision: store | 29 | 51 | 3.86980 | 0.2482 |
| 10.6 | Store visit: to confirm decision | 8 | 14 | 2.38671 | ** |
| 12.0 | Purchasing action | 57 | 100 | 2.96100 | 0.7973 |
| 13.2 | Delivery | 54 | 95 | 2.92277 | 0.4797 |
| 13.3 | Reconsider decision | 6 | 10 | 2.33809 | ** |
| 13.7 | Study the manual | 7 | 12 | 2.98408 | ** |
| 14.2 | Installation of appliance | 49 | 86 | 2.98792 | 0.4183 |

* These figures indicate the p-value for the two halves of the sample that were compared through the Mann-Whitney rank sum test for internal consistency (Discussion follows later)

** No calculations due to low response (n<15)

The stage 1 protocol provides a clear indication of *decision-making schemata* (e.g. *store visits*; *price comparisons*) and *object schemata* (e.g. *non-personal information sources*; *retail stores*) but does not indicate *role schemata* satisfactorily (e.g. *friends as influencers*). Despite clear instructions, participants did not provide enough information on the *person-* or the *role schemata*. The missing data on role schemata was calculated at between $n=44$ and $n=56$ for the respective actions. It was decided to actively resolve this shortcoming during the following stages.

To determine the trustworthiness of data, the sample ($n = 57$) was randomly divided into two halves ($n=29$; $n=28$). Data was compared using the Mann-Whitney rank sum test as if they were two independent groups (Steyn, Smit, Du Toit & Strasheim, 1994:594). No significant difference in responses and position of mention could be found for any one of the actions mentioned by the two halves of the sample ($p \leq 0,05$) (Table 6.3), which indicated trustworthy responses.

Stage 2: Script-elicitation through a concept driven, oral reconstruction technique

The recorded interviews with 25 new volunteers (Table 6.1) were transcribed. Content analysis and coding was done in the same way as for stage 1. No new actions to those extracted during stage 1 were added which confirmed the potential of a written technique to elicit detailed descriptions. The same coding schedule as for stage 1 was used. Inter rater reliability for the interpretation of the researcher and assistant after comparing all 25 responses in the same manner as for stage 1 was

calculated at 97,4% - an indication of high inter rater reliability. Table 6.4 reflects the script protocol for stage 2.

TABLE 6.4: RESULTS: STAGE 2 (CONCEPT DRIVEN, ORAL RECONSTRUCTION TECHNIQUE)

| Mean position | Variable | n=25 | % | Std dev | P-value** |
|---------------|--|------|-----|---------|-----------|
| 2.3 | Needs assessment | 23 | 92 | 1.32995 | 0.0037 |
| 2.8 | Use of personal information sources: friends, family | 15 | 60 | 2.18714 | 0.0955 |
| 3.8 | Use of non personal information: written form | 17 | 68 | 1.61165 | 0.3306 |
| 6.0 | Use of personal information: phoning stores | 11 | 44 | 3.00874 | 0.7546 |
| 6.5 | Store visit: to compare products | 17 | 68 | 2.80886 | 0.2585 |
| 6.7 | Store visit: to acquire product information | 24 | 96 | 3.03660 | 0.1387 |
| 6.9 | Store visit: to compare prices | 10 | 40 | 1.96920 | 0.1020 |
| 7.4 | Evaluation of alternatives | 5 | 20 | 2.19089 | 0.7927 |
| 7.5 | Financial decisions | 24 | 96 | 3.46096 | 0.3959 |
| 8.0 | Final decision: store | 8 | 32 | 2.82842 | 0.1321 |
| 8.3 | Store visits: to compare retailer benefits | 13 | 53 | 2.28708 | 0.5934 |
| 8.5 | Making a shortlist of suitable alternatives | 4 | 16 | 2.38047 | 0.2056 |
| 8.8 | Store visit: to confirm decision | 4 | 16 | 2.21735 | 0.1651 |
| 9.6 | Final decision: product | 23 | 92 | 2.03914 | 0.6199 |
| 11.4 | Purchasing action | 25 | 100 | 2.49799 | 0.3885 |
| 12.4 | Delivery | 25 | 100 | 2.51793 | 0.2692 |
| 13.4 | Installation of appliance | 25 | 100 | 2.51793 | 0.2687 |
| 13.9 | Study the manual | 19 | 76 | 3.13534 | 0.4468 |
| 17.0 | Reconsider decision | 1 | 4 | - | 0.1266 |
| | Use of non personal information: product specific | 0 | 0 | - | |

** These figures indicate the p-value for the stage 1 and stage 2 data that were compared through the Mann-Whitney rank sum test for consistency (Discussion follows later)

The Mann-Whitney rank sum test for two independent groups was used to determine whether the stage 1 and stage 2 techniques succeeded in inducing the same information from memory. For all but one variable (NEEDS ASSESSMENT) no significant difference in the mean positions of the various script actions in the script protocols for the two studies could be found ($p \leq 0,05$) (Table 6.4). The fact that the mention of NEEDS ASSESSMENT differed for the two procedures (see also Table 6.7) may be ascribed to the fact that stage 1 depended upon independent reconstruction of the event while interviews provided the opportunity to interrupt participants and to ask them to elaborate on certain aspects. This probably served as a reminder of actions under reported in stage 1. Participants did however have more time to think during stage 1, which means that the stage 1 data could possibly be a better reflection of the actual sequence of actions. It must further be emphasized that the mean positions of needs assessment and actions related to information search are relatively close to each other in stages 1 and 2 which means that related actions could be closely interwoven in a real life situation.

A better response in terms of role actions was achieved. Results of stages 2 to 4 with respect to role actions are reflected in Table 6.7 and are discussed concurrently.

Stage 3: Elicitation of script sub-actions and role expectations, through a data driven discrimination technique

In terms of role actions, this technique eventually provided more detail than stage 2 (Table 6.7), probably because the technique served as a reminder of experience that did not surface spontaneously during any of the previous stages (Bone & Ellen, 1990:449). The use of a discrimination technique after having implemented reconstruction techniques in stages 1 and 2, addressed a shortcoming of those techniques: they depended on independent reconstruction of the event, which makes it difficult to retrieve information from long-term memory (Bower *et al*, 1979:213).

Only 22 of the 25 invited participants arrived for the data-collection session. Because of the intention to compare the results of stages 2 and 3 (the same sample, but different techniques) to determine the trustworthiness of responses, no new participants were included.

TABLE 6.5: RESULTS: STAGE 3 (DATA DRIVEN DISCRIMINATION TECHNIQUE)

| Mean position | Variable | n=22 | % | Std dev | P-value* | P-value** |
|---------------|--|------|-----|---------|----------|-----------|
| 2.3 | Needs assessment | 20 | 91 | 1.61632 | 1.0000 | 0.0047 |
| 3.1 | Use of non personal information: written form | 19 | 86 | 1.52369 | 0.7500 | 0.9803 |
| 4.2 | Use of personal information sources: friends, family | 14 | 64 | 3.06096 | 0.2500 | 0.2500 |
| 5.2 | Use of personal information: phoning stores | 14 | 64 | 3.22081 | 0.5156 | 0.5444 |
| 6.6 | Store visit: to compare prices | 9 | 41 | 3.12694 | 1.0000 | 0.8426 |
| 7.0 | Store visit: to acquire product information | 22 | 100 | 2.97205 | 0.6277 | 0.0500 |
| 7.1 | Evaluation of alternatives | 7 | 32 | 1.68560 | 1.0000 | 0.6665 |
| 7.5 | Store visit: to compare products | 14 | 64 | 2.29548 | 0.1322 | 0.1175 |
| 8.1 | Financial decisions | 20 | 91 | 1.68560 | 0.9622 | 0.0999 |
| 8.2 | Making a shortlist of suitable alternatives | 5 | 23 | 1.94079 | 1.0000 | 0.2033 |
| 8.3 | Store visits: to compare retailer benefits | 11 | 50 | 2.62937 | 0.5313 | 0.6262 |
| 9.1 | Final decision: store | 9 | 41 | 2.57120 | 0.3750 | 0.4573 |
| 9.5 | Store visit: to confirm decision | 4 | 18 | 2.38047 | 1.0000 | 0.3390 |
| 11.1 | Final decision: product | 19 | 86 | 2.27238 | 0.0740 | 0.1109 |
| 12.0 | Purchasing action | 22 | 100 | 2.15824 | 0.3136 | 0.7039 |
| 13.3 | Delivery | 22 | 100 | 2.14213 | 0.2390 | 0.7336 |
| 14.4 | Study the manual | 13 | 59 | 2.32875 | 0.4747 | 0.2755 |
| 14.5 | Installation of appliance | 22 | 100 | 1.97001 | 0.0886 | 0.4947 |
| - | Use of non-personal information: product specific | 0 | 0 | | | |
| - | Reconsider decision | 0 | 0 | | | |

* These figures indicate the p-value for the data of stages 2 and 3 that were compared through the Wilcoxon rank sum test for consistency ($p \leq 0,05$) (Discussion follows later)

** These figures indicate the p-value for the data of stages 1 and 3 that were compared through the Mann-Whitney rank sum test for consistency (Discussion follows later)

Trustworthiness of data was determined using the Mann Whitney rank sum test to compare the data of stages 1 and 3 (two independent groups). For all but one variable (NEEDS ASSESSMENT), there were no significant differences in the responses in terms of the actions mentioned or the ordering of actions in the two script protocols ($p \leq 0,05$) (Table 6.5). The fact that the mention of NEEDS ASSESSMENT differed for the two techniques (see also Table 6.10) may be ascribed to the

fact that stage 1 depended upon independent reconstruction of the event, while the stage 3 procedure depended upon discrimination. Participants could therefore have been reminded of actions through the pictures provided in stage 3. With reduced cognitive effort to reconstruct the event from memory, it was possible that the participants could focus more clearly on identifying actions and arranging them in sequential order. Therefore the results of stage 3 probably reflected the event more accurately. This was confirmed by a comparison between the results of stages 2 and 3 where no significant difference in the results could be found (Table 6.10). Once again the mean positions of needs assessment and information search are very close which probably indicates a close interaction of relevant actions during the event.

Responses of stages 2 and 3 (the same sample) were compared using the Wilcoxon rank sum test (Steyn *et al*, 1994:594). No significant differences in the positions of actions for the two script protocols (excluding subgroups that were too small to merit statistical comparison) ($p \leq 0,05$) (Table 6.6) indicate trustworthy data.

Stage 4: Determining the set quality of the script through a data driven, written reconstruction technique

Three tasks were completed during this stage.

- Written reports of *in-store activities* were analyzed and coded in the order mentioned by the participants. No new concepts or actions to those indicated in stage 1 came to the fore.
- Participants' descriptions of actions pertaining to the event *prior to entering the store* were analyzed and coded, using the same coding schedule as for stages 1 to 3.
- Participants' reports of activities relating to financial matters were analyzed and coded. No new concepts or actions were identified to those indicated in stage 1. Descriptions referring to financial decisions in either the first or second task were elaborated in terms of more specific descriptions given during this task.

Data analysis and coding of responses to the first and second tasks (in-store activities; activities prior to entering the store) were done. Results of the two tasks were integrated in terms of their actual sequential order in the script. Results of the third task (financial decision-making) were analyzed and coded and the results were used to elaborate a respondent's mention of financial decision-making in the integrated version of the previous tasks. The stage 4 results only provided data up to the point where consumers left the store. The protocol for stage 4 thus only represents part of the script. Stage 4 results are therefore compared with the stage 1 to 3 versions in terms of face value rather than through statistical analysis.

TABLE 6.6: RESULTS: STAGE 4 (DATA DRIVEN, WRITTEN RECONSTRUCTION TECHNIQUE)**

| MEAN POSITION | VARIABLE | N=25 | % |
|---------------|--|------|-----|
| 2.0526 | use of non personal information: written form | 19 | 76 |
| 2.8409 | needs assessment | 22 | 88 |
| 3.0455 | use of personal information: phoning stores | 11 | 44 |
| 3.6429 | use of personal information sources: friends, family | 7 | 28 |
| 5.0000 | making a shortlist of suitable alternatives | 3 | 12 |
| 5.8333 | evaluation of alternatives | 12 | 48 |
| 6.0000 | final decision: store | 1 | 4 |
| 6.1111 | use of non-personal information: product specific | 9 | 36 |
| 7.4783 | store visit: to acquire product information | 23 | 92 |
| 7.5714 | store visit: to compare prices | 14 | 56 |
| 7.9000 | store visit: to compare products | 25 | 100 |
| 8.1267 | financial decisions | 25 | 100 |
| 10.0000 | store visit: to confirm decision | 1 | 4 |
| 11.3333 | final decision: product | 3 | 12 |
| 11.9333 | store visits: to compare retailer benefits | 15 | 60 |
| 12.2400 | purchasing action | 25 | 100 |

** Only actions indicated by n>6 were considered in the final discussion

Needs assessment and *information search* were, as in the case of stages 1 to 3, identified as taking place prior to store visits and in the same sequence as mentioned in stage 1. This occurred during both of the written techniques where participants had enough time to think about their responses. In-store activities coincided with those of previous stages although higher frequencies of actions were reported. This is ascribed to the fact that participants had to focus on specific scenes, which probably induced better reconstruction from long-term memory. In-store activity, due to its apparent significance in all of the stages, became a topic of discussion in the focus-group discussions. Table 6.10 reflects results of stages 1 to 4 to facilitate a comparison of the respective script protocols that were used to generate and motivate the eventual empirical and theoretical script for the acquisition of major household appliances.

Elicitation of role schemata

The various script-elicitation techniques used were not equally successful in eliciting role schemata. This aspect was for example neglected in the stage 1 elicitation technique, probably because participants wrote their reports on blank sheets of paper. The design of a report sheet with column indications to remind participants to specify all of the schemata for every action required is recommended for future studies. During stage 2 an effort was made to induce responses by reminding interviewees to specify role behaviour. The projective technique used in stage 3 explicitly expected of participants to identify all individuals in selected pictures and to specify their actions throughout the event. Stage 4 did not produce a full script and from responses it could be concluded that respondents paid more attention to action statements and neglected role actions (the same problem that occurred during the stage 1 written technique). Once again a specially designed report sheet with columns is recommended for future studies.

Table 6.7 reflects the responses of participants concerning role behaviour during the various decision-making actions. Finally it would appear that not many persons are involved in a household's decision-making and acquisition of a new appliance. Apart from the involvement of husbands and wives, friends and salespeople seem to make contributions during the pre-purchase stages of information seeking while salespeople seem to be influential in-store.

Role actions indicated in stages 2 to 4 and summarized in Table 6.6 had to be interpreted on face value due to the small samples and disappointingly low responses for some of the actions. The format of the instructions for stage 3 where participants had to identify the individuals in the pictures and had to describe their actions was accepted as more successful in identifying role actions than any of the techniques used in the other stages of data-collection. A discussion of role actions was identified as a priority discussion topic for the focus-group sessions.

| Stage | Role | Frequency | Percentage | Comments |
|---------------------|---------|-----------|------------|----------|
| Information seeking | Wife | 10 | 100% | |
| | Husband | 0 | 0% | |
| In-store | Wife | 10 | 100% | |
| | Husband | 0 | 0% | |
| Purchase decision | Wife | 10 | 100% | |
| | Husband | 0 | 0% | |
| Delivery | Wife | 10 | 100% | |
| | Husband | 0 | 0% | |
| Post-purchase | Wife | 10 | 100% | |
| | Husband | 0 | 0% | |

TABLE 6.7: RESULTS STAGES 2 TO 5: INDICATION OF ROLE ACTIONS

| Actions | Stage 2 (n=25) | Stage 3 (n=22) | Stage 4 (n=25) | Stage 5 Consensus remarks during focus- group discussions (see Table 8) | Conclusion reached |
|---|--|---|---|--|---|
| Needs assessment | Husband 0 Wife 10 Jointly 9 DNC* 6 | Husband 0 Wife 4 Jointly 12 DNC.... 6 | Husband 0 Wife 2 Jointly 19 DNC 4 | The wife has definite ideas of what she wants Men do have a say..... Husbands and wives decide together | Joint** assessment, or handled by the wife |
| Use of promotional material (non-personal): written form | Husband 2 Wife 5 Jointly 5 DNC 13 | Husband 0 Wife 11 Jointly 7 DNC 4 | Husband 0 Wife 5 Jointly 14 DNC 6 | Men and women read advertisements in newspapers and magazines. Women usually make a bigger effort to get product information from various sources....they read all kinds of advertisements | Performed jointly or by the wife |
| Use of non-formal information sources (personal): friends, family | Husband 2 Wife 9 Jointly 2 DNC 12 | Husband 2 Wife 13 Jointly 2 DNC 5 | Husband 0 Wife 1 Jointly 6 DNC 18 | Women usually make a bigger effort to get product information from various sources....they phone their friends Women like to talk to their friends about the purchases | Generally by the wife or jointly |
| Use of non-formal information sources (personal); phone calls to stores | Husband 1 Wife 8 Jointly 1 Missing 15 | Husband 3 Wife 9 Jointly 2 DNC 8 | Husband 0 Wife 2 Jointly 8 DNC 15 | ... women would phone different stores... Maybe men do not make such an effort to collect information from various sources because they don't have the time | Generally by the wife or jointly |
| Use salesperson's advice (in-store) | Yes 20 DNC 5 | Yes 18 DNC 4 | Yes 24 DNC 1 | We look around first and then talk to the salespeople Some stores have excellent salespeople but we hate to be pressurized so we only ask for their opinion after we have looked at the products ourselves | Jointly, seldom the husband alone |
| Store visits to: <i>compare prices;</i> <i>get product information;</i> <i>compare products;</i> <i>compare retailers;</i> <i>confirm decision</i> | Husband 1 Wife 7 Jointly 14 DNC 3 | Husband 1 Wife 4 Jointly 15 With friend 1 DNC 1 | Husband 0 Wife 0 Jointly 23 DNC 2 | Men consider different characteristics..... They must go along to the store to look at more technical things. Men do make an input.... especially by accompanying their wives to stores. Men do go along to stores because they also pay for the appliances. | Jointly, seldom the husband alone |
| Financial decisions | Husband 6 Wife 2 Jointly 12 DNC 5 | Husband 4 Wife 4 Jointly 12 DNC 2 | Husband 0 Wife 0 Jointly 23 DNC 2 | ..this is a big decision with a lot of money involved therefore men have to be consulted from the beginning. Husbands and wives have to discuss financial matters to decide who will pay for the product. | Predominantly joint deliberations and decisions |
| Final decision: Store | Husband 0 Wife 6 Jointly 12 DNC 7 | Husband 1 Wife 2 Jointly 15 DNC 4 | Husband 5 Wife 0 Jointly 19 DNC 1 | Men do go along to stores because they also pay for the appliances. | Generally a joint decision |
| Final decision: Product | Husband 0 Wife 6 Jointly 12 DNC 7 | Husband 1 Wife 2 Jointly 15 DNC 4 | Husband 0 Wife 1 Jointly 13 DNC 11 | Men must be involved in case something goes wrong with the product later... | Generally a joint decision |
| Purchase transaction | Husband 2 Wife 3 Jointly 6 DNC 14 | Husband 0 Wife 5 Jointly 14 DNC 3 | | Husbands and wives have to discuss financial matters to decide who will pay for the product. | Generally jointly or performed by the wife |
| Delivery | Self 1 Retailer 9 DNC 15 | Self 0 Retailer 22 DNC 0 | | Stores must be able to deliver the appliances Delivery should be part of the deal.... | Generally done by the retailer |
| Study the manual | Husband 0 Wife 10 Jointly 8 DNC 7 | Husband 0 Wife 8 Jointly 5 DNC 9 | | Manuals are usually very complicated. Men might read the manuals to see how the installation should be done... Wives are more concerned about what the manuals say..... | By the wife or jointly |
| Installation of appliance | Self 10 Technician 7 DNC 8 | Self 7 Technician 9 DNC 6 | | Some men are very handy, so they do it themselves... We usually get a technician to do the installation.... It all depends what you buy....some appliances can easily be installed by the husbands and others not | Either self or by technician |

* DNC: did not complete

**"joint": husband and wife

Stage 5: Focus-group discussions

Data was transcribed and the contents were analyzed. Concluding statements of discussion topics are summarized in Table 6.8.

TABLE 6.8: CONCLUDING STATEMENTS OF FOCUS-GROUPS**

| Topic | Responses |
|--------------------|--|
| Information search | <ul style="list-style-type: none"> o Promotional material is the only source of information one has apart from what you know by experience and what friends tell you o Advertisements only include prices, capacity, guarantees..... o Information is scarce: there is little to go by o Where does one go to get product information? o Brand name is an important thing.... o The latest technology has become very complicated.....brand names can be used to guide the purchase if you do not know the appliances well o Men and women look for different characteristics that is why both go to the stores to investigate the options o Friends' recommendations can be trusted because it is based on experience o Everything one needs to know is found in the stores. I know of no other source that provides consumer information o Salespeople cannot be trusted. They only sell to earn commission o Some salespeople know the appliances but most of them are useless o Salesmen are supposed to assist with information but they are not always well informed themselves o Some stores have excellent salespeople but we hate to be pressurized so we only ask for their opinion after we have looked at the products ourselves o Advertisements really only provide the basic information like price, dimensions and guarantees. One then has to go to stores to see what the appliances really look like and what is available o If you already know what type of appliance you need, does one need really more than to know what the appliance costs and how long it is guaranteed? o There is no written information available in-stores. All manuals are sealed in the packaging of appliances o Most of the information is eventually found in the store by looking at the displays o Retailers and industry should definitely pay more attention to the service provided in retail stores o I would never have thought to contact the SABS for information o I do use the internet but have never thought of using Consumer Help Lines supplied by industry o Can one really ask the SABS for assistance? I would feel like I am wasting their time o Stores are the most important sources of information o I do not know why people bother to look for information because there is very little. It is much better to go to the store to look at the various models and brand names o It does not take long to make a decision once you are in the store |
| Role actions | <ul style="list-style-type: none"> o Appliances are very expensive. I do not think that a woman should make such a decision by herself o Men consider different characteristics. They must go along to the store so that they can look at more technical things o Men do make an input, especially by accompanying their wives to stores o Men do go along to stores because they also pay for the appliances o Wives make more inputs before they go to the store. After all they will be using the machines o Men are definitely involved in the decision as to what to purchase but their wives will have more say in the final purchase o Men are as much involved in household purchases as their wives because their money is involved o Men must be involved in case something goes wrong with the product later... o Men and women look for different characteristics that is why both go to the stores to investigate the options o Husbands and wives have to discuss financial matters to decide who will pay for the product o Appliances are very expensive, that's why husbands and wives have to discuss the financial implications of a purchase before any decision is made o They will definitely discuss the matter before buying anything.....appliances are very expensive these days o Women will discuss the financial implications with their husbands even when they earn their own money... o This is a big decision with a lot of money involved therefore men have to be consulted from the beginning o Men are involved but women will have more influence over the final decision o Women like to talk to their friends about the purchases because they can be trusted o Of course friends can be trusted when they recommend something. Remember, one won't ask anyone for their opinion o Men and women read advertisements in newspapers and magazines... o Women usually make a bigger effort to get product information from various sources. They phone stores, read all kinds of advertisements and would phone different stores... o Maybe men do not make such an effort to collect information from various sources because they don't have the time |

| | |
|---------------------|--|
| In-store activities | <ul style="list-style-type: none"> o Salespeople are in the game for the commission. That is why one has to look at the products on your own before calling them for assistance o In-store displays are the most important source of information. That is why it is important to go to a big store o There is very little written information in-stores that can be used. One usually has to rely on the appearance and trusted brand names to decide what to buy o Brand names are used to select the products that you eventually choose from...and price of course o Once you've seen the appliances you know what you want o It is better to look around on your own first before you talk to the salespeople o It is senseless to go back and forth....if you've seen the products in the store, you are ready to make a choice o Salespeople must not pressurize me o Salespeople are not very helpful o Salespeople should be better trained to do their jobs. Some know very little about the products they are supposed to sell... o It is important to choose a reliable store. They usually have more competent salespeople and will provide better after sales service |
| Financial planning | <ul style="list-style-type: none"> o Affordability is most important. It is no use looking at everything if you can not afford it o Financial decisions are most important in terms of what can be afforded and whether the purchase can be made o Finances determine everything. If an appliance breaks, it is a nightmare because so much money is involved o Financial aspects form a major part of the decision-making process. In the end everything is determined by availability of money o One has to look at all the options first before one can discuss finances. How will you otherwise know how much it will cost? o Unless financial matters are cleared out, one cannot decide anything o Money determines everything. If you can't pay, it is no use. That is why husbands and wives have to do it together o One knows more or less what can be afforded before you go to the stores but it is only when you have seen what is available that you really know the implications o One has to decide how you are going to pay: on hire purchase or cash or what ever. It all depends when the disaster strikes o Financial arrangements with the bank can only be made once you have been to the store to know how much money is involved o Sometimes the husbands pay and sometimes the wives pay. It all depends.... |
| Needs assessment | <ul style="list-style-type: none"> o The wife has definite ideas of what she wants o Wives know what is needed because they use the machines o Wives usually know what they want ... o Men do have a say because they are more technically orientated... o Husbands and wives decide together because of the consequences involved....what do women know about plumbing requirements and so on? o It all depends who is going to use the machine but in the end the wife has more say o One has to decide what the household needs before you go to the store o I think that when you look at advertisements, brochures and so on, you already have some idea of what you like and what you prefer o It is difficult to search for information if you don't know what you are looking for..... o One definitely looks at appliances in terms of your requirements.....won't consider front loaders if you prefer a top loading machine |

** In the words of the participants

ORGANIZATION OF SCRIPT PROTOCOLS

Identification of strength of actions

In accordance with previous script studies (Bozinoff, 1982:483; Bower *et al*, 1979:181), the *density of grouping of frequencies* was used to differentiate and categorize the *strength* of actions in the various script protocols. Consequently all actions mentioned at frequencies below 25% were eliminated from the script protocol as being less prominent. All other actions were categorized using the parameters in Table 6.9. Script protocols were then re-written in the relevant style to make individual actions more easily discernable in terms of their prominence/strength in the *empirical* script protocols (a practice generally used in script studies).

TABLE 6.9: PARAMETERS FOR INDICATION OF ACTION STRENGTHS IN THE SCRIPT PROTOCOLS

| Indicative style of presentation | Frequency (%) |
|----------------------------------|----------------|
| <i>action</i> | 25-39 |
| action | 40-59 |
| <i>ACTION</i> | 60-74 |
| ACTION | 75+ |

Empirical script protocols for stages 1 to 4

Table 6.10 reflects an integrated version of the results of stages 1 to 4, rewritten in terms of strength of actions (Table 6.9) to enable a comparison of data.

TABLE 6.10: PRELIMINARY EMPIRICAL SCRIPT PROTOCOLS FOR STAGES 1 TO 4**

| Adapted script protocol: Stage 1 (Table 6.3) (concept driven, written reconstruction technique) | Adapted script protocol: Stage 2 (Table 6.4) (concept driven, oral reconstruction technique) | Adapted script protocol: Stage 3 (Table 6.5) (data driven discrimination technique) | Results: Stage 4 (Table 6.6) (concept driven, written reconstruction technique) |
|--|---|--|--|
| 1. use of non personal information: written form | | | 1. USE OF NON PERSONAL INFORMATION: WRITTEN FORM |
| 2. NEEDS ASSESSMENT | 1. NEEDS ASSESSMENT | 1. NEEDS ASSESSMENT | 2. NEEDS ASSESSMENT |
| 3. use of personal information sources: friends, family | 2. USE OF PERSONAL INFORMATION SOURCES: FRIENDS, FAMILY | | |
| | 3. USE OF NON PERSONAL INFORMATION: WRITTEN FORM | 2. USE OF NON PERSONAL INFORMATION: WRITTEN FORM | |
| | | 3. USE OF PERSONAL INFORMATION SOURCES: FRIENDS, FAMILY | |
| 4. use of personal information: phoning stores | 4. use of personal information: phoning stores | 4. USE OF PERSONAL INFORMATION SOURCES: PHONING STORES | 3. Use of personal information: phoning stores |
| | | | 4. Use of personal information sources: friends, family |
| | | | 5. Evaluation of alternatives |
| | | | 6. Use of non-personal information: product specific |
| | 5. STORE VISIT: TO COMPARE PRODUCTS | | |
| | | 5. store visit: to compare prices | |
| 5. STORE VISITS: TO ACQUIRE PRODUCT INFORMATION | 6. STORE VISITS: TO ACQUIRE PRODUCT INFORMATION | 6. STORE VISITS: TO ACQUIRE PRODUCT INFORMATION | 7. STORE VISITS: TO ACQUIRE PRODUCT INFORMATION |
| | 7. store visit: to compare prices | | |
| | | 7. evaluation of alternatives | 8. store visit: to compare prices |
| 6. STORE VISIT: TO COMPARE PRODUCTS | | 8. STORE VISIT: TO COMPARE PRODUCTS | 9. STORE VISIT: TO COMPARE PRODUCTS |
| 7. Store visit: to compare prices | | | |
| 8. use of non personal information: product specifications | | | |
| 9. FINANCIAL DECISIONS | 8. FINANCIAL DECISIONS | 9. FINANCIAL DECISIONS | 10. FINANCIAL DECISIONS |
| | 9. final decision: store | | |
| 10. making a shortlist of suitable alternatives | | | |
| 11. evaluation of alternatives | | | |
| 12. store visits: to compare retailer benefits | 10. store visits: to compare retailer benefits | 10. store visits: to compare retailer benefits | 11. STORE VISITS: TO COMPARE RETAILER BENEFITS |
| | | 11. final decision: store | |
| 13. FINAL DECISION: PRODUCT | 11. FINAL DECISION: PRODUCT | 12. FINAL DECISION: PRODUCT | |
| 14. final decision: store | | | |
| 15. PURCHASING ACTION | 12. PURCHASING ACTION | 13. PURCHASING ACTION | 12. PURCHASING ACTION |
| 16. DELIVERY | 13. DELIVERY | 14. DELIVERY | |
| | | 15. study the manual | |
| 17. INSTALLATION | 14. INSTALLATION | 16. INSTALLATION | |
| | 15. STUDY THE MANUAL | | |

** Empirical script norms illuminate the properties of a script in terms of script concepts and their ordering indicating action strengths

Organization of a single empirical script protocol

To generate a single script for the event, the level of agreement of the various script protocols had to be determined first. The respective positions of actions in the four script protocols were compared using the Mann Whitney rank sum test for the two halves of stage 1, to compare stages 1 and 2, and to compare stages 1 and 3 (Tables 6.3; 6.4; 6.5). The Wilcoxon rank sum test was used to compare stages 2 and 3 (Table 6.5). The only action that differs significantly in terms of its mean position in the various script protocols is *needs assessment* in terms of its position in the stage 1 protocol versus the protocols for stages 2 and 3. Possible reasons for the difference could be that during stage 1, participants concentrated on describing the event in terms of all the relevant actions (written technique). When participants were however confronted with stimuli (based on the responses of stages 1 and 2) and were requested to interpret and arrange them in sequential order (stage 3), *needs assessment* was prominently indicated to be the first action taken. Although stage 4 confirms the stage 1 order, the nature of the task in stage 4 and the method of sequential ordering (the researcher integrated responses of participants after their description of separate scenes where the intention was to elicit more detailed description of scenes in the event) might cast some doubt on the exact position of the element under discussion. It was decided to place *needs assessment* in the first position based on stage 3 responses as well as consensus statements of focus-groups (Table 6.8). No significant difference in the mean position of any of the other actions was found (stages 1 to 3). The strength of actions was determined by comparing the various script protocols on face value.

Main concepts and elements within a group of related elements were analyzed to determine the **scene headers**. A scene eventually incorporates all related elements (actions mentioned by more than 25% of participants).

Concepts identified in the initial procedure before a reduction of data from 42 to 20 statements were integrated with basic action statements to enable a more comprehensive expression of some **actions/elements** (Example: *Needs assessment* was rewritten as *needs assessment in terms of requirements, preferences and experience based knowledge*) inclusive of person, object, decision-making and role schemata. The latter was obtained from responses during stages 2 to 4 as summarized in Table 6.7.

Figure 6.4 represents the integrated empirical script for the acquisition of major household appliances as elicited through multiple techniques and taking into consideration the strengths and weaknesses of the various elicitation techniques.

Scene 1: NEEDS ASSESSMENT

NEEDS ASSESSMENT IN TERMS OF EXPERIENCE, PREFERENCES AND ATTITUDES IS DONE JOINTLY BY HUSBAND AND WIFE OR BY THE WIFE

Scene 2: INFORMATION SEARCH

WRITTEN INFORMATION SOURCES, MAINLY PROMOTIONAL MATERIAL SUCH AS ADVERTISEMENTS ARE USED JOINTLY BY HUSBAND AND WIFE OR BY THE WIFE;

PERSONAL INFORMATION, MAINLY RECOMMENDATIONS OF FRIENDS AND FAMILY, BASED ON EXPERIENCE IS GENERALLY OBTAINED BY THE WIFE OR JOINTLY;

Telephone enquiries are made to several stores (salespeople), mainly by the wife or jointly

Product specific information such as technical information is gathered mainly by husbands

Scene 3: STORE VISITS

STORES ARE VISITED JOINTLY BY HUSBAND AND WIFE:

TO LOOK AT IN-STORE DISPLAYS AS MAIN SOURCES OF PRODUCT INFORMATION WITH ASSISTANCE OF SALESPEOPLE
TO COMPARE PRODUCTS IN TERMS OF THE HOUSEHOLD'S NEEDS, PERSONAL KNOWLEDGE AND EXPERIENCE

To obtain price information by looking at in-store displays

To investigate product specifications by consulting appliance manuals (mainly by the husband)

Scene 4: FINANCIAL DECISIONS

FINANCIAL DECISIONS, INCLUDING AFFORDABILITY, MEANS OF PAYMENT, WHO IS RESPONSIBLE FOR PAYMENT AS WELL AS FINANCIAL ARRANGEMENTS ARE GENERALLY DELIBERATED JOINTLY BY HUSBAND AND WIFE IN-STORE OR AT HOME

Scene 5: EVALUATION

A shortlist of suitable alternatives is made jointly by husband and wife;⁴

Evaluation of product alternatives⁵ is done jointly by husband and wife in-store, or at home;

Stores are compared jointly by both spouses in terms of benefits offered

Scene 6: CHOICE

Final decision of where to purchase the appliance is made jointly by husband and wife

A PRODUCT IS CHOSEN JOINTLY BY HUSBAND AND WIFE

Scene 7: PURCHASING

THE PURCHASE TRANSACTION IS EITHER DONE JOINTLY OR BY THE SPOUSE RESPONSIBLE FOR PAYMENT

Scene 8: DELIVERY

DELIVERY IS GENERALLY DONE/ORGANISED BY THE RETAILER

Scene 9: INSTALLATION

The appliance manual is generally studied mainly by the wife, but may also be consulted by the husband if he installs the appliance himself

INSTALLATION IS DONE EITHER BY A TECHNICIAN OR THE HUSBAND

FIGURE 6.4: INTEGRATED EMPIRICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES

⁴ Making a shortlist was prominently mentioned by between 25-39% of participants and was therefore included in the script. This action probably did not feature in the stage 3 discrimination task because it is difficult to reflect this action through a drawing.

⁵ The same argument as the previous one can be used for evaluation of alternatives (indicated by 40-59% of participants)

Theoretical script

Following the rules for the presentation of a script (Weisberg, 1980:55; Bower *et al*, 1979:179), Table 6.11 represents the theoretical script for the acquisition of household appliances within a consumer decision-making context.

Discussion of the script

Scene 1: NEEDS ASSESSMENT

Indicated as the first action jointly taken by husband and wife, this scene represents the deliberation of household needs such as the dimensions and capacity needed. It further entails a consideration of individual factors such as experience with previous appliances and preferences in terms of style, design and brand names. The focus-group discussions confirmed that husbands rarely if ever take sole responsibility for so-called white goods because it is still perceived to be a woman's prerogative to state what is needed. Focus-groups mentioned that financial aspects (affordability) could be part of the discussion of needs in the initial scene although active discussions usually flow from store visits when consumers have had the opportunity to investigate all options.

Scene 2: INFORMATION SEARCH

Information search prior to store visits is done in terms of the needs identified in scene 1 and is generally limited to non-formal information, mostly promotional in kind such as advertisements in newspapers and free mail. This is supplemented with personal information from friends and family who act as influencers and share their experiences. Phone calls are also made to different stores for salespeople's recommendations. Information search is generally done jointly or by the wife and include enquiring about brand reputations, performance characteristics, product features, prices and after sales service. Sometimes husbands enquire about technical aspects such as electrical consumption. During focus-group discussions it became clear that consumers are ignorant of formal sources of information such as the SABS and Consumer Help Lines supplied by industry via Internet services. Participants agreed that they did not know how and where to get information apart from those in newspapers and popular magazines and found those to reflect mainly price, capacity, brand name and guarantee related information. They further had consensus that friends' advice is more reliable and reported salespeople to be mostly incompetent in assisting consumers. Their role in the decision-making event could therefore be described as informative (in terms of providing some of the information that could not be found elsewhere).

The mean positions of actions in scenes 1 and 2 are relatively close together in all of the script protocols, which indicate that these scenes could in fact be closely interlinked.

TABLE 6.11: THEORETICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES

| TITLE: PURCHASING SCRIPT FOR MAJOR HOUSEHOLD APPLIANCES | |
|--|---|
| Person schemata: Consumer (male, female); Friends; Family; Salesperson; Cashier | Roles: Consumer; Sales person; Advisor; Technician; Delivery man; |
| Object schemata: Advertisements; Appliances; Stores; Store display; Instruction manuals; Money; Credit cards; Sales documents; Telephone; Guarantees | |
| Entry condition: Household needs an appliance Consumer has money | Outcomes: Consumer owns new appliance Consumer has less money Retailer (sales person) has made a sale |
| SCENE | SCENE ELEMENTS IN TERMS OF STRENGTH OF ACTION |
| Scene 1 NEEDS ASSESSMENT | Needs assessment in terms of experience, preferences and attitudes is done jointly by husband and wife or by the wife |
| Scene 2 INFORMATION SEARCH | Written information sources, mainly promotional material such as advertisements are used jointly by husband and wife or by the wife; Personal information, mainly recommendations of friends and family, based on experience is generally obtained by the wife or jointly; Telephone enquiries are made to several stores (salespeople), mainly by the wife or jointly Product specific information such as technical information is gathered mainly by husbands |
| Scene 3: STORE VISIT | Stores are visited jointly by husband and wife: To look at in-store displays as main sources of product information with assistance of salespeople To compare products in terms of the household's needs, personal knowledge and experience To obtain price information by looking at in-store displays To investigate product specifications by consulting appliance manuals (mainly by the husband) |
| Scene 4 FINANCIAL DECISIONS | Financial decisions, including affordability, means of payment, who is responsible for payment as well as financial arrangements are generally deliberated jointly by husband and wife in-store or at home |
| Scene 5: EVALUATION | A shortlist of suitable alternatives is made jointly by husband and wife, Evaluation of product alternatives is done jointly by husband and wife in-store or at home; Stores are compared jointly by both spouses in terms of benefits offered |
| Scene 6: CHOICE | Final decision of where to purchase the appliance is made jointly by husband and wife A product is chosen jointly by husband and wife |
| Scene 7: PURCHASE | The purchase transaction is either handled jointly or by the spouse responsible for payment |
| Scene 8: DELIVERY | Delivery is generally done/organized by the retailer |
| Scene 9: INSTALLATION | The appliance manual is generally studied mainly by the wife, but may also be consulted by the husband if he installs the appliance himself Installation is done either by a technician or the husband |

Scene 3: STORE VISITS

Store visits were mentioned as being very important during the focus-group discussions due to the limited availability of product information to guide decision-making. Consumers also indicated that they do not know of other information sources that could be used and therefore strongly depended on store visits for information. Store visits seem to be a joint effort by husband and wife. Store visits are made to compare prices, to compare appliances in terms of household needs and to enquire about product specifications. Although consumers consider the role of salespeople in the provision of product information very important, it was agreed that salespeople seldom meet the expectations in terms of competence. Their persuasive skills are doubted. At this point retailers and industry were blamed for neglecting this service to consumers.

Scene 4: FINANCIAL DECISIONS

Financial decisions were described as including a discussion of affordability (price limitations), how to pay for the appliance (cash, hire purchase etc), who is to pay for the purchase (husband, wife or jointly) and arranging the financing at a financial institution. Financial decision-making was mentioned prominently after the store visits as a joint action wherein both spouses are involved. More intense discussions of financial decision-making in stage 4 and during the focus-group discussions, indicated finances to be a prominent determinant during the decision-making process due to the amount of money involved and the fact that consumers often have to arrange credit facilities to enable the purchase. Apart from the store visit, deliberation of finances was considered the most important stage of the event. From the arrangement of actions and scenes, it can be deduced that financial discussions are made in terms of needs and information acquired through the store visits and other sources and that the outcome of financial deliberations direct evaluation and choice processes.

Scene 5: EVALUATION

Identified as a less prominent scene than any of the others in terms of the strength of actions mentioned, this is a predominantly shared task where husbands and wives compare, discuss and deliberate the product options and store benefits (such as discounts, delivery and installation) either in-store or at home after the store visits. During focus-group discussions it became clear that consumers do not really experience an evaluation stage: the process should perhaps rather be described as a search for the suitable appliance that includes evaluation along the way instead of a separate stage of evaluation where options are compared and eliminated (evaluation shopping). The fact that all action statements referring to evaluation were mentioned by fewer than 64% of participants, confirm this conclusion. During the focus-group discussions it was concluded that scenes 3, 4 and 5 could take place in-store.

Scene 6: CHOICE

The final choice of product (mentioned by 75% and more of the participants) is generally done jointly by husband and wife. Focus-groups agreed that men often dominate the decision in terms of the amount of money to be spent and technical aspects involved. Women's opinions seem to be stronger in terms of the type of appliance preferred. This coincided with what was indicated during needs assessment. This scene may also include "choice of store", i.e. to select the retailer that offers more benefits.

Scene 7: PURCHASE

The final purchase is generally made jointly or by the spouse who takes responsibility for payment. This confirms a more egalitarian approach to financial decisions in modern households in general.

Scene 8: DELIVERY

The majority indicated the delivery to be the responsibility or a service provided by the retailer and some even indicated the delivery as a pre-condition of store patronage.

Scene 9: INSTALLATION

The installation is done by either the consumer (husband) or the retailer, depending on whether the consumer is able to do it. In the cued recall procedure more than half of the participants mentioned "study of the manual" before installation (probably by those who installed the appliances themselves). Those who mentioned it after installation, were probably those who had the appliances installed by a technician.

From the empirical script it can be concluded that:

An individual with a less-developed script will probably conclude with the more prominent/stronger actions mentioned by 75% and more of respondents, namely:

NEEDS ASSESSMENT;

STORE VISIT TO ACQUIRE INFORMATION;

FINANCIAL DECISIONS;

FINAL DECISION PRODUCT;

PURCHASING;

DELIVERY;

INSTALLATION

These are generally referred to as actions that form the *common core* of the script (Bozinoff, 1982:483).

Someone with a more developed script will have more actions included in the protocol, namely:

- USE OF NON-FORMAL WRITTEN INFORMATION SOURCES (ADVERTISEMENTS, ETC);
- USE OF NON-FORMAL PERSONAL INFORMATION SOURCES (ASKING FRIENDS, PHONING STORES);
- COMPARISON OF PRODUCTS

More experienced consumers will include even more actions, namely:

- visits to different stores to compare retailer benefits;**
- compilation of a shortlist of alternatives;**

use of formal information namely product specifications

CONCLUSION

Any new script that is elicited and generated has to be evaluated and discussed in terms of the basic properties and structural characteristics of a script to determine whether the script can be accepted and acknowledged for further use within the theoretical framework of a discipline. The script generated for the acquisition of major household appliances was thus evaluated.

Properties of the script

In terms of the basic properties of a script (Bower *et al*, 1979 in Bozinoff & Roth, 1983:656 as discussed in Erasmus, 2002), the following can be concluded:

Action statements were elicited in a very uniform and logical way in all four stages of the script-elicitation procedure despite the difference in techniques used to reconstruct the particular purchasing event. The level of agreement calculated for the various scripts confirm a remarkable resemblance. For all but one action (needs assessment), there was no significant difference in the order of the action statements (elements) of the four groups of data (two halves of stage 1; stage 2; stage 3) when they were compared with one another ($p \leq 0.05$). The logical order of the action statements in the final script should also be noted. Keeping in mind that participants were allowed to react spontaneously with minimum guidance as to what were to be included in their reports, the end results strongly indicate the existence of script knowledge in memory. Despite differences in the various elicitation techniques in terms of approach and application, there was little fluctuation in content when the results of the various stages were compared. In fact, after implementation of the written elicitation technique in stage 1, no additional action statements were added as a result of the other techniques that were used. The number of action statements identified during the first three stages shows minor difference (17, 15 and 16 statements respectively) (Table 6.10).

Script norms (person, object, decision-making schemata) for the specific event were easily identifiable except for the elicitation of role schemata that posed some practical problems. This can be ascribed to the unstructured way of script-elicitation, which probably resulted in participants' forgetting to specify roles during their description of actions of the event. Participants had no problem in identifying role actions during stages 3 and 5 when they were very specifically reminded to elaborate. The same script norms were evoked through all of the first three script-elicitation techniques and a specific order of actions/scenes was thereafter determined. Except for one action, needs assessment, that was indicated a second action in stage 1, there were no significant differences in the positions of activities in the various script protocols ($p \leq 0,05$) found for the various elicitation procedures.

Action sequences were spontaneously **grouped into scenes/elements** (Table 6.10) where the more prominent/stronger actions could be used to specify scene headers. Weaker activities were in fact activities that depended upon the stronger actions for occurring (e.g. *make a shortlist of alternatives* as part of the scene *evaluation of alternatives*). Scenes in the final script form a logical order considering the five basic steps of consumer decision-making (Schiffman & Kanuk, 2000:444). Main concepts were easily discernible and when analyzed on their own can be regarded as actions *that always take place* (Den Uyl & Van Oostendorp, 1980:278).

Script elements were organized in a common order: no significant difference in the position of activities, thus the order in the script protocols in the first three script protocols ($p \leq 0,05$) were found. A final integrated script protocol could be reached without major effort. This aspect was put to test in the fourth script-elicitation procedure, and once again, participants had no problem to reconstruct elements of the event (either before or after the specified scene) in the same order as before (Table 6.10).

From the data generated, it can be concluded that - although not conscious of scripted activities - participants succeeded in reconstructing the acquisition process of household appliances in a very uniform, ordered way, when encouraged to do so. Some elicitation techniques did evoke more detail (in written procedures participants often included detail such as poor assistance of salespeople, delivery problems and detail surrounding financial arrangements) (Bozinoff & Roth, 1983:656). Despite the fact that a few participants acted hesitantly when they received their instructions when introduced to script-elicitation sessions and indicated that they needed time to think before they responded, they were very co-operative, produced valuable responses and were very willing to take part in follow-up procedures.

Structural characteristics of a script

When judging the structural characteristics of the script (Bower *et al*, 1979 in Bozinoff & Roth, 1983:656 as discussed in Erasmus, 2002), the following can be concluded:

Only **generic actions** are contained in the script: this can be concluded from the limited number of scenes and activities in the final script as well as the fact that the activities as formulated and indicated are very basic in nature.

The script **possesses a set quality**: when confronted with a single scene in the fourth script-elicitation stage, participants experienced no problem to complete the script even though the level of abstraction they were confronted with, was somewhere near the middle of the script.

A strong **temporal sequence** of script activities was identified through the correlation of the sequence of actions/scenes in the different script-elicitation procedures. This was confirmed in the focus-group discussions: participants found it unthinkable to go to the store without deliberating household needs and found it absolutely necessary to organize finances before making a final decision regarding the product.

A **hierarchical structure** was evident (Smith & Houston, 1986:504). Elements of the script protocols were almost spontaneously grouped into scenes in a very logical order that showed some resemblance to the basic flow of stages of a consumer decision-making process. No problem was experienced in identifying scene headers or to group and arrange scene actions of variable strength that interconnected as logic elements of a specific scene.

Based on the level of agreement of the responses elicited during the various stages, the script-elicitation procedure can be regarded successful in eliciting a script for the specific event. With reference to the script norms, it can be concluded that the relevant person, object and decision-making schemata were elicited and indicated without hesitation. More attention should however be given to the elicitation of role schemata. Script elements were eventually arranged in a logical sequential order. Because of the level of agreement between the various script protocols (stages 1 to 4) the generation of the final script was based on logical conclusions. This qualifies the script for the acquisition of major household appliances as a so-called strong script (Bozinoff & Roth, 1983:656) where actions are clearly specified and arranged in the minds of experienced consumers.

The attempt to elicit and generate a purchasing script, more specifically a script for obtaining major household appliances within the consumer decision-making context, proved successful. The selection, combination and order of performing the various script-elicitation techniques proved to

be successful in eliciting the relevant schemata and in generating a script that adheres to the basic properties and structural characteristics of a script. More attention should however be given to the elicitation of role schemata during stages 1 and 4 by providing a specially designed sheet instead of blank paper. This particular study fortunately - as a result of the selection and specific ordering of script-elicitation techniques - provided the opportunity to remedy problems during subsequent stages. The stage 3 discrimination technique and the consequent focus-group discussions were used to clarify uncertainties regarding role schemata.

Although - in retrospect - it was determined that all the relevant script actions were already identified in stage 1, the successive stages were necessary for triangulation purposes and to elicit role schemata, which did not surface clearly during stages 1 and 2. The specific order of script-elicitation techniques is recommended for future research. Leigh and Rethans' (1983:669) observation that the process will eventually determine the length of the script is hereby confirmed: the written technique succeeded in eliciting all the relevant actions while consequent techniques were useful to elaborate on specific aspects and to design visual stimuli for discrimination purposes. Although the stage 4-elicitation procedure did not change or contribute additional information to the information that had already been generated through the preceding procedures, it did confirm the reconstruction of action sequences from any entry level in the script to confirm the structural characteristics of a script. The focus-group discussions were vibrant and supported the information collected during the previous stages. It was found to be a satisfactory technique to discuss and debate role behavior.

Recommendations

It is recommended that the format and content of the script be considered as a representation of the purchasing event and may be used to anticipate or reflect consumer decision-making behaviour for the acquisition of major household appliances. The fact that a script represents the portrayal of the event from the view of the consumer, provides the opportunity to

- identify areas of concern (limited use of objective information due to unavailability, ignorance; in-store facilities) that need to be addressed to improve the process as well as the outcome of decisions,
- properly structure and make available product information in the form and format that address consumers' - both men and women - needs,
- sensitize retail towards consumers' needs so that in-store activities could be used as a more satisfactory purchasing experience,
- direct promotional effort sensibly and effectively to educate, inform and limit uncertainty and doubt,
- design educational programmes that would in the long and short term result in more responsible consumer decision-making behaviour.

REFERENCE LIST

- ABELSON, RP. 1981. Psychological status of the script concept. *American Psychologist* 36(7):715-729.
- ALDERSHOFF, DE. 1985. Final food consumption level based on expenditure and household production. *Advances in Consumer Research* XII:209-214. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- BARNES, JH. 1993. Ethno: A methodology to studying process of information. *Advances in Consumer Research* XX:63-69. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- BONE, PF & ELLEN, PS. 1990. The effect of imagery processing and imagery content on behavioral intentions. *Advances in Consumer Research* XVII:449-454. Twentieth Annual Conference. [sl]. Association for Consumer Research.
- BOWER, GH, BLACK, JB & TURNER, TJ. 1979. Scripts in memory for text. *Cognitive Psychology* 11:177-220.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L & ROTH, VJ. 1983. Recognition memory for script activities: an energy conservation application. *Advances in Consumer Research* X:655-660. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- BROWN, TJ. 1992. Schemata in consumer research: a connectionist approach. *Advances in Consumer Research* XIX:787-794. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- BUSS, WC & SCHANINGER, CM. 1983. The influence of sex roles in family decision-making. *Advances in Consumer Research* X:439-444. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- COOK, WA. 1982. Turning focus groups inside out. *Advances in Consumer Research* IX:62-65. Twelfth Annual Conference. New Orleans. Association for Consumer Research.
- CORSINI, RJ. 1994. *Encyclopedia of Psychology*. Vol. 2. New York. John Wiley.
- COX, A, GRANBOIS, DG & SUMMERS, J. 1983. Planning, search, certainty and satisfaction among durables buyers: a longitudinal study. *Advances in Consumer Research* X:394-399. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- DEN UYL, M & VAN OOSTENDORP, H. 1980. The use of scripts in text comprehension. *Poetics* 9:275-294.
- DENZIN, NK & LINCOLN, YS. 2000. *Handbook of Qualitative Research*. 2 nd ed. London. Sage.
- DONOGHUE, S. 2000. Projective techniques in consumer research. *Journal of Family Ecology and Consumer Sciences* 28:47-53.
<http://www.up.ac.za/academic/acadorgs/saafecs/vol28/donoghue.html>
- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson Sigma.

ERASMUS, AC, BOSHOFF, E & ROUSSEAU, GG. 2001. Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences* 29: 82-90. <http://www.up.ac.za/academic/acadorgs/saafecs/vol29/erasmus.html>

ERASMUS, AC. 2002a. Script theory in consumer behaviour research. *Journal of Family Ecology and Consumer Sciences* 30 (submitted for publication).

ERASMUS, AC. 2002b. Selection and motivation of procedures for the elicitation of a script for the acquisition of household appliances within the consumer decision-making context *Journal of Family Ecology and Consumer Sciences* 30 (submitted for publication).

FERN, EF 1983. Focus groups: a review of some contradictory evidence, implications and suggestions for future research. *Advances in Consumer Research* XX:121-129. Thirteenth Annual Conference. [sl]. Association for Consumer Research.

GARDNER, MP & RAJ, SP. 1983. Responses to commercials in laboratory versus natural settings: a conceptual framework. *Advances in Consumer Research* X:142-146. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.

HOY, MG. 1991. The emergence of script related knowledge. *Marketing theory and applications* 2:387-394. American Marketing Association Winter's Conference.

HUBERMAN, AM & MILES, MB. 1994. Data management and analysis methods. In DENZIN, NK & LINCOLN, Y. 1994. *The Handbook of Qualitative Research*. Thousand Oaks. Sage.

HUDSON, LA & MURRAY, JB. 1986. Methodological limitations of the hedonic consumption paradigm and possible alternative: a subjectivist approach. *Advances in Consumer Research* XIII:343-348. Sixteenth Annual Conference. [sl]. Association for Consumer Research.

JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial structure of scripts. An Assessment of Marketing Thought and Practice. *Advances in Consumer Research* IX:75-79. Twelfth annual conference. [sl].

LA TOUR, SA. 1986. Reliability and validity in consumer research: where do we go from here? *Advances in Consumer Research* XIII:696-698. Sixteenth Annual Conference. [sl]. Association for Consumer Research.

LAI, AW. 1994. Consumption schemata: their effects on decision-making. *Advances in Consumer Research* XXI:489-494. Twenty Fourth Annual Conference. [sl]. Association for Consumer Research.

LAUTMAN, MR. 1982. Focus groups: theory and method. *Advances in Consumer Research* IX:52-55. Twelfth Annual Conference. [sl]. Association for Consumer Research.

LEIGH, TW & RETHANS, AJ. 1983. Experiences with script-elicitation within consumer decision making contexts. *Advances in Consumer Research* X:667-678. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.

MACUN, I & POSEL, D. 1998. Focus groups: a South African experience and a methodological reflection. *South African Sociological Review* 2(1):114-135.

MANO, H & DAVIS, SM. 1990. The effects of familiarity on cognitive maps. *Advances in Consumer Research* XVII:275-282. Twentieth Annual Conference. New Orleans. Association for Consumer Research.

- McQUARRIE, EF & McINTYRE, SH. 1988. Conceptual underpinnings for the use of group interviews in consumer research. *Advances in Consumer Research* XV:580-586. Eighteenth Annual Conference. New Orleans. Association for Consumer Research.
- MENON, G & JOHAR, G. 1993. "Yes I remember it well...." The role of autobiographical memory in consumer information processing. *Advances in Consumer Research* XX:108. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- MOUTON, J. 1996. *Understanding Social Research*. Pretoria. Van Schaick.
- ROBSON, S. 1989. Group discussions. In ROBSON, S & FOSTER, A. *Qualitative Research in Action*. [sl]. Edward Arnold.
- SCHURR, PH. 1986. Four script studies: What we have learnt. *Advances in Consumer Research* XIII:498-508. Sixteenth Annual Conference, [sl]. Association for Consumer Research.
- SMITH, RA & HOUSTON, MJ. 1986. Measuring script development: an evaluation of alternative approaches. *Advances in Consumer Research* XIII:504-508. Sixteenth Annual Conference, [sl]. Association for Consumer Research.
- SPECK, PS, SCHUMANN, DW & THOMSON, CT. 1988. Celebrity endorsements – scripts, schema and roles. *Advances in Consumer Research* XV:69-75. Eighteenth Annual Conference. [sl]. Association for Consumer Research.
- STEYN, AGW, SMIT, CF, DU TOIT, SHC & STRASHEIM, C. 1994. *Modern Statistics in Practice*. Pretoria. Van Schaick Academic.
- STOLTMAN, JJ, TAPP, SR & LAPIDUS, RS. 1989. An examination of shopping scripts. *Advances in Consumer Research* XVI:384-391. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- TAYLOR, SA, CRONIN, JJ jr & HANSEN, RS. 1991. Schema and script theory in channels research. *Marketing Theory and Applications* 2:15-24 American Marketing Association Winter's Conference. [sl]..
- TOULIATOS, J & COMPTON, NH. 1988. *Research Methods in Human Ecology*. Iowa. Iowa State University Press.
- VENKATESH, A. 1985. A conceptualization of the household/technology interaction. *Advances in Consumer Research* XII:189-194. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- WEISBERG, RW. 1980. *Memory, Thought, Behavior*. Oxford University Press. Oxford.
- WHITNEY, JC & JOHN, G. 1983. An experimental investigation of intrusion errors in memory for script narratives. *Advances in Consumer Research* X:661-666. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- YOON, C, MEYERS-LEVY, JM & TYBOUT, A. 1990. Exploring temporal perspective framing effects. *Advances in Consumer Research* XVII:533. Twentieth Annual Conference. New Orleans. Association for Consumer Research.

7

THE POTENTIAL OF A SCRIPT TO PORTRAY THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES IN CONSUMER BEHAVIOUR RESEARCH

ABSTRACT

The acquisition of major household appliances - in terms of the importance of the purchase, the consequences and impact of purchase decisions in the short and the long term - is generally described as complex, high-risk decisions that may create a considerable amount of confusion and tension. It is therefore generally approached with uncertainty and rather cautiously. Reports on the ways in which the difficulties are addressed, are however, ambiguous and conflicting. Some reports indicate more extensive information seeking and evaluation while others indicate that consumers revert to more simplistic decision-making strategies.

Traditional consumer decision models tend to portray the process of proceeding through a major purchase decision as a logical problem solving matter (Cherian & Harris, 1990:747). In these models, the decision-making process is depicted as multi staged and complex and the consumer decision-making process generally consists of three major components: input, process and output (Schiffman & Kanuk, 2000:443). Objections against the use of traditional consumer decision-making models for all purchasing events and conflicting evidence of consumers' approach to complex decision-making activities, have led to the elicitation and generation of a script for the acquisition of major household appliances (Erasmus, 2002c).

This discussion intends to explain the advantages of a script as a portrayal of a specific purchasing event: in terms of an improved understanding of consumer behaviour and to encourage more focused strategies by professionals in the field of consumer science, retail and industry to address consumers' needs. The acquisition of household appliances is first discussed within a traditional consumer-decision-making framework and thereafter within the script framework. The script's unique characteristics and content reveal certain problems: despite the complexity of the purchasing task, information search is limited; retail stores are exposed as an ideal platform for consumer education and consumer facilitation but do not meet consumers' expectations. A concerted effort by retail, industry and professionals in the discipline of consumer science is needed to address problems that are currently experienced in the retail environment.

OPSOMMING

Die aankoop van groot elektriese huishoudelike toerusting word kragtens die belangrikheid van die aankoop, die hoeveelheid geld wat betrokke is en die kort- en langtermyn gevolge van die aankoop, as komplekse hoë-risiko-aankope beskou wat spanning en verwarring by verbruikers kan veroorsaak. Sodanige aankope word dus gewoonlik met groot onsekerheid en omsigtigheid hanteer. Daar is uiteenlopende verslae van hoe verbruikers hierdie onsekerheid aanspreek. Sommige rapporteer meer intense inligtingsoeke en produkevaluering terwyl ander toon dat verbruikers hulle tot meer eenvoudige besluitnemingstrategieë wend.

Tradisionele verbruikersbesluitnemingsmodelle word gewoonlik gebruik as teoretiese raamwerke om navorsing op hierdie gebied te struktureer. In hierdie modelle word die besluitnemingsproses as kompleks en bestaande uit verskeie stadia voorgehou. Besware wat met verloop van tyd teen die gebruik van tradisionele besluitnemingsmodelle aangeteken is in samehang met teenstrydige bewyse van hoe verbruikers onsekerheid tydens besluitneming hanteer, het gelei tot die generering van 'n geskrif vir die aankoop van groot elektriese huishoudelike toerusting in 'n poging om 'n meer realistiese weergawe van die aankoopproses daar te stel (Erasmus, 2002c).

Hierdie bespreking het ten doel om die voordele van 'n geskrif te identifiseer en verduidelik om verbruikersgedrag beter te kan verstaan en om doelgerigte pogings deur die kleinhandel en industrie aan te moedig om praktykprobleme aan te spreek. Die aankoop van huishoudelike toerusting word eers binne 'n tradisionele verbruikersbesluitnemingsraamwerk bespreek en daarna volgens voorstelling in die geskrif.

Die struktuur en inhoud van die geskrif is uiteindelik selfverklarend. Hoewel sekere stappe in die geskrif groot ooreenkomste met stadia van die besluitnemingsproses toon, lê die unieke eienskappe van die geskrif verskeie probleme bloot. Ten spyte van die kompleksiteit van die besluitnemingstaak, is inligtingsoeke beperk. Hoewel kleinhandelaars as die ideale platform vir verbruikersopvoeding en verbruikersfasilitering identifiseer word, voldoen dit nie aan verbruikers se verwagtinge nie. Wanneer die inhoud van die geskrif met bestaande teorie in verband gebring word, kan afgelei word dat verbruikers se hantering van die aankoopproses die gevolg van onsekerheid is. 'n Doelbewuste poging deur die kleinhandel, industrie en belanghebbendes binne die professie verbruikerswetenskap is nodig om praktykprobleme aan te spreek. Dieselfde gevolgtrekkings sou nie op grond van verbruikersbesluitnemingsmodelle afgelei kon word nie.

Search words: *scripts; script for the acquisition of household appliances; purchasing of household appliances; major household appliances; script theory; household decision-making; consumer facilitation; consumer education*

INTRODUCTION

OBJECTIVES

In contrast to repetitive household purchases such as buying groceries, the purchasing of major household appliances is far more complex and far-reaching in terms of financial implications, performance characteristics and long-term consumer satisfaction (Howell, 1994:285-287; Hill & King, 1989:144; Cox, Granbois & Summers, 1983:394). It is therefore, in terms of other household purchases, regarded as complex, high-risk consumer decisions. Unfortunately research reports on this topic are difficult to find because the subject has been grossly neglected for many years by consumer science and marketing research. Theoretically there seems to be valid reason to study consumers' approach to the acquisition of major household appliances. Some of the reasons are: the financial implications of such purchases on households in the short- and long-term; the impact of household technology in terms of households' resource management; the consequences of household technology on interior design and planning; impressive changes in appliances as a result of technological development; the effect of global marketing and global concerns regarding energy consumption and waste disposal as well as the acquisition of commodities such as household appliances as a constellation of products that are used to project social status (McMeekin & Tomlinson, 1998:875, 876). Firat speaks of a so-called hyper reality that inspires consumers to purchase certain objects (Firat, 1991:70, 73) while some consumers are called consummate collectors (Hirschman, 1990:850) because they display material possessions for the purpose of feeling differentiated from other people (Tian, Bearden & Hunter, 2001). Interior objects, including household appliances are often used to impress others.

In the field of interior merchandise - in terms of its interest to academics, its importance for retail and industry and the impact of the acquisition and ownership of appliances on modern households - the dynamics of electric household appliances in homes and the retail environment present a major, exciting challenge for the future. Professionals and students in the field of consumer science will have to brace themselves for the questions and challenges that accompany change (Burton, 1992:383-385). A fresh approach to consumer facilitation seems inevitable and any attempt to improve our knowledge and understanding of the consumer decision-making process will be beneficial to all.

OBJECTIVES

The objectives of this discussion are to

- give a brief overview of the theory of consumers' approach to the decision-making process when purchasing major household appliances, both as a household expenditure and as a commodity that has more impact and more to offer than obvious functional benefits;
- compare complex consumer decision-making (as is the case during the acquisition of major household appliances) as it is reflected by traditional consumer decision-making models to the presentation of the same purchasing event in a script;
- discuss the advantages of using a script as a more realistic and relevant portrayal of consumers' decision-making behaviour during the acquisition of major household appliances in terms of how consumers, retail and industry as well as professionals in the field of consumer science could benefit.

CONSUMERS' APPROACH TO THE ACQUISITION OF ELECTRICAL HOUSEHOLD APPLIANCES

Introduction

The acquisition of major household appliances - in terms of the importance of the purchase, the consequences and the impact of purchase decisions on the short and the long term - is generally described as complex, high-risk decisions. Several arguments support such claims and confirm that consumers generally approach the purchasing process with a notable degree of uncertainty. The conflicting evidence of how consumers deal with these complex decisions in reality necessitate an improved understanding of the entire decision-making process in order to make some suggestions as to how consumers could be assisted.

Electrical household appliances are no longer perceived to be luxury items

Household appliances have become a cultural convenience and a natural necessity in modern homes. Many household decisions evolve around household technology or at least the availability thereof. Its multidimensional profile addresses a combination of consumer needs such as efficient task performance (functional aspects), cost savings, efficient use of time, to communicate emotions, to express family related values and to alter life styles (Cooper, 1994:4, 12; Burton, 1992:383-394). Consumers' needs in terms of household technology ultimately depend on circumstances and consumer characteristics: although some still perceive household appliances to be luxury items, others rely on them as necessities (Badami & Chibat, 1998:36-40; Fournier, Antes & Beaumier, 1992:329-332; Joag, Gentry & Hopper, 1985:585, 586; Venkatesh, 1985:193).

Complexity of the purchase decision

The complexity of the purchase decision is mainly ascribed to extensive technological progress and change over the last two decades. This has resulted in a situation where consumers often consider themselves incapable of evaluating the performance characteristics of new appliances (Niemeyer, Rai & Kear, 1997:46, 49; Hill & King, 1989:144). Differences in price, design, functional aspects and performance characteristics create confusion and complicate the decision-making process (Du Plessis & Rousseau, 1999:82-83). Even higher educated consumers require increased cognitive effort to cope with continual change in household technology and consumers are seldom fully aware of the variety awaiting them in-stores when they are confronted with a purchase (Bettmann, 1993:8; Fournier *et al*, 1992:329-332). Although there is no doubt that consumers find new ranges of appliances exciting, they generally experience more pressure when there are so many alternatives to choose from (Cooper, 1994:14; Dhar, 1992:735; Burke, 1990:253). Making an informed consumer decision where the priorities in terms of functional, aesthetical, cost and other factors are prioritised realistically for a specific household could be problematic (Cox *et al*, 1983:394).

Although consumers who are more familiar and knowledgeable about products are expected to have developed more established criteria to cope with product judgments and are expected to apply decision-making criteria more consistently (Burke, 1990:252; Mano & Davis, 1990:275), the relative long expected service life (ten to twenty-five years) for household appliances complicate the decision-making process. Consumers seldom reach the point where they have accumulated enough product experience to consider themselves "familiar" with appliances and consequently seldom feel capable of making purchase decisions without assistance. When objects are perceived to be socially visible products (as could be the case with household appliances) consumers become less confident and react in almost the same way as having no experience at all. The importance of the decision is therefore related to the importance of the consequences of the decision (Chaiken, 1980:760). The greater the importance of the purchase, the more analytic, systematic, formal and careful the decision-making process is expected to be (Chaiken, 1980:760). Final choices are often delayed because of uncertainty (Dhar, 1992:735) and this extends the decision-making procedure.

Risk perception as a result of uncertainty involved

In most consumer decision situations, explicit, well-defined probabilities rarely exist and are difficult to formulate. The situation is further complicated (as seems typical during the acquisition of household appliances) when consumers are faced with limited and incomplete information about the product (Burke, 1990:250). This results in uncertainty with regards to the outcome and specific benefits that will emerge from their purchase decisions. For products such as appliances that are expensive, that are regarded as socially visible products, that have to last for a considerable period of time and that are not bought frequently, consumers' uncertainties create

anxiety over the possibility of making errors (Hansen, 1992:175; O'Shaughnessy, 1985:310). This uncertainty is typically described in terms of various types and levels of risk perception.

Financial risk perception is common when purchasing relatively expensive products. According to Srinivasan (1993:288) the purchase of an expensive product is usually characterised by a lengthy decision-making process because consumers go through intensive cognitive effort while processing external information and all the influences imposed on them:

Social risk perception refers to tension experienced as a result of consumers' urge to gain the anticipated approval of significant others through the choice of the "right" products (Ungerer, 1999:28-30; McMeekin & Tomlinson, 1998:875; Kanwar & Pagiavlas, 1992:589-595; Wright, Claiborne & Sirgy, 1992:316). Fear of bad decisions that might reflect negatively on the decision-maker's ability to handle the situation, enhances pre-purchase tension. The greater the uniqueness, cost, social visibility, complexity and rate of stylistic changes (all of which could be associated with household appliances), the more likely it would be that people will draw inferences from product characteristics about the image of the owner. This increases the pressure to purchase products with specific characteristics such as specific brand names and impressive product features (Toivonen, 1994:46; Wright *et al*, 1992:311-313). In such instances, *social-* as well as *psychological risk* perception affects product evaluation and determine the outcome of the decision-making process. Belk (1988:145, 146) proposes - according to the existential philosophy of Sartre (1943) - that possessions play a major role in reflecting an individual's identity and that the possibility of making an incorrect choice could have far reaching effects for the consumer - financially as well as emotionally.

The contributing fact that major household appliances are supposed to be functional for ten to twenty years (depending on the type of household, type of appliance and frequency of use) (Ahluwalia & Shackford, 1998:21-22; Erasmus, 1995:135-138; Cooper, 1994:4) increases *functional risk perception*. Households furthermore have to be satisfied with their purchases during this time irrespective of changing circumstances and product developments and this is complicated even further by a lack of knowledge of product developments. As a result of the risk involved during the purchasing of major household appliances, consumers very seldom make purchases without experiencing cognitive dissonance (Hansen, 1992:175; O'Shaughnessy, 1985:310).

Confusing evidence regarding consumers' coping with the decision-making process

From what has been reported there is no doubt that the purchasing process is generally approached rather cautiously. Reports on the ways in which the difficulties are addressed, are however, ambiguous and conflicting.

More extensive information search Some reports indicate more extensive information search and product evaluation. According to Meyers-Levy and Maheswaran (1990:532) any purchase with high personal relevance or what is perceived to be a high-risk decision, will probably result in detailed processing and a more extensive decision-making process. The conclusion that major household appliances are generally purchased over a longer period of time to allow for more intensive information seeking and processing and the evaluation of potentially suitable alternatives as is the case with other expensive products such as housing (Bozinoff & Roth, 1983:655; Bozinoff, 1982:481) seems valid. There is evidence that task complexity directly affects the decision-making strategies implemented (Burke, 1990:253). Bettman (1993:9), for example, based on work by himself, Payne and Luce hypothesized that stress generated during decision-making causes the decision process to be more effortful although it is often more error prone due to less accurate memory recall. D'Astous, Bensouda and Guindon, (1989:433-434) proceeded with work initiated by Hoyer (1984) who found that consumer decision-making should be viewed taking into consideration the relevant *dimensions of a purchase*, i.e. frequency of purchase and importance of the purchase. Rousseau (in Du Plessis & Rousseau, 1999:82) uses a similar analysis and states that the more important a product, the more complex the decision-making process: he reasons that when higher functional, social, personal and financial risks are implicated, consumers usually engage in more extensive external information search and a more deliberative decision-making process. Consumers will therefore devote more cognitive effort to the purchase of a product that is considered to be important. One can deductively conclude that the decision-making process for household appliances should be considered complex and unique and that it is a type of consumer decision that requires specific and more extensive decision-making strategies.

More simplistic decision-making strategies Other studies, however, indicate that consumers deal with complex decisions by reverting to more simplistic decision-making strategies. In the eighties, when theorists began to question the rational approach to consumer decision-making, it was found that for many products, consumers spend very little time or do not even engage in some of the sequential activities suggested as being important during decision-making. It was found that many consumers do little or no pre-purchase information search and do the minimum of planning prior to entering retail stores (D' Astous *et al*, 1989:433). Some researchers even added that consumers do not typically apply an investigative approach to optimise decisions but relied on heuristics that was somehow associated with consumer satisfaction (e.g. a higher price or a reputable brand name).

Instead of increasing effort to obtain more information to handle complex decisions and to cope with uncertainty, consumers often take decision shortcuts (Hansen, 1992:175).

- They may *imitate those who “know”* (friends, relatives) and in so doing, depend on perceived success of others (O’Shaughnessy, 1985:310).
- They may *seek advice* from trusted others (e.g. friends, salespeople or specialists in the field) because personal information sources are perceived to be more credible than non-personal information sources (O’Shaughnessy, 1985:310) even though the information shared by friends might be biased and subjective and the salesperson’s recommendations might be based on the potential for commission earned through the sale.
- They may use *personal* (salespeople, friends, product specialists) and/or *non-personal* (technical data, brochures, magazines) *information sources*. This is indicative of more extensive information-seeking behaviour but this unfortunately often results in confusion due to an information overload or inability to interpret information (O’Shaughnessy, 1985:310).
- They may revert to the *reputation/ the familiar* by being brand loyal (Kanwar & Pagiavlas, 1992:589-595) and in so doing neglect objective evaluation criteria.
- They may also neglect objective evaluation criteria by choosing an expensive product assuming that price represents quality (Kanwar & Pagiavlas, 1992:589-595). Because higher prices also indicate affordability and status, emotional aspects become more prominent (Schiffman & Kanuk, 2000:441).
- They *seek guarantees/ reassurance* through collecting additional information. According to Sirdeshmukh and Unnava (1992:289), consumers exhibit some form of insensitivity to missing information as long as they are unaware of what they are missing. When they are alerted about the importance of attributes or when they realize that some information is missing, they become more concerned, however. Consumers’ reactions in the market place will thus be determined by general knowledge and experience about products rather than explicitly available information.
- They *do comparison-shopping* (O’Shaughnessy, 1985:310) and in effect combine the evaluation process with in-store information seeking.
- They *use a legalistic approach* to comply with demands of others (e.g. government energy regulations or the demands of a spouse) to avoid conflict with some *legitimate* authority (O’Shaughnessy, 1985:310).
- Consumers could even revert to an elementary knowledge structure and base their choices on simplistic criteria deduced from prior personal experiences with the same or similar products (Burke, 1990:252).

Conflicting evidence on consumer decision-making strategies resulted in the so-called *rational* consumer becoming the subject of criticism. It was then postulated that consumers engage in both cognitive and emotional information processing (D'Astous *et al*, 1989:433, Zajonc & Markus, 1982 in Lofman, 1991:729): cognitive referring to active, effortful planning and goal-directed consumer behaviour that involves intellectual activity while emotional processing refers to a state of sensory or imaginary evaluation that might have a different effect dealing with the event.

While traditional consumer decision-making models were constructed with the intention to portray the consumer decision-making process and to reflect the various steps of the decision-making process, it is evident that these models predominantly reflect rational consumer decision-making with extensive cognitive involvement.

THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES WITHIN A TRADITIONAL CONSUMER DECISION-MAKING FRAMEWORK

Engel, Blackwell & Miniard (1995:473) emphasize that a consumer decision-making model is *nothing more than a replica of the phenomena it is designed to represent* and that it specifies the variable, the way in which they are interrelated and the outcome when the model is set in motion. A advantage of consumer decision-making models are their explanatory value (to graphically show how the process proceeds), that they provide a frame of reference for research (to enable the formulation of research priorities) and the provision of a basis for management of information systems (by retail and industry in order to provide insight for marketing strategy). Consumer decision-making models provide broad, organized structure that reflect the basic process of consumer decision-making from different viewpoints and within different contexts. Some of the best-known consumer decision-making models are the Nicolaï model (1966), Howard and Sheth (1969), Engel, Kolat and Blackwell (1973), Anderson (1965), Hansen (1972) and Markin model (1974) (Firat, 1985:3).

Traditional consumer decision models tend to portray the process of proceeding through a major purchase decision as a logical problem-solving matter (Cherian & Harrison, 1990:747). In these models, the decision-making process depicts a multi-stage and complex ~~and~~ consumer decision-making process generally consisting of three major components, namely *input*, *process* and *output* (Schiffman & Kanuk, 2000:443). When described in terms of the traditional five-step classification *problem recognition* (pre-search stage), *information search* and *alternative evaluation* form part of the so-called *process* while *choice* and *outcome evaluation* are components of the *output* (Schiffman & Kanuk, 2000:444). Such a description is typical of the rational approach to consumer decision-making (Punj & Srinivasan, 1992:493-495; Harrel, 1990: 740; D'Astous *et al*, 1989:433; Cox *et al*, 1983: 394) and reflects the cognitive (problem solving) consumer and to a certain extent emotional consumer decision-making (Schiffman & Kanuk, 2000:442).

The following would represent a discussion of a complex, high-risk consumer decision as for the purchasing of major household appliances in terms of the five stages of consumer decision-making as suggested by traditional consumer decision-making models:

- **Problem-recognition** is generally regarded as the event that triggers the purchase decision and is regarded as the pre-cursor of the rest of the consumer-initiated activities. All the other stages of the consumer decision process are sequentially linked to the problem-recognition stage (Du Plessis & Rousseau, 1999:84; Punj & Srinivasan, 1992:491). Problem-recognition indicates a particular want or need (Punj & Srinivasan, 1992:491) that has to be satisfied, for example the need to purchase a new appliance. It may also be related to any of the other stages of the decision-making process, e.g. how to finance the appliance, which brand to choose, the back-up service et cetera (Du Plessis & Rousseau, 1999:84). Problem-recognition in terms of the purchase of an expensive durable product can thus be proposed as a comprehensive, intense and unsettling stage that absorbs a fair amount of time and emotional energy to resolve.

- **Information search** refers to consumers' use of a combination of information sources to facilitate the decision-making process. Apart from reverting to internal (experience/knowledge-based) information, consumers also use external information: some of which are personal (e.g. friends, relatives, reference groups) and others non-personal (e.g. literature, brochures, product specifications, promotional material such as advertisements, economic variables and business activities such as sales) (Du Plessis & Rousseau, 1999:87; Punj & Srinivasan, 1992:491). Although field studies tend to treat all sources of information equivalently, some sources provide more information than others (Ozanne, 1988:574), some sources are more effective and some exert more pressure (social, psychological or in terms of understandability). While the general purpose of promotional material such as advertisements (a form of information that is readily available) is to inform and persuade (Owen, 1992:773), friends and family are consulted to share experience-based knowledge or to approve decisions. Rousseau describes information search as a learning process (Du Plessis & Rousseau, 1999:87) and emphasizes that a consumer in the end has to be able to comprehend, retain and apply what has been learnt. Unfortunately more is not always better and information search can be tiresome, frustrating and confusing, leaving the consumer worse off than before. Srinivasan (1993: 290) explains that *too much and too difficult information might result in an overload and be rejected* because it becomes a threat. Sirdeshmukh and Unnava (1992:284) have also found *missing information* to dominate consumers' perception of products during the information search process and this emphasizes the importance of knowing what consumers actually want to know before spending a lot of money on marketing and during consumer facilitation.

- **Alternative evaluation** deals with the examination of products/models and store visits to evaluate product alternatives. Within a typical rational approach, the evaluation of products is

influenced by pre-meditated evaluation criteria (Du Plessis & Rousseau, 1999:88) (e.g. performance characteristics, product dimensions, price, after sales service), preferences (e.g. brand names, design, model), attitudes (e.g. brand loyalty) and motives. Traditional consumer behaviour theories include four basic motives that influence consumers' evaluation of products, namely *economic motives* (where cost factors are dominant), *responsive actions* (based on experience and habit formation), *psychological drives* (including subconscious desires to own a specific type and brand of product and a need for personal fulfillment through a purchase) as well as *social goals* (these include social visibility and status factors) (Ratchford & Vaughn, 1989:293). During a cognitive laden decision, evaluation forms a significant part of the consumer decision-making process and could even include modification of evaluation criteria, making compromises and bargaining activities. The evaluation of alternatives is a critical stage of the decision-making process (Du Plessis & Rousseau, 1999:88). Engel *et al* (1995:474) refer to it as a rigorous process.

- **Choice** refers to the selection of the most suitable alternative from the evoked set of products. Consumers could experience some form of anxiety and even panic at this stage for fear of making the incorrect decision and because of an inability to cope with the decision – especially where complex, durable and high-risk products are concerned (Bonfield, 1989:567). Consumers can at this point even decide to postpone a purchase. Du Plessis (in Du Plessis & Rousseau, 1999:89) prefers to refer to this stage as the *response stage*. Some authors include the effect of the in-store environment, retailer benefits, contribution of salespeople and store image as decisive factors in terms of the final decision/choice when they discuss the concept or explain the model (Du Plessis & Rousseau, 1999:89; Engel *et al*, 1995:474) although in-store activities are seldom explicitly stipulated in the model itself. Having gone through the previous stages, *choice* entails emotional strain, cognitive involvement and time expenditure and refers to much more than a yes/no decision.
- **Outcome evaluation** or **post-purchase response** involves a consumer's evaluation of the product (appliance) towards eventual achievement of consumer satisfaction or dissatisfaction or indifference (Du Plessis & Rousseau, 1999:89). In instances where cognitive dissonance is experienced, consumers generally make an active effort to obtain additional information or approval from others in support of their decision and to balance their psychological discomfort (Du Plessis & Rousseau, 1999:90). There is enough evidence to believe that consumers are likely to experience cognitive dissonance during the purchasing of major household appliances and that even the post-purchase response stage should be accounted for in terms of time and effort.

One can thus conclude that when researchers use traditional consumer decision-making models to structure research, when retail and industry refer to these models to set up a marketing strategy or when students use these models to get an understanding of consumer behaviour, traditional

consumer decision-making models create certain expectations as to the extent of the process and the detail involved. Criticism of traditional consumer decision-making models as discussed by Erasmus, Boshoff and Rousseau (2001:82-90) include objections made by Firat (1985:3), namely that concepts and variables included in the models and their relationships are assumed; a technological-managerial orientation seems to dominate traditional models and that buyer behaviour instead of consumer behaviour is investigated.

Problems associated with traditional consumer decision-making models (attitude models, multi-attribute models, brand choice models) and criticisms of the models have led to the development of alternatives, for example normative models (Sheth, 1980 in Hill & King, 1989:144). A consumer-aid model as an example of a normative model was proposed and then developed by Hill and King (1989:145-147) with the exclusive intention to establish a more representative model of consumer decision-making for complex products so that consumer assistance provided by consumer organizations and professionals could be more in line with what happens in real-life situations. They proposed a procedure for the development of a consumer aid model but eventually concluded with a list of limitations that prevent adoption and implementation of the model. Examples include the fact that product category was not considered; that the purchase of many products involve group decisions (e.g. husband and wife collectively) that affect the process; that models will differ for products where price is of major concern and that subjective evaluation criteria such as aesthetic factors and style were overlooked. These limitations can almost without exception be associated with the purchase of major household appliances and consequently disqualifies the use of a consumer aid model for the purposes of describing this particular purchasing event.

THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES WITHIN A SCRIPT FRAMEWORK

A proposal to use scripts to reflect purchasing events

In the on-going debate and research about consumer decision-making, Schurr (1986:498) suggested the use of purchasing-scripts as more accurate predictions of buyer behaviour. Scripts are knowledge structures that form part of an individual's declarative knowledge and are stored in long-term memory. Scripts (also known as *event schemata*) are well-known concepts in cognitive psychology and are inter alia defined as a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer (Puto, 1985:404) and as a "mental picture plus caption" – representing the action sequences, participants, and physical objects found in a particular situation (Abelson, 1981 in Schurr, 1986:498). The fact that scripts contain generic information, that scripts are temporal in nature and that they are sequentially ordered, initiated the idea to explore scripts as representations of purchasing events. A major advantage of a script is that it is compiled from the perspective of the consumer, which means that a more realistic scenario of a specific event could be obtained.

A theoretical script for the acquisition of major household appliances

With this in mind, a script for the acquisition of major household appliances within a consumer decision-making context that coincided with the basic properties and characteristics within script theory, was successfully elicited and generated (Erasmus, 2002c) (Table 7.2; Figure 7.1). This was done after a thorough study of basic script theory (Erasmus, 2002a) and after careful consideration of potential script-elicitation techniques that led to the eventual compilation of a suggested script-elicitation procedure (Erasmus, 2002b). Parameters for the interpretation of action strengths are indicated in Table 1 and these parameters are based on frequency distributions of data collected during the script-elicitation procedures.

TABLE 7.1: PARAMETERS FOR INDICATION OF ACTION STRENGTHS IN THE SCRIPT PROTOCOLS

| Indicative style of presentation | Frequency (%)** |
|----------------------------------|-----------------|
| <i>action</i> | 25-39 |
| action | 40-59 |
| <i>ACTION</i> | 60-74 |
| ACTION | 75+ |

** Refers to the frequency an action is mentioned. All actions mentioned by fewer than 25% of participants were ignored as being less prominent in the script.

Scene 1: NEEDS ASSESSMENT

NEEDS ASSESSMENT IN TERMS OF EXPERIENCE, PREFERENCES AND ATTITUDES IS DONE JOINTLY BY HUSBAND AND WIFE OR BY THE WIFE

Scene 2: INFORMATION SEARCH

WRITTEN INFORMATION SOURCES, MAINLY PROMOTIONAL MATERIAL SUCH AS ADVERTISEMENTS ARE USED JOINTLY BY HUSBAND AND WIFE OR BY THE WIFE;

PERSONAL INFORMATION, MAINLY RECOMMENDATIONS OF FRIENDS AND FAMILY, BASED ON EXPERIENCE IS GENERALLY OBTAINED BY THE WIFE OR JOINTLY;

Telephone enquiries are made to several stores (salespeople), mainly by the wife or jointly

Product specific information such as technical information is gathered mainly by husbands

Scene 3: STORE VISITS

STORES ARE VISITED JOINTLY BY HUSBAND AND WIFE:

TO LOOK AT IN-STORE DISPLAYS AS MAIN SOURCES OF PRODUCT INFORMATION WITH ASSISTANCE OF SALESPEOPLE

TO COMPARE PRODUCTS IN TERMS OF THE HOUSEHOLD'S NEEDS, PERSONAL KNOWLEDGE AND EXPERIENCE

To obtain price information by looking at in-store displays

To investigate product specifications by consulting appliance manuals (mainly by the husband)

Scene 4: FINANCIAL DECISIONS

FINANCIAL DECISIONS, INCLUDING AFFORDABILITY, MEANS OF PAYMENT, WHO IS RESPONSIBLE FOR PAYMENT AS WELL AS FINANCIAL ARRANGEMENTS ARE GENERALLY DELIBERATED JOINTLY BY HUSBAND AND WIFE IN-STORE OR AT HOME

Scene 5: EVALUATION

A shortlist of suitable alternatives is made jointly by the husband and wife;¹

Evaluation of product alternatives² is done jointly by husband and wife in-store, or at home;

Stores are compared jointly by both spouses in terms of benefits offered

Scene 6: CHOICE

Final decision of where to purchase the appliance is made jointly by husband and wife

A PRODUCT IS CHOSEN JOINTLY BY HUSBAND AND WIFE

Scene 7: PURCHASING

THE PURCHASE TRANSACTION IS EITHER HANDLED JOINTLY OR BY THE SPOUSE RESPONSIBLE FOR PAYMENT

Scene 8: DELIVERY

DELIVERY IS GENERALLY DONE/ORGANISED BY THE RETAILER

Scene 9: INSTALLATION

The appliance manual is generally studied mainly by the wife, but may also be consulted by the husband if he installs the appliance himself

INSTALLATION IS DONE EITHER BY A TECHNICIAN OR THE HUSBAND

FIGURE 7.1: EMPIRICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES

¹ The compilation of a shortlist was prominently mentioned by between 25-39% of participants and was therefore included in the script. This action probably did not feature in the stage 3 discrimination task because it is difficult to reflect this action through a drawing.

² The same argument holds as for the previous point (indicated by 40-59% of participants)

TABLE 7.2: THEORETICAL SCRIPT FOR THE ACQUISITION OF MAJOR HOUSEHOLD APPLIANCES

| TITLE: PURCHASING SCRIPT FOR MAJOR HOUSEHOLD APPLIANCES | |
|--|---|
| Person schemata: Consumer (male, female); Friends; Family; Salesperson; Cashier | Roles: Consumer; Salesperson; Advisor; Technician; Delivery man; |
| Object schemata: Advertisements; Appliances; Stores; Store display; Instruction manuals; Money; Credit cards; Sales documents; Telephone; Guarantees | |
| Entry condition: Household needs an appliance Consumer has money | Outcomes: Consumer owns new appliance Consumer has less money Retailer (salesperson) has made a sale |
| SCENE | SCENE ELEMENTS IN TERMS OF STRENGTH OF ACTION |
| Scene 1 NEEDS ASSESSMENT | Needs assessment in terms of experience, preferences and attitudes is done jointly by husband and wife or by the wife |
| Scene 2 INFORMATION SEARCH | Written information sources, mainly promotional material such as advertisements are used jointly by husband and wife or by the wife; Personal information, mainly recommendations of friends and family, based on experience is generally obtained by the wife or jointly; Telephone enquiries are made to several stores (salespeople), mainly by the wife or jointly Product specific information such as technical information is gathered mainly by husbands |
| Scene 3 STORE VISIT | Stores are visited jointly by husband and wife : To look at in-store displays as main sources of product information with assistance of salespeople To compare products in terms of the household's needs, personal knowledge and experience To obtain price information by looking at in-store displays To investigate product specifications by consulting appliance manuals (mainly by the husband) |
| Scene 4 FINANCIAL DECISIONS | Financial decisions, including affordability, means of payment, who is responsible for payment as well as financial arrangements are generally deliberated jointly by husband and wife in-store or at home |
| Scene 5 EVALUATION | A shortlist of suitable alternatives is made jointly by husband and wife, Evaluation of product alternatives is done jointly by husband and wife in-store, or at home; Stores are compared jointly by both spouses in terms of benefits offered |
| Scene 6 CHOICE | Final decision of where to purchase the appliance is made jointly by husband and wife A product is chosen jointly by husband and wife |
| Scene 7 PURCHASE | The purchase transaction is either handled jointly or by the spouse responsible for payment |
| Scene 8 DELIVERY | Delivery is generally done/organized by the retailer |
| Scene 9 INSTALLATION | The appliance manual is generally studied mainly by the wife, but may also be consulted by the husband if he installs the appliance himself Installation is done either by a technician or the husband |

Interpretation of the script

A script consists of various scenes that could be associated with certain stages of a traditional consumer decision-making process. Script elements contained in a scene represent only those actions that are relevant to the specific purchasing event (in this instance the purchasing of major household appliances). These elements are sequentially and hierarchically ordered to indicate the flow of activities towards completion of the event. Every scene is characterized by a main concept (e.g. store visit) that indicates the primary actions/elements to be expected in a particular scene. In the script for the acquisition of major household appliances (Table 7.2) certain scene headers can be associated with and show resemblance to stages of the consumer decision-making as represented in consumer decision-making models. However, elements pertaining to the scenes in the script, redefine the scope of activities expected in a specific scene when compared to consumer decision-making theory.

An indication of the strength of script elements within a scene (Figure 7.1) indicates the probability of occurrence of actions/elements to allow for differences in decision-making behaviour of different consumers. The indication of person schemata, role schemata and object schemata in their unique interaction throughout the script, define activities relating to the purchasing event in a very specific way. This characteristic is unique to scripts and the lack thereof has been mentioned as a limitation of consumer decision-making models (Hill & King, 1989:145-147).

The following discussion of the various scenes in the script for the acquisition of major household appliances confirm the exclusive characteristics of a script to portray a specific event, including only relevant actions and interconnecting schemata to provide a more realistic depiction of the event.

Scene 1: Needs assessment For the script-elicitation procedure, participants were confronted with the situation where an appliance needed replacement. The needs recognition stage as described in the consumer decision models was therefore partially defined. The general content of needs assessment as described by participants during the script-elicitation procedure can be associated with the first stage in traditional consumer decision-making models, namely problem-recognition keeping in mind that replacement was stipulated as a given situation. In discussions of traditional consumer decision-making models, this stage/scene is described to represent a comprehensive, intense and unsettling situation that might absorb a fair amount of time and emotional energy to resolve (Punj & Srinivasan, 1992:491). Contributing factors are indicated to be the complexity of the purchase, the financial implications and various levels of risk perception. The script indicates a joint discussion by husband and wife of the specific needs of the household in terms of product features, personal preferences and attitudes. The involvement of both husband

and wife requires the implementation of a specific decision-making strategy (autonomous, synergetic, etc.) and a deliberation of the needs, wants and perspectives of both spouses to reach consensus and to avoid conflict. This in itself may be time-consuming. The active involvement of both husband and wife emphasizes the possible effect of decision-making strategies during this stage in terms of reaching an agreement. Modern women's increased occupational involvement and their consequential ability to contribute financially to purchases that were formerly regarded as luxury items but have since become important time and energy saving devices may have a major impact in this scene (Badami & Chibat, 1998:36-40; Fournier *et al*, 1992: 329-332; Joag *et al*, 1985: 585, 586; Venkatesh, 1985:193).

Scene 2: Information search In the script, information search includes activities dominated by the wife prior to store visits. Although the acquisition of major household appliances is expected to instigate extensive information search to minimize uncertainty and reduce risk perception, the script (Table 7.2, scene 2) indicates otherwise. This scene reflects limited search in terms of types and sources of information (Erasmus, Boshoff & Rousseau, 2002c). Advertisements in newspapers and magazines feature as a main source of information due to the availability thereof while personal information (mainly non-formal and experience related) shared by friends and family are highly regarded because of the practical value and its perceived trustworthiness (Erasmus *et al*, 2002c:**) . Phone calls to stores complete consumers' information framework that mainly comprises information on brand reputations, performance characteristics, product features, prices and guarantees. The latter is often used as surrogate indicators for quality (Agrawal, Richardson & Grimm, 1996:424).

In contrast to what is proposed in consumer decision-making theory, the script neither reflects lengthy information search, nor difficulty to cope with information or information overload due to a large amount of factual information that needs to be processed. Contrary to what is expected, information search as exposed in the script seems uncomplicated and shows little evidence of search for technical information.

Scene 3: Store visits Store visit is an important scene in the script in terms of the range of elements included. This scene is exceptional in the sense that the individual stages in traditional consumer decision-models are signified by verbs (information search; evaluation; choice, etc.) that refer to very specific types of activities. The specification of person, decision-making, object as well as role schemata in a script have resulted in this scene being identified by the most salient denominator (in this case, store visit) which eventually integrates various activities (information search, evaluation as well as choice). The script specifies the store as the center of activity. This scene integrates three stages of the theoretical consumer decision-making process to reflect a reality where husband and wife, with limited information at hand, rely on store visits for the information and assistance required to finalize a decision and to complete the transaction.

Although the type of information search specified in this scene is still relatively elementary with limited referral to technical information, the significance of the script lies in its ability to indicate the store as the most important source of information (in addition to the non-formal, experience based and often subjective information shared by friends and family) and venue for product evaluation. It further identifies the potential of the retail store as education facility and of the salesperson as consumer facilitator. The content of this scene is informative in the sense that it indicates the manner and time frame in which consumers integrate a multitude of purchase related tasks. Despite the array of decision-making tasks dealt with in-store, the elements contained in this scene do not typify store visits as being complex.

Although some authors include the effect of the in-store environment in their discussion of the final choice when they explain consumer decision models (Du Plessis & Rousseau, 1999:89; Engel *et al*, 1995:474) in-store activities are seldom explicitly stipulated in the consumer decision model itself. In the script, in-store activities are explicitly identified as a coherent scene prior to the choice scene. This is mainly because of the specific characteristic of a script to identify the relevant script norms and to consequently describe more clearly the *what*, *where* and *when* of a specific scene.

Scene 4: Financial decisions Financial aspects of a purchase are generally considered as an external influence during consumer decision-making that impacts on financial risk perception on the grounds of the relative cost of appliances. It can also form part of the discussion of the choice but specific reference to deliberation of finances in consumer decision-making theory pertaining to its incorporation in consumer decision-making models, is limited. Mention of when and how these decisions fit into the decision-making process (or models), is neglected.

The script, on the other hand, reflects financial decisions as a prominent scene and as a major precursor of the choice that is made. Both husband's and wife's deliberation of affordability (price limitations), method of payment (for example cash or hire purchase, as well as a deliberation of whether the husband, wife or both will finance the purchase) and the consequent arrangement of finances in reaction to their store visit/s are stipulated in a specific scene in the script. The culmination of needs assessment, information search and the store visits enable an estimation of the financial implications of their decision and necessitate ways to address the situation. Instead of interpreting the financial implications of the purchase as an external influence that influences perception and eventually information search, evaluation and choice (a scenario typically deduced from consumer decision-making models), financial aspects seem to culminate much later during the decision-making process as a determinant of what is eventually considered to be affordable and how the transaction is to be concluded. Of importance is the fact that financial decision-making is a scene in itself rather than an element or sub-scene of another scene. This was confirmed by focus-group discussions during the script-elicitation procedure (Erasmus *et al*, 2002c:**) .

Scene 5: Evaluation This scene comprises of elements that are generally weaker and probably less prominent than in most of the other scenes (Figure 7.1). Evaluation is indicated as a task handled by both husband and wife and entails the evaluation of product alternatives, a comparison of retailer benefits (such as discounts, delivery and installation) and the compilation of a shortlist of alternatives by a minority of consumers. During focus-group discussions it became clear that consumers do not really experience an evaluation stage: the process should perhaps rather be described as a search for the suitable appliance that includes evaluation along the way during in-store activities instead of experiencing a separate stage of evaluation where options are compared and eliminated. Wagner and Klein (1993:209-212) found that consumers actually use simple agendas to decide – even for complex products. O’Shaughnessy (1985:310) refers to the interaction of information search and evaluation as comparison-shopping. The fact that all action statements referring to evaluation were mentioned by less than two thirds of the participants during all of the script-elicitation procedures, confirms this conclusion.

Scene 6: Final choice Choice refers to choice of the product and for those who visit several stores, this scene also includes the choice of store that inter alia offers more benefits and best prices. This scene may take place in the store itself or at home and it is dealt with jointly although husbands may strongly influence the amount of money to be spent and insist on certain technical aspects while women tend to dominate the type of machine that is chosen. This coincides with the scenario of needs assessment.

Scene 7: Purchase The actual purchase is made jointly or may be finalized by the individual responsible for payment. At this point all decisions regarding method of payment et cetera are sorted out so that this scene merely reflects the action of signing the contract (if any) and paying.

Scene 8: Delivery The majority of consumers indicated or expected delivery of the appliance as being the responsibility of the retailer and in some instances even chose the store that included delivery as part of the deal.

Scene 9: Installation Installation seems to be handled by either the consumers (husbands) or by qualified technicians. In instances where consumers do the installation themselves, the manual is read before installation. Many however only read the manual after installation (probably by those who have the appliances installed by technicians).

ADVANTAGES OF A SCRIPT AS PORTRAYAL OF THE DECISION-MAKING EVENT

Unique properties and characteristics of a script

The script, due to the fact that it is generated from the view of the consumer and in terms of the basic characteristics and properties of a script, provides valuable insight into consumers' actual buying behaviour during the decision-making event. The following conclusions made on the grounds of advantages offered by a script are offered to theorists, retail and industry to understand what actually happens during the specific event.

General script content Consumer decision-making models and consumer-aid models provide broad, organized structures that reflect the basic process of consumer decision-making (Burns & Gentry, 1990:522; Hill & King, 1989:145-147). A script represents a mental representation of the event from the view of the consumer (Puto, 1985:404) and reflects the specific content of only one event: in this case the event of purchasing major household appliances.

Ordering of script scenes and elements A script indicates a sequential and hierarchical ordering of scenes and script elements. Although the sequential ordering of steps in decision-making has been criticized in traditional decision-making models (Martin & Kiecker, 1990:443), a script compensates by acknowledging that some scenes could occur simultaneously. The indication of object schemata in the script for the acquisition of major household appliances for example revealed that *store visit* (scene 3) could, for some consumers and in certain circumstances, also include *evaluation* (scene 4) and *choice* (scene 5) as sub scenes. The sequential ordering then only becomes important in the sense that it indicates one scene as a pre-cursor of the other: consumers for example do *comparison shopping in-stores* before *financial decision-making* but in reality all actions could take place during a single store visit in a relatively short space of time. This was confirmed by comparing reports gathered through the use of three different script-elicitation techniques as well as a fourth technique where participants specifically had to reconstruct the event starting at a specific point somewhere in the middle of the purchasing event (Erasmus, 2002c).

A noteworthy property of a script is that it indicates a hierarchical order of activities of the event (Bozinoff & Roth, 1983:656; Bower, Black & Turner, 1979:179). In contrast to traditional consumer decision-models that are invaluable in terms of concept formation and to indicate the interaction of concepts when the process comes into motion, a script is a portrayal of reality. The script is a simpler version of the event and only includes actions that are relevant to the event but the empirical script also indicates strengths and weaknesses of individual elements. The so-called *core*

elements (actions that will always occur) thus become evident so that there is a more defined portrayal of how the event is handled by different consumers in different contexts. This for example resulted in the conclusion that for the acquisition of major household appliances, *evaluation* (scene 6) is less prominent because, for some, evaluation is contained in *evaluation shopping* (a combined effort during *store visit*, scene 3). A traditional model only reflects the one extreme.

It is suggested that consumer facilitation and consumer education concentrate on core activities to ensure that efforts are worthwhile and for the benefit of the majority of consumers. If less prominent elements are considered important by theorists, retail and industry (for example the use of product specifications), they could be focused on to improve their significance during the event. Anything that theoretically appears to be missing (for example use of formal, objective information sources such as research reports and consumer help lines provided via electronic media as well as thorough product evaluations), should be scrutinized in terms of acceptability, accessibility, applicability, etc.

Indication of role schemata A basic property of a script is that it contains person schemata, decision-making as well as role schemata. The script consequently specifies the scene (for example *store visit*), indicates who are involved (for example husband and wife) and provides a clearer idea of their respective roles during the activity. Roles during the decision-making event are indicated in terms of being (Jobber, 1998:59; Brinberg & Schwenk, 1985:487) the *initiator* (instigates the process, takes lead by gathering information); *influencer* (attempts to persuade the other by imposing choice criteria to direct the outcome of the decision); *decider* (have the power and/or financial authority to make the ultimate choice); *buyer* (conducts the transaction) and/or the *user* (the actual consumer of the product which could be both, one or none of the spouses).

One of the limitations of a consumer-aid model identified by Hill and King (1989:145-147) was that the purchase of many products involves group decisions (e.g. husband and wife collectively), which have implications for the decision-making process (Punj & Srinivasan, 1992:495; Burns & Gentry, 1990:522; Foster & Olshavsky, 1989: 665; Hill & King, 1989:144). Spouses might for example express different ideas and have different expectancies regarding household appliances (e.g. capacity, design, performance, energy consumption, price), which might lead them into using different information sources and requiring different features and standards. Despite evidence of the involvement of spouses during consumer decision-making for complex, high-risk products, the roles and decision-making responsibilities of spouses are seldom explicated or explained in consumer decision-making models. It has also been brought to the attention that researchers often assume certain products to be chosen and bought by women. This implies stereotyping and sexism during research that might not correctly portray what is happening in reality. The general practice to use women as subjects for consumer research when it concerns household products, while the stereotypes of male-female relations (where men are considered the experts, bosses and decision-makers and women are considered to be the passive and unquestioning followers) often still

dominate. One such a study is titled *Product and brand user stereotypes among social classes* where 203 women were interviewed regarding households' use of cars, magazines, household appliances, toiletries, food stuffs and underwear (Munson & Spivey, 1981:696-699). In recent years, greater emphasis has been on traditional versus modern sex roles postulating that behaviours of spouses have become less predictable because of increased flexibility and freedom associated with spouses' respective roles (Brinberg & Schwenk, 1985:487). From a pragmatic standpoint men as well as women should be included in research to get a balanced view of the actual state of affairs because modern women have big spending and decision-making power that has to be acknowledged while men have increasingly become involved in household decision-making (Bristor, 1992:843, 846).

Apart from spouse's involvement, the decision-making strategies implemented to reach consensus also come into play. This eventually affects the intensity of deliberation as well as the time involved at specific intervals during the event. It appears that households experience the greatest amount of conflict over individual perceptions as well as individual preferences in the more important consumer decisions (Qualls & Jaffe, 1992:527). This is one of the reasons why *needs assessment* in the script is described as intense and complex.

Spouse's joint involvement in the acquisition of major household appliances from needs assessment up to installation of the appliance in the script, emphasizes the importance of the inclusion of men as well as women in advertising, promotions as well as literature that is made available in-stores and education programmes. Traditional consumer decision-making models do not specify role actions while this aspect is of major importance in terms of who should be targeted, in which way and where information should be made available (maybe even men's magazines). A more egalitarian approach to consumer decision-making, necessitates an open-minded approach where both sexes are included so that they can identify with what is offered in the market place.

Script reveals issues of concern

A comparison of the script for the acquisition of major household appliances (that is a portrayal of a specific purchasing event) and traditional consumer decision-making models (generalized models that represent stages of consumer decision-making and relevant concepts in interaction) provides the opportunity to confront the reality as it is anticipated and striven for by consumer facilitators, retail and industry.

Limited information search

On the one hand theory postulates that consumers tend to use formal written information when complex, high-risk products are purchased (Srinivasan, 1993:288). On the other hand findings indicate the apparent lack of information search by consumers even when the purchase involves a large outlay of money (Ozanne, 1988:574).

According to the script, and contrary to what is suggested for complex decision-making situations, formal, objective information sources (such as product reports, product specifications and user information provided by industry, service organizations and consumer specialists including product brochures and manuals) are neglected or not used during the decision-making process for household appliances. Money and effort spent on these sources may be wasted. During script-elicitation procedures participants did mention that product manuals were not available (sealed in cartons) or too technical to understand. An investigation into what is required, and how it could be provided, is recommended. In a study by Wagner and Klein (1993:209-212) it was concluded that consumers in actual fact use simple agendas when purchasing even complex commodities. They reported that consumers use top down agendas (data driven, for example price, brand name) to simplify decision-making. A question worth considering is what information do consumers really consider important, relevant and desirable. How do consumers for example perceive quality (Day & Castleberry, 1986:94, 96).

Information that is used by consumers can either be categorized as promotional material (with limited educational value); personal experience (based on limited knowledge where education level and consumer socialization comes into effect) and the recommendations of trusted others (subjective information based on experience and individual preferences). Informal, subjective information thus seems to dominate consumer decisions (Cole, Gaeth & Singh, 1986:64). Advertisements seem to be powerful in providing information such as price and capacity: while salespeople are consulted for additional information such as guarantees and store benefits such as delivery. Salespeople are also expected to provide technical information. They are however frequently criticized for their lack of knowledge and assistance. This has to be considered a major concern by retail and industry and merits further investigation to improve the situation.

Prominence of the store in terms of product decisions

In-store activity is implicated in traditional consumer decision-making models while the prominence of the retail store as indicated in the script is note worthy. Store visits seem important in terms of the type and frequency of actions that occur in-store; this scene serves as a continuation of information search, comparison-shopping and choice. The strength of in-store activities is further evidence of the importance of the store during the event. A concerted effort by retail and industry to improve the services that are provided in retail stores is required so that consumers need not depend on friends' and neighbours' subjective inputs as major information sources.

It is suggested that the in-store environment be developed as an educational facility so that consumers (who go there anyway) are given proper, non-biased assistance by well-trained salespeople. It is further suggested that the potential role of salespeople to upgrade the services provided in retail stores, be investigated. During script-elicitation procedures consumers

complained about salespeople's incompetence, lack of service orientation and expressed the need for appliances to be demonstrated in the stores.

Financial decisions Financial decisions are integrated in a prominent scene in the script. This scene incorporates the deliberation of affordability, method of payment and financial arrangements. This aspect is neglected in traditional consumer decision-making models while it appears to be very prominent, even in a less developed script (Erasmus, 2002c). It is suggested that attention be given to the financial dimension of the purchase decision so that consumers have a better understanding of what they are paying for and what to expect (such as import taxes, availability of spare parts, guarantees) to reduce risk perception and to place the flow of the process (impact of financial deliberations on the final choice) and role actions (for example the sharing of financial responsibilities by spouses) in proper perspective.

CONCLUSION

The script for the acquisition of major household appliances within a consumer decision-making context is a fairly simple representation of the purchasing event but reveals much in terms of how the purchasing event is handled and which aspects need to be addressed to improve the situation as consumers experience it. The script content presents a challenge to theorists, retail and industry. It is important to acknowledge that the structure and contents of the script has the potential to reflect reality. Scripts provide the basic structure to identify and address consumers' needs in terms of actual needs rather than perceived needs; to improve the retail environment toward achieving a consumer friendly, informative environment; to recognize the interaction of spouses during decision-making to ensure that future research is non sexist and addresses all parties concerned.

It is further proposed that the script concept be extended to other purchasing events such as housing and clothing decision-making as a concerted effort to have a better understanding of consumers' decision-making behaviour. In this way conflicting research results such as those for complex decision-making will be understood and interpreted.

REFERENCE LIST

- AGRAWAL, J, RICHARDSON, PS & GRIMM, PE. 1996. The relationship between warranty and product reliability. *Journal of Consumer Affairs* 30(20):421-443.
- AHLUWALIA, G & SHACKFORD, A. 1998. How long will components last? *Consumers' Research* 81(10):21-24.
- BADAMI, VV & CHIBAT, NW . 1998. Home appliances get smart. *IEEE Spectrum* 35(8):36-43.
- BELK, RW. 1988. Possessions and the extended self. *Journal of Consumer Research* 15(9):139-168.
- BETTMAN, JR. 1993. The decision maker who came in from the cold. *Advances in Consumer Research* XX:7-11. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- BONFIELD, EH. 1989. Understanding consumer panic. *Advances in Consumer Research* XVI:567-573. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- BOWER, GH, BLACK, JB & TURNER, TJ. 1979. Scripts in memory for text. *Cognitive Psychology* 11:177-220.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [sl]. Association for Consumer Research.
- BOZINOFF, L & ROTH, VJ. 1983. Recognition memory for script activities: an energy conservation application. *Advances in Consumer Research* X:655-660. Thirteenth Annual Conference. [sl]. Association for Consumer Research.
- BRINBERG, D & SCHWENK, D. 1985. Husband wife decision-making: an exploratory study of the interaction process. *Advances in Consumer Research* XII:487-491. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- BRISTOR, JM. 1992. Insider versus outsider: reflections of a feminist consumer. *Advances in Consumer Research* XIX:843-849. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- BURKE, SJ. 1990. The effects of missing information on decision strategy selection. *Advances in Consumer Research* XVII:250-256. twentieth Annual Conference. New Orleans. Association for Consumer Research.
- BURNS, AC & GENTRY, JW. 1990. Toward improving household consumption behavior research: avoidance of pitfalls in using alternative household data-collection procedures. *Advances in Consumer Research* XVII:518-523. Twentieth Annual Conference. New Orleans. Association for Consumer Research. .
- BURTON, JR. 1992. Household technology: implications for research and policy. *Journal of Family and Economic Issues* 13(4):383-394.
- CHAIKEN, S. 1980. Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Marketing Psychology* 39(5):752-766.

- CHERIAN, J & HARRIS, B. 1990. Capricious consumption and the social brain theory: why consumers seem purposive even in the absence of purpose. *Advances in Consumer Research* XVII:745-749. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- COLE, CA, GAETH, G & SINGH, SN. 1986. Measuring prior knowledge. *Advances in Consumer Research* XIII:64-67. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- COOPER, T. 1994. *Beyond Recycling. The Longer Life Option*. London. New Economics Foundation.
- COX, A, GRANBOIS, DG & SUMMERS, J. 1983. Planning, search, certainty and satisfaction among durables buyers: a longitudinal study. *Advances in Consumer Research* X:394-399. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- D'ASTOUS, A, BENSOUDA, I & GUINDON, J. 1989. A re-examination of consumer decision-making for a repeat purchase product: variations in product importance and purchase frequency. *Advances in Consumer Research* XVI:433-438 Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- DAY, E & CASTLEBERRY, SB. 1986. Defining and evaluating quality: the consumer's view. *Advances in Consumer Research* XIII:94-98. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- DHAR, R. 1992. To choose or not to choose: this is the question. *Advances in Consumer Research* XIX:735-738. Twenty Second Annual Conference. Association for Consumer Research.
- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson Sigma.
- ENGEL, JF, BLACKWELL, RD & MINIARD, PW. 1995. *Consumer Behavior*. International ed. [sl]. Dryden.
- ERASMUS, AC. 1995. Die lewensduur van elektriese huishoudelike toerusting. *Tydskrif vir Dieetkunde en Huishoudkunde* 23(3):132-140.
- ERASMUS, AC, BOSHOFF, E & ROUSSEAU, GG. 2001. Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences* 29:82-90.
<http://www.up.ac.za/academic/acadorgs/saafecs/vol29/erasmus.html>
- ERASMUS, AC. 2002a. Script theory in consumer behaviour research. *Journal of Family Ecology and Consumer Sciences* (submitted for publication).
- ERASMUS, AC. 2002b. Justification of procedures for the elicitation of a script for the acquisition of household appliances within the consumer decision-making context. *Journal of Family Ecology and Consumer Sciences* (submitted for publication).
- ERASMUS, AC. 2002c. The elicitation and generation of a script for the acquisition of household appliances within the consumer decision-making context. *Journal of Family Ecology and Consumer Sciences* (submitted for publication).
- FIRAT, AF. 1985. A critique of the orientations in theory development in consumer behavior: suggestions for the future. *Advances in Consumer Research* XII:3-6. Fifteenth Annual Conference. New Orleans. Association for Consumer Research.
- FIRAT, AF. 1991. The consumer in post modernity. *Advances in Consumer Research* XVIII:70-76. Twenty First Annual Conference. [sl]. Association for Consumer Research.

- FOSTER, IR & OLSHAVSKY, RW. 1989. An exploratory study of family decision-making using a new taxonomy of family role structure. *Advances in Consumer Research* XVI:655-670. Nineteenth Annual Conference. Association for Consumer Research.
- FOURNIER, S, ANTES, D & BEAUMIER, G. 1992. Nine consumption lifestyles. *Advances in Consumer Research* XIX:329-337. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- HANSEN, DE. 1992. Issues in consumer choice with uncertain product outcomes. *Advances in Consumer Research* XIX:175-176. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- HARREL, GD. 1990. A new perspective on choice. *Advances in Consumer Research* XVII:737-745. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- HILL, DJ & KING, MF. 1989. Preserving consumer autonomy in an interactive informational environment: toward development of a consumer decision aid model. *Advances in Consumer Research* XVI:144-151. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- HIRSCHMAN, EC. 1990. Consumption styles of the rich and famous: the semiology of Saul Steinberg and Malcolm Forbes. *Advances in Consumer Research* XVII:850-855. Twentieth Annual Conference. [sl]. Association for Consumer Research.
- HOWELL, SC. 1994. The potential environment: home, technology and future aging. *Experimental Aging Research* 20(4):285-290.
- JOAG, SG, GENTRY, JW & HOPPER, J. 1985. Explaining differences in consumption by working and non-working wives. *Advances in Consumer Research* XII:582-586. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- JOBBER, D. 1998. *Principles and Practice of Marketing*. 2nd ed. McGraw Hill. London.
- KANWAR, R & PAGIAVLAS, N. 1992. When are higher social class consumers more and less brand loyal than lower social class consumers? *Advances in Consumer Research* XIX:589-595. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- LOFMAN, B. 1991. Elements of experiential consumption: an exploratory study. *Advances in Consumer Research* XVIII:729-735. Twenty First Annual Conference. New Orleans. Association for Consumer Research.
- MANO, H & DAVIS, SM. 1990. The effects of familiarity on cognitive maps. *Advances in Consumer Research* XVII:275-282. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- MARTIN, D & KIECKER, P. 1990. Parallel processing models of consumer information processing: their impact on consumer research methods. *Advances in Consumer Research* XVII:443-448. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- McMEEKIN, A & TOMLINSON, M. 1998. The diffusion of household durables in the UK. *Futures* 30(9):873-886.
- MEYERS-LEVY, J & MAHESWARAN, D. 1990. Message framing effects on product judgments. *Advances in Consumer Research* XVII:531-535. Twentieth Annual Conference. New Orleans. Association for Consumer Research.

- MUNSON, JM & SPIVEY, WA. 1981. Product and brand user stereotypes among social classes. *Advances in Consumer Research* VIII:696-701. Eleventh Annual Conference. New Orleans. Association for Consumer Research.
- NIEMEYER, S, RAI, VK & KEAN, R. 1997. Older females' opinions about the functionality of home products and equipment. *Journal of Family and Consumer Sciences* (Spring):46-49.
- O'SHAUGHNESSY, J. 1985. A return to reason in consumer behaviour: an hermeneutical approach. *Advances in Consumer Research* XII:305-311. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- OWEN, RS. 1992. Clarifying the simple assumption of the information load paradigm. *Advances in Consumer Research* XIX:770-776. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- OZANNE, JL. 1988. Keyword recognition: A new methodology for the study of information seeking behaviour. *Advances in Consumer Research* XV:574-579. Eighteenth Annual Conference. [sl]. Association for Consumer Research.
- PUNJ, G & SRINIVASAN, N. 1992. Influence of problem-recognition search and other decision process variables: a framework for analysis. *Advances in Consumer Research* XIX:491-496. Twenty Second Annual Conference [sl]. Association for Consumer Research.
- PUTO, CP. 1985. Memory for scripts in advertisements. *Advances in Consumer Research* XII:404-409. Fifteenth Annual Conference. [sl]. Association for Consumer Research.
- QUALLS, WJ & JAFFE, F. 1992. Measuring conflict in household decision behavior: read my lips and read my mind. *Advances in Consumer Research* XIX:522-531. Twenty Second Annual Conference. [sl]. Association for Consumer Research.
- RATCHFORD, BT & VAUGHN, R. 1989. On the relationship between motives and purchase decisions.: some empirical approaches. *Advances in Consumer Research* XVI:293-299. Nineteenth Annual Conference. [sl]. Association for Consumer Research.
- SCHIFFMAN, LG & KANUK, LL. 2000. *Consumer Behavior*. 7 th ed. New Jersey. Prentice Hall.
- SCHURR, PH. 1986. Four script studies: What we have learnt. *Advances in Consumer Research* XIII:498-508. Sixteenth Annual Conference. [sl]. Association for Consumer Research.
- SIRDESHMUKH, D & UNNAVA, HR. 1992. The effects of missing information on consumer product evaluations. *Advances in Consumer Research* XIX:284-289. Twenty Second Annual Conference [sl]. Association for Consumer Research.
- SRINIVASAN, N. 1993. Consumer judgments, decisions and framing dynamics: An informational viewpoint. *Advances in Consumer Research* XX:288-290. Twenty Third Annual Conference. [sl]. Association for Consumer Research.
- TIAN, KT, BEARDEN, WO & HUNTER, GL. 2001. Consumers' need for uniqueness: scale development and validation. *Journal of Consumer Research*.
<http://www.journals.uchicago.edu/JCR/j..... /issues/v28nl/280104. text.html>
- TOIVONEN, T. 1994. Does consumption determine social class? On the changing pattern of consumption determination. *Journal of Consumer Studies and Home Economics* 18:45-63.
- UNGERER, LM. 1999. Activities, life styles and status products of the newly emerging middle class in Gauteng. *Research Report* no. 262. Unisa. Pretoria.

VENKATESH, A. 1985. A conceptualization of the household/technology interaction. *Advances in Consumer Research* XII:189-194. Fifteenth Annual Conference. [sl]. Association for Consumer Research.

WAGNER, JA & KLEIN, NM. 1993. The effect of familiarity on consumers' choice agendas. *Advances in Consumer Research* XX:209-214. Twenty Third Annual Conference. [sl]. Association for Consumer Research.

WRIGHT, ND, CLAIBORNE, CB & SIRGY, MJ. 1992. The effects of product symbolism on consumer self concept. *Advances in Consumer Research* XIX:311-318. Twenty Second Annual Conference. Association for Consumer Research

INTRODUCTION

... process of making a purchase decision is a complex phenomenon that is influenced by a variety of factors. One of the most important factors is the consumer's self-concept. The self-concept is a collection of beliefs and attitudes that the consumer has about himself or herself. It is a dynamic and constantly changing construct that is shaped by a variety of social and cultural factors. The self-concept is also a key determinant of consumer behavior. Consumers are more likely to purchase products that are consistent with their self-concept. For example, a consumer who sees himself as an environmentally conscious individual is more likely to purchase eco-friendly products. The self-concept is also a key determinant of brand loyalty. Consumers are more likely to remain loyal to a brand if they believe that the brand is consistent with their self-concept. The self-concept is also a key determinant of consumer satisfaction. Consumers are more likely to be satisfied with a purchase if they believe that the product is consistent with their self-concept. The self-concept is a complex and multifaceted construct that is shaped by a variety of social and cultural factors. It is a key determinant of consumer behavior, brand loyalty, and consumer satisfaction.

The purpose of this research was to explore the relationship between the self-concept and consumer behavior. The study was conducted using a series of experiments. The first experiment was designed to explore the relationship between the self-concept and brand loyalty. The second experiment was designed to explore the relationship between the self-concept and consumer satisfaction. The third experiment was designed to explore the relationship between the self-concept and purchase decisions. The results of the study are discussed in detail in the following chapters.

The study was motivated by the following research questions:

1. How do consumers' beliefs about the complexity of major household appliances relate to their purchase decisions with regard to satisfying their needs?
 2. Are consumers in general capable of making informed choices from the assortment of household appliances that are available in the market place, or do they rely on cues such as price, brand name, product features and design to make their purchase decisions?
- The study was motivated by the following research questions:



CONCLUSIONS AND RECOMMENDATIONS

INTRODUCTION

The process of eliciting and generating a script for the acquisition of major household appliances necessitated integration and in depth study of several topics from different disciplines. Consumer decision-making theory and its relevance in marketing and consumer behaviour formed the basic background for the research project (Chapter 3). The purchasing of major household appliances was approached as an example of complex, high-risk household decision-making behaviour and required the study of resource management, household decision-making strategies, marketing and household equipment literature from a variety of non-related sources and disciplines (Chapter 7). Script theory was considered and introduced as a result of a suggestion in relation to consumer behaviour research (Chapter 3) but required a study and understanding of basic script theory, memory and thought processes from the domain of cognitive psychology (Chapter 4).

During the integration of theory from various disciplines and in the justification and execution of the research procedure (Chapters 5 & 6), answers to, or at least guidelines for addressing concerns/questions that initiated this research project (Chapter 2) were concluded.

The initial questions that led to the formulation of the problem statement for this research project (Chapter 2), were:

- How do consumers handle the acquisition of major household appliances to eventually conclude decisions with potentially satisfying outcomes?
- Are consumers in general capable of making informed choices from the spectrum of household appliances that are available in the market place -of which some are very impressive in terms of product features and design but at the same time technologically highly advanced, complex and expensive? If an attempt is made to study consumers' acquisition of major household appliances, how could researchers structure and approach research projects taking into consideration that traditional consumer decision models probably do not satisfactorily reflect what happens in practice and that there is conflicting evidence regarding consumers' approach to and handling of complex decision-making tasks?

- Can an alternative to traditional consumer decision-making models be found/generated to serve as a more realistic portrayal of the consumer decision-making process so that research in this regard as well as consumer education and consumer facilitation efforts attempted within the discipline of consumer science be approached and structured more effectively?

The problem statement was consequently formulated as follows:

Can a script that conforms to the properties and structural characteristics of a script according to basic script theory be elicited and organized within the consumer behaviour context to portray the acquisition of major household appliances?

CONCLUSIONS

A script-elicitation procedure was formulated and justified (Chapter 5) after thorough study of script theory and previous research in this regard (Chapter 4 & 5). A script for the acquisition of major household appliances was consequently elicited and generated successfully (Chapter 6) and it was consequently evaluated in terms of the script content and its application (Chapter 7).

The initial questions can now be responded to as follows:

It became apparent that consumers' approach to -, and handling of the acquisition of major household appliances as described from the perspective of consumers during the script-elicitation procedures represents a fairly simple straightforward approach when compared to what could be concluded from traditional consumer decision-making models (Chapters 6 & 7). Of the nine scenes contained in the final script (Figure 7.2), six probably take place in the store, which also has consequences in terms of the time allocated to the decision-making and purchasing process.

Much can be learnt from the extent to which traditional decision-making models and the final script eventually *agree* but also in terms of how they *differ* in portraying the decision-making process/event. Of specific interest are the contribution of informal personal information sources (recommendations of friends and family) prior to store visits and the decisive role of the store visits in terms of information search and finalizing of a purchase decision. The apparent lack of using objective non biased information sources (in written as well as personal form) as well as a tendency to do comparison-shopping rather than to devote time and energy to the formal evaluation of product alternatives after a listing of suitable product alternatives (evoked set), provide interesting avenues for further research. Possible reasons for such behaviour that came to the fore during individual interviews and focus-group discussions, included remarks such as "there is no place to go for information/advice and assistance; friends can be trusted whereas salespeople earn commission on sales and are therefore biased in their assistance, apart from advertisements that

provide limited information, stores are the only places where information is made available.....consumers are left in the dark." The fact that financial decision-making was prominently identified as a noteworthy scene of the decision-making event rather than an element of in-store shopping or pre-purchase planning, may be indicative of this specific purchasing event as imposing a significant degree of financial risk. This thus merits a proper discussion of the financial consequences and the impact of financial consequences of the purchasing decision within any consumer decision-making framework. This aspect is ignored in traditional consumer decision-making models, which gives the impression that the financial decision has been neglected and assumed as part of the choice stage with little attention to the relative amount of time and energy devoted to this aspect by consumers during the decision-making event. The fact that consumers apparently do comparison-shopping instead of browsing first, selecting potential suitable appliances, drawing up a short-list and doing proper evaluation in terms of pre-meditated purchasing criteria, explains the concentrated activity in the in-store environment. This has consequences for consumer education and consumer facilitation: consumers will have to be empowered and assisted to act on well-deliberated intentions and product knowledge to ensure informed decisions. The interaction of both spouses through out the decision-making event until the closure of the deal emphasizes the importance of a non-sexist approach to consumer behaviour research, consumer education, consumer facilitation and marketing. This is especially important for industry and retail in terms of their marketing strategies and for communication in media while it inevitably also affects the general approach during consumer education and -facilitation.

The question of whether consumers are able to make informed choices from the spectrum of household appliances that are available in the market place, revealed several shortcomings. These could be addressed through liaison between all interested parties and through focused future research to determine the cause and effect of so-called problem areas. From the contents of the empirical script (Chapter 6, Figure 6.10) there is no doubt that consumers use heuristics during consumer decision-making and that little attention is given to objective product evaluation and information search. Although consumers admit that household technology provides a challenge in terms of decision-making, little evidence of active information search became evident. Consumers seem to be unaware of alternative routes of information search. Only a small percentage of participants (25-39%) mentioned the use of product specifications as decision-making criterion (the need for product specifications did not even surface in all of the elicitation procedures) (Chapter 6). During focus-group discussions, participants were unable to suggest any formal, objective sources of product information, but simultaneously admitted that such sources would be very useful. One can conclude that consumers often depend on the recommendations of trusted others (friends and family) and although it not necessarily reflects a situation of "the blind leading the blind", it exposes a reliance upon brand name information and friends' recommendations in terms of functional aspects as decisive factors. Consumers can benefit from more attention and guidance towards concluding more informed decisions. This gap could be addressed by an integrated approach by

industry, retail and professionals in the field of consumer science in taking hands to contribute towards a general climate that promotes responsible and informed decision-making behaviour, especially in the in-store environment.

Traditional consumer decision models are very helpful in terms of concept formation and – identification. The script for the acquisition of major household appliances that was elicited and generated from the perspective of consumers (Chapter 6) puts consumers' approach to the purchasing event in a new perspective. The ideographic, emic theoretical approach provided the opportunity to give a reflection of what happens in reality. The script thus contains only the apparent relevant information and excludes non-relevant decision-making actions. Traditional consumer decision-models are ideal to be used by academics and other interested parties involved in consumer education and –facilitation to structure and direct consumer education and – facilitation programmes. Traditional consumer decision-models could serve as a frame of reference against which script content and structure could be compared to inter alia identify areas of specific activity or shortcomings in actual consumer decision-making behaviour. Conflicting evidence regarding consumers' approach to and handling of complex decision-making tasks (Chapter 7) could hereafter be studied and discussed within this alternative framework.

The generation of a script for the acquisition of major household appliances in the hope that the result would adhere to the basic characteristics and properties of a script within basic script theory (Chapter 6) is of importance for the discipline of consumer science. It was shown that scripts as an alternative to traditional consumer decision models could be generated to serve as a more realistic portrayal of the consumer decision-making events. Within the domain of consumer behaviour in the discipline of consumer science, this study provides new avenues to explore and has confirmed the value of multi disciplinary research.

RECOMMENDATIONS

The contribution of this study to the discipline of consumer science is twofold.

In the field of consumer behaviour the script concept firstly provides a new platform for the study of complex consumer decision-making of which major household appliances was used as an example. Empirical research with regards to major household appliances, specifically from the point of view of consumer behaviour, is limited. Although aspects such as sustainability, energy conservation and service life expectancy of household appliances have been touched on by researchers in this field over the past few years, this study sets the scene for future research against the background of applied consumer decision-making. The script portrays the consumer decision-making process in terms of consumers' interpretation of real life experiences from where recommendations could be made to address consumers' needs and to facilitate consumer decision-making. Quantitative

studies to determine the extent of certain problem areas are recommended (for example a quantification of the use of various information sources during decision-making so that measures could be taken to improve shortcomings through education and the availability of consumer-friendly information where and when needed).

The study, done within the discipline of consumer science, involved theory from the field of cognitive psychology to suggest an alternative framework to portray the consumer decision-making process. This study focused on the acquisition of major household appliances as an example of complex consumer decision-making for major household appliances. Expanding this principle to other commodities such as housing decisions and clothing purchases may result in many advantages for consumer science, retail and industry because scripts provide a closer look into the reality of consumer decision-making behaviour.

In retrospect, the script-elicitation procedure proved successful in terms of the combination of techniques included as part of the recommended procedure. The sequence in which the various techniques were applied proved very successful. Although an ideographic approach recommends minimum structure during the research process to encourage spontaneous reaction from participants without imposing thoughts that could influence responses, the use of a specially designed data-capturing sheet during the stage 1 written elicitation technique could have resulted in a more satisfactory elicitation of role schemata from the start. In this research project the initial idea to implement stages of script-elicitation based on the results of preceding stages, provided the opportunity to focus and include on limitations identified along the way. The stage 3 discrimination procedure as well as the focus-group discussions thus eventually provided the opportunity to capture the relevant data.

It is further hoped that this study would encourage multi disciplinary research from which, ultimately, consumers would benefit.

JOURNAL OF FAMILY ECOLOGY AND CONSUMER SCIENCES

TYDSKRIF VIR GESINSGEKOLOGIE EN VERBRUKERSWETenskapPE

Erasmus, AC, Boshoff, E (Eds.), 2002

Consumer decision-making models within the discipline of consumer science: A critical approach

AUTHORS

Mrs AC (Adele) Erasmus

Prof E (Elizabeth) Boshoff

Department of Consumer Science

Department of Consumer Science

University of Pretoria

University of Pretoria

Private

Private

Box

South Africa

000

0002

000

Journal of Family Ecology and Consumer Sciences

APPENDIX

Tel: +27 12 420 2571
Fax: +27 12 420 2805

Tel: +27 12 420 3473
Fax: +27 12 420 2805

Prof GG (Doreen) Roussouw

Department of Industrial Psychology

University of Port Elizabeth

P.O. Box 1600, Port

Elizabeth, 6001

South Africa

Tel: +27 41 294 2361

Fax: +27 41 294 2574

KEYWORDS

Consumer decision-making; consumer decision making; decision-making models; processes; models of consumer decision-making; models of consumer decision-making; consumer research; consumer competitiveness; consumer behaviour; consumer behaviour

ABSTRACT

Consumer decision-making models are generally used in consumer behaviour research for the purpose of conceptualizing and to structure research. Some of the best-known models were developed in the 1960's and 1970's. Labeled as "grand models" of consumer decision-making, they visually reflect the consumer decision process in terms of the associations of concepts and flow of activities as understood within the limited theoretical background that inspired model building of the 1960's.

In the 1980's, theorists began to question the rational approach to consumer decision-making and suggested that consumer decision-making processes do not necessarily reflect what actually happens in practice. A general concern is that these models are used without careful pre-meditation of the nature, purpose and alternative research perspectives that might better support specific studies.

As an alternative to consumer decision models, researchers have begun to explore characteristics that often coincide in the typical, typical, or unexpected of the common (ground) activities that



JOURNAL OF FAMILY ECOLOGY AND CONSUMER SCIENCES

TYDSKRIF VIR GESINSEKOLOGIE EN VERBRUIKERSWETENSKAPPE

JFECS

Erasmus, AC, Boshoff, E & Rousseau, GG

Navigational
information

**Consumer decision-making models within the discipline of
consumer science:
A critical approach**

- **JFECS**

[home page](#)
[- Guidelines
for Authors](#)
[- Editorial
Committee](#)
[- Referees](#)

AUTHORS

Mrs AC (Alet) Erasmus



Department of Consumer
Science
University of Pretoria
Pretoria
South Africa
0002

aerasmus@postino.up.ac.za

Tel: +27 12 420 2575
Fax: +27 12 420 2855

Prof E (Elizabeth) Boshoff



Department of Consumer
Science
University of Pretoria
Pretoria
South Africa
0002

eboshoff@postino.up.ac.za

Tel: +27 12 420 3775
Fax: +27 12 420 2855

Prof GG (Deon) Rousseau



Department of Industrial
Psychology
University of Port Elizabeth
PO Box 1600, Port
Elizabeth, 6000
pyaggr@upe.ac.za

Tel: +27 41 504 2361
Fax: +27 41 504 2574

KEYWORDS

Consumer decision-making; consumer decision models; decision-making models; traditional models of consumer decision making; models of consumer decision-making; consumer research; research perspectives in consumer behaviour; consumer behaviour

ABSTRACT

Consumer decision-making models are generally used in consumer behaviour research for the purpose of conceptualizing and to structure research. Some of the best-known models were developed in the 1960's and 1970's. Labeled the "grand models" of consumer decision-making, they visually reflect the consumer decision process in terms of the interrelationship of concepts and flow of activities as understood within the limited theoretical background that inspired model building at the time.

In the 1980's, theorists began to question the rational approach to consumer decision-making and suggested that consumer decision-making models do not necessarily reflect what actually happens in practice. A general concern is that these models are used without careful pre meditation of the context, purpose and alternative research perspectives that might better support specific studies.

Scripts as an alternative to consumer decision models per definition have certain structural characteristics that offer potential in this regard: scripts are composed of the common (generic) actions that

represent a prototypical event and contain a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer. Scripts might also, due to the fact that they are context specific, based on real life experiences and only contain the generic details of an event, provide more realistic avenues for describing consumer decision-making.

View the full-text article. (Article available in Acrobat PDF format. To download the Acrobat Reader, go to the JFECS home page and click the Get Acrobat Reader button.)

[Home page](#)

Updated by [Seugnet Blignaut](#)
on 14 November 2001

Consumer decision-making models within the discipline of consumer science: a critical approach

Alet C Erasmus, Elizabeth Boshoff and GG Rousseau

OPSOMMING

Verbruikersbesluitnemingsmodelle word algemeen in verbruikersgedragnavorsing gebruik om die navorsing te struktureer en te konseptualiseer. Verskeie van die tradisionele modelle – wat in die laaste tye en sewentigerjare saamgestel is – is in handboeke beskikbaar wat terselfdertyd die teorie ter ondersteuning bied en die stappe van die verbruikersbesluitnemingsproses definieer en bespreek. Verbruikersbesluitneming word meestal in terme van vyf stadia voorgehou. Die modelle verskil grootliks ten opsigte van die klem en konteks sowel as detail wat ingesluit word.

In die tagtigerjare het navorsers begin besef dat die tradisionele modelle van verbruikersbesluitneming nie noodwendig die korrekte beeld van die verbruikersbesluitnemingsproses weergee nie. Verskeie navorsers het resultate van studies gepubliseer om aan te toon dat alternatiewe tot die tradisionele verbruikersbesluitnemingsmodelle gevind moes word. Feitlik sonder uitsondering toon besware 'n oorbeklemtoning van eksterne en omgewingsfaktore op verbruikersbesluitneming sowel as 'n wanvoorstelling dat aktiewe beplanning en rasionele denke komplekse besluitneming rig. Verbruikersbesluitneming het oor jare baie meer kompleks geraak as gevolg van 'n groter verskeidenheid produkte wat beskikbaar is, ontwikkeling op die gebied van tegnologie, wêreldinvloede, groter bedingingsmag van werkende vroue wat ook op besluitnemingstrategieë in gesinsverband 'n invloed het. Veralgemening van verbruikersbesluitnemingsprosesse in terme daarvan om tradisionele besluitnemingsmodelle te gebruik om bepaalde prosesse voor te stel, is nie meer haalbaar nie.

Die positivisme wat algemeen as perspektief vir die beskouing van verbruikersbesluitneming beskou is (en nog steeds deur sommige beskou word) blyk nie al die moontlikhede te bied om die fenomeen te beskryf nie. Sterk steun vir die implimentering van subjektivistiese benadering en veral kwalitatiewe navorsingstegnieke in navorsing waar die verbruiker toegelaat word om gedagtes en idees spontaan te ontvou, word bepleit. In ooreenstemming met 'n voorstel van Sheth (1981) word navorsers op die gebied van verbruikersgedrag in die verbruikerswetenskap gemotiveer om kreatief te dink binne minder rigiede teoretiese raamwerke sodat daar deur middel van navorsingsmetodes en tegnieke wat groter ruimte vir die ontdek van die onverwagte, meer omtrent verbruikgedrag aan die lig kan kom. Indien bestaande teorie van verbruikersgedrag gekombineer word met produkspesifieke (byvoorbeeld behuising, kleding, huishoudelike toerusting) teorie kan nuwe insigte bekom word wat waardevol en rigtinggewend kan wees in verbru-

INTRODUCTION

Consumer behaviour¹ and consumer decision-making² have become prominent research topics in the various fields of consumer science in recent years. Consumer science includes the former discipline of home economics and refers to a discipline that evolves around consumer behaviour and decision making concerning foods and nutrition, clothing and textiles, housing and interior merchandise in everyday living in order to meet basic and higher order needs for physical, psychological, socio-psychological and financial satisfaction in a complex micro and macro environment. Of specific importance is that buying and consumer decision-making are complicated as a result of external influences that have to be handled within an internal frame of reference that has come about through consumer socialization (that may be/have been restricted). Consumer behaviour within the discipline of consumer science focuses on *consumption behaviour*³ where the humane aspect of decision making and purchasing is of major importance as opposed to *buyer behaviour* - the domain of the marketing and business professionals who wish to understand buyer behaviour (Schiffman & Kanuk, 2000:5).

Consumer decision-making models are widely used in consumer behaviour research and study areas to structure theory and research. In a discussion of the consumer decision-making process, Engel, Blackwell & Miniard (1995:143) state that "a model is nothing

¹ Consumer behaviour: those actions directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that precede and follow these actions (Engel et al, 1995:G3)

² Consumer decision-making: the behaviour patterns of consumers, that precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services (Du Plessis et al, 1991:11).

³ Consumption behaviour: the style and process of consuming and possessing, collecting and disposing of consumer products and services including the resultant change of feelings, moods and attitudes toward the products and services (Schiffman & Kanuk, 2000:G3).

— Mrs AC Erasmus

— Prof E Boshoff

Department of Consumer Science
University of Pretoria,

— Prof GG Rousseau

Department of Industrial Psychology
University of Port Elizabeth

more than a replica of the phenomena it is designed to present. It specifies the building blocks (variables) and the ways in which they are interrelated." Models are also described as flow charts of behavioural processes (Du Plessis, Rousseau & Blem, 1991:18).

Advantages offered by models include the possibility to grasp visually what happens as variables and circumstances change, that models provide conceptual frames of reference that logically indicate the interrelationship of variables for research purposes, that models provide the possibility to understand different consumer decision processes and marketing strategies and that models play an important part in the establishment of theory (Engel et al, 1995:143; Du Plessis et al, 1991:18). Walters (1978:43) even proclaimed consumer decision-making models to "specify exact cause and effect that relate to consumer behaviour".

TRADITIONAL MODELS OF CONSUMER DECISION-MAKING

Background

Some of the best-known consumer decision-making models were developed in the 1960's and 1970's during a time characterized by limited theory on consumer behaviour and when theories from other disciplines were used. Until then, marketers rather than academics undertook research. This was all part of a developing discipline of consumer behaviour. Howard developed the first consumer decision-model in 1963 (Du Plessis et al, 1991:10). Others include the Nicosia-model (1966), Howard - Sheth- (1969), Engel, Kollat & Blackwell- (1968), Andreason- (1965), Hansen- (1972) and Markin-models (1968/1974). A concern was that consumer behaviour research did not grow from a pure theoretical basis and it is within this context that several theoretical models of consumer decision-making were developed (Du Plessis et al, 1991:9). These models, labelled the "grand models" of consumer decision-making (Kassarjian, 1982:20), tend to portray the process of proceeding through a major purchase decision⁴ as a logical problem solving approach (Cherian & Harris, 1990:747). Furthermore, consumer decision-making is depicted as multi-staged and complex with several factors triggering problem recognition before initiating a sequence of actions to reach an outcome of satisfaction or dissatisfaction (Harrel, 1990:740; Cox, Granbois & Summers, 1983:394). Differences between models lie primarily in their emphasis on particular variables and the manner of presentation (Du Plessis et al, 1991:32; Walters, 1978:42). The popularity of model building seemed to decrease after 1978 – especially in the case of comprehensive models (Van der Walt in Du Plessis et al, 1991:39). The consumer decision-

models that are still used today thus reflect the consumer decision process in terms of the interrelationship of concepts and flow of activities as understood within the limited theoretical background that inspired model building at the time.

Most of the consumer behaviour textbooks used as sources of consumer behaviour models for study and research purposes, refer to the elements (Cox et al, 1983:394; Harrel, 1990:740) of the consumer decision process in terms of the traditional five step classification, i.e. the cognitive decision sequence of *problem recognition / pre-search stage, information search, alternative evaluation, choice, outcome evaluation* (Schiffman & Kanuk, 1994:566-580; Solomon, 1996:268; Du Plessis et al, 1991:27; Foxall, 1983:75). Some prefer to add one or more additional stages to place importance on certain phenomena/activities such as the inclusion of *blocking mechanisms, the disposal of the unconsumed product or its remains* (Du Plessis & Rousseau, 1999:83; Engel et al, 1995:142, 143; Du Plessis, et al, 1991:38).

The classification in terms of various stages of consumer decision-making is typical of the rational approach to consumer decision-making (Punj & Srinivasan, 1992:493-495; D'Astous, Bensouda & Guindon, 1989:433). A rational approach to consumer decision-making refers to the careful weighing and evaluation of utilization or functional product attributes to arrive at a satisfactory decision (Solomon, 1996:268; Engel et al, 1995:G12). Rational goals are based on economic or objective criteria such as price, size and/or capacity (Schiffman & Kanuk, 2000:G11).

Engel et al (1995:4), in their discussion of "what consumer behavior is all about," identify the dominant research perspective in consumer behaviour as *logical positivism*. Positivism implies a research approach in which rigorous empirical techniques are used to discover generalized explanations and laws (Engel et al, 1995:G11). It is within this perspective that the "grand models" of consumer decision-making have been produced. When traditional models were later revised (1982 Engel, Kollat & Blackwell-model, versus the 1978 model), more emphasis was placed on cognitive aspects of buying behaviour than before. These were called the contemporary models, but although they include aspects of mental activity, it is still difficult to ascertain whether these models are accurate and whether they have predictive value (Du Plessis et al, 1991:18, 19).

CONSUMER DECISION-MAKING MODELS CRITICIZED

Objections against the indiscriminate use of consumer decision-making models have been voiced since their introduction. Apart from the limited theoretical background within which traditional consumer decision-making models were developed and revised, the different forms of criticism can broadly be categorized in terms of: an assumption of rational consumer deci-

⁴ Purchase decision: the process of weighing the consequences of product alternatives to come to a final product decision.

sion-making behaviour; a generalization of the decision-making process; concern about the detail included in consumer decision-making models as well as limitations as a result of a positivistic approach to the development of consumer decision-making models.

Rational consumer decision-making criticized

In the 1980's, theorists began to question the rational approach to consumer decision-making because studies showed that for many products, consumers spend very little time or do not even engage in some of the sequential activities suggested as being important during consumer-decision making. It was found (as discussed by Bozinoff, 1982:481 based on work by Lachman et al, 1979) that consumers are frequently engaged in *non-conscious behaviour* during consumer decision-making. This implies that consumer decision models in fact attempt to explain highly subconscious matter in a consciously-oriented information paradigm.

Actual consumer decision-making processes might also, in some cases, appear to be haphazard and disorderly when in fact, they are functional and highly adaptive, although opportunistic (Hayes-Roth, 1982: 132). An *opportunistic approach* does not coincide with structured and rigid traditional decision-making models. Some researchers concluded that many consumers undertake little or no prepurchase information-search and undertake limited planning prior to entering retail stores (Solomon, 1996:269; D' Astous et al, 1989:433). It became clear that consumers possess and implement a repertoire of consumer decision-making strategies depending on the product, situation, context and previous experience (Solomon, 1996: 269). Some researchers even added that consumers do not typically apply analytical decision rules to optimize decisions but relied on heuristics that would lead to satisfying decisions instead (e.g. an "acceptable" price or "trusted" brand name) (Solomon, 1996:287).

The so-called "rational" consumer became the subject for several critical analyses which postulated that consumers engage in both *cognitive* and *emotional* information processing prior to a purchase (Schiffman & Kanuk, 2000:461; Zajonc & Markus in Lofman, 1991:729; D' Astous et al, 1989:433). Cognitive information processing refers to active, effortful planning and goal directed consumer behaviour that involves meditated intellectual activity, while emotional processing refers to the evaluation of product alternatives within more abstract parameters.

Ratchford and Vaughn (1989:298) suggested that ego gratification, social acceptance as well as sensory desires might imply different decision-making activities to those traditionally accepted and reflected in consumer decision-making models. Their concern was that one could easily, from the design of traditional consumer decision-making models, overemphasize the role and importance of external factors during consumer decision-making while neglecting or minimizing emotional aspects.

Bettman (1993:8) accentuates that an understanding of consumers' decision-making behaviour not only has to focus on what products *do* (functional and performance attributes), but also has to consider what products *mean* to consumers. Driven by emotional needs/concerns, consumers are limited in the options they are willing to consider during the decision-making process and consequently adapt the decision-making strategy (Schiffman & Kanuk, 2000:461; Bettman, 1993:8).

Schiffman and Kanuk (2000:439, 440) describe a rational consumer decision as one where the consumer is aware of all the product alternatives, where the consumer has the capability to correctly rank product alternatives in terms of benefits and disadvantages and is able to identify the best alternative. Arguments against rational consumer behaviour include the fact that consumers operate in an imperfect world, that they possess limited knowledge and skills and that certain values might dominate their goals and decisions. Rational consumer behaviour thus seems too idealistic and simplistic.

A generalization of the consumer decision-making process

Consumer decision-making models provide broad, organized structures that reflect the basic process of consumer decision-making from certain viewpoints and within certain contexts (Walters, 1978:42). These models are often used to structure and interpret consumer behaviour research - even for product specific research. This inevitably means that the research approach, when implementing a specific decision-making model, has to coincide with certain assumptions made by the original authors. Generalizing the decision-making process to such an extent for any consumer product might imply a biased view of, and approach to, the consumer decision-making process right from the start (Burns & Gentry, 1990:522).

Sirgy (1983:16-18), studying the progress of consumer behaviour research within the theory of social cognition, criticized the traditional interpretation of consumer behaviour and proposed a *level of analysis dimension*: classifying some consumer decision processes at a *microlevel* (e.g. based purely on sensation, perception) some at the *micro-macrolevel* (including the five steps of decision-making, namely problem recognition, information search, alternative evaluation, outcome evaluation) and others at a *macrolevel* (referring to repeat purchase behaviour and diffusion of innovation). Sirgy suggested a categorization of consumer decisions for discussion and research purposes rather than a generalization of the decision-making process over the spectrum.

D' Astous et al (1989:433, 434) carried on with the work of Hoyer (1984) who concluded that consumer decision-making should be viewed considering the relevant *dimensions* of a purchase, i.e. *frequency of purchase* and *importance of the purchase*. Although it is not a hard-and-fast rule, it is generally accepted that

the more important a product, the more complex the decision-making process, for example, when higher social, personal and financial risks are implicated, consumers usually engage in external information search and a more deliberative decision process (Du Plessis & Rousseau, 1999:94-94; Du Plessis et al, 1991:27; Assael, 1989:31, 534). Consumers therefore devote more cognitive effort to the purchase of a product that is considered to be important.

Consumer decision-making models are also criticized as being somewhat *idealized* (Cox et al, 1983:394). Because extraordinary short planning periods for the purchasing of complex products are reported in some instances, a need for research to bring about a closer fit between theory and practice is suggested. Consumer decision-making models – due to their complexity and the detail included – give the impression that extended buying behaviour is the norm.

Within the constructivist framework it is argued that consumer attitudes and preferences – based upon previous experiences – are not *revealed*, but *elicited* during decision-making. Consumer goals are often imprecise – especially in situations of less frequent purchases – and are in fact constructed in a given situation within the boundaries of personal experiences. The assumption made in hierarchical models of consumer decision-making, namely that the decision to choose is independent of which alternative to choose, and that the decision-making process necessarily proceeds through the various stages to come to a final decision, may not always be valid. Consumers often decide to choose or not to choose depending on the existing situation (Dhar, 1992:735-737). This implies a more definite impact of *in store search activities* during consumer decision-making rather than preparedness before entering the store. Traditional consumer decision-making models do not portray this possibility clearly.

Traditional models of consumer decision-making assume that the decision-making process occurs in a serial or sequential fashion (Martin & Kiecker, 1990:443). The English logician Alan Turing introduced the first of these in 1936. The basic assumption of most of these serial processing models, as delineated by Newell and Simon's theory of problem solving, requires that only one information process occurs at a time (Martin & Kiecker, 1990:443). New models in the field of cognitive science depict information processing in a more *parallel* way to make provision for the fact that some stages of the decision-making process occur simultaneously. All traditional consumer decision-making models are of serial nature and since model building has declined after 1978 (Van der Walt, 1978 in Du Plessis et al, 1991:39), one may well wonder whether further research in this regard should not be pursued.

In a commentary on new theoretical perspectives in consumer behaviour, Stewart (1990:751-753) argues that although a lot has been done in the field of consumer decision-making, the focus has only been on a

narrow range of phenomena. He proposes a simple model of consumer decision-making and emphasizes that a general assumption, namely that the end point of the consumer decision is the *purchase*, may be overly simplistic. He provides an alternative model with no obvious beginning or ending. Stewart recommends studies where the starting point of the decision-making process is deliberately changed (for example confronting consumers with different situations, such as entering the store) and to explore what actually happens *before* and *after* that specific situation. He further states that consumers often do not know the reasons for their actions and behaviour because decisions become automated. He concludes by stating that much has still to be learnt about consumer decision-making.

Comments on the detail included in consumer decision-models

Olshavsky and Granbois (1979:93) are of the opinion that "the most pervasive and influential assumption in consumer behavior research is that purchases are preceded by a decision process". These consumer behaviouralists asserted that information processing was often performed with *previously acquired* and *stored information*. This implies that consumers probably proceed through the decision-making process much quicker than is suggested/proposed by traditional consumer decision-making models (John & Whitney, 1982:75). Some researchers are therefore of the opinion that consumer decision-making models often complicate a situation that is fairly straightforward. This argument supports the fact that consumer decision-making models tend to generalize conditions that are specialized, product and situation specific. Although the Engel Blackwell-model that was designed in 1982 (after the original Engel, Kollat & Blackwell-model of 1968) (Du Plessis et al, 1991:25) approaches decision-making in terms of high and low involvement, it still seems very detailed and complex. Little has changed since the introduction of these models in the early years to accommodate the fore-mentioned arguments.

Srinivasan's view (1993:290) seems to contradict the previous arguments when he states that consumers may, in the course of the decision-making process, be educated and inspired to upgrade their decision-making behaviour through implementing extensive information search. Unfortunately *too much* and *too difficult* information – due to an information overload – often has the opposite effect. The information may then be rejected because it becomes a threat to a consumer's self-concept and confidence. The generation of information could also be very time-consuming and information search might even have financial implications. Consumers might find it less threatening, easier, quicker and cheaper to rely/draw upon a prior information base. In Srinivasan's view, even extensive product search might not always be as elaborate as is suggested in traditional consumer decision models.

Consumers' choice processes vary according to the *type of product* involved, the *timing* and the *people* involved (Burns & Gentry, 1990:520). No one consumer decision-making model could fully reflect all purchase decisions or all complex consumer decisions. Using consumer decision-making models to discuss or interpret consumer decision-making in general, is therefore an oversimplification of the true situation. Although Walters (1978:42) emphasizes that consumer decision-making models are an oversimplification of the reality, traditional consumer decision-making models - as a result of the detail included - might still be perceived as complex and elaborate to the inexperienced researcher and might give the impression that they have been designed to accommodate most aspects of decision-making.

Other concerns mentioned by Harrel (1990:739, 740), is that the multi-attribute models so frequently used to study and explain consumer decision-making, are founded on the assumption that attributes are important and that many of these models have a strong or even *overemphasis on brand choice* (e.g. the Howard Sheth-model as well as the Engel, Kollat & Blackwell-model) (Sheth & Garrett in Harrel, 1990:739). Although brand decision-making represents a fair amount of deliberation during consumer decision-making, it does not represent the whole consumer decision-making process (Harrel, 1990:739).

Presumed decision-making strategies

In real world situations consumers are often faced with incomplete information and in most consumer decision situations, explicit, well-defined probabilities rarely exist and/or are difficult to formulate. This makes elaborate, rational decision-making as suggested by traditional consumer decision-making models almost impossible (Burke, 1990:250). Under such less than ideal conditions, *decision shortcuts* become the alternative. It is also suggested that even under ideal conditions, consumers actually "gamble" product alternatives as if they are forming statistical expectations based on probability-weighted outcomes of gambles which imply the use of a compensatory choice process. Much of the descriptive research on how consumers make decisions under uncertainty shows that consumers are highly concerned with negative information or losses. Consumers seem to think in terms of losses and gains relative to some neutral point and presume that losses tend to be stronger than gains. As a result, consumers eventually opt for the alternative with the smallest potential loss. This is a non-compensatory strategy that only focuses on losses and might be ascribed to consumers' inability to consider concepts/features of importance that would result in a satisfactory outcome (Hansen, 1992:175). Such decision-making behaviour deviates from the route of rational decision-making and cannot be described within a traditional consumer decision-making model.

Sharing the same views as Chhabra and Olshavsky (1986:12) who reported that *alternative choice rules*

have been uncovered by researchers and that the evaluation of products is done holistically, based on preferences retrieved from memory, Burke (1990:250) recognizes the possibility of the use of *alternative decision-making strategies* (to those suggested in detailed consumer decision-making models) in situations where consumers are confronted with a lack of information. According to Burke, "missing information" forces consumers to opt for an alternative approach to consumer decision-making. This is probable in the case of complex decision-making that requires higher levels of understanding (as would be the case with technologically complex products) and where products are purchased less frequently so that consumers lack the relevant experience to proceed through the decision-making process as is portrayed in traditional models. When confused or overwhelmed, consumers tend to take alternative decision-making routes (Burke, 1990:251; Solomon, 1996:297).

In Chhabra and Olshavsky's opinion (1986:12), a consumer's retrieval of experience from memory strongly refers to so-called *scripts* and previous experience in decision-making activities. It is further proposed that consumers can even "decide not to decide", thus subcontracting a choice to another person such as the spouse. Alternatively, hybrid strategies could be used where consumers combine personal information with recommendations from sources such as friends. All these possibilities are difficult to detect from consumer decision-making models.

Bettman (1993:8) states that two major goals of decision-makers are to *make a good decision* and to *conserve cognitive effort*. Consumers generally trade-off the accuracy a given strategy might attain in a particular choice environment and the cognitive efforts required and as a result choose a strategy that represents a reasonable accuracy/effort trade-off for that task. This is a *constructive view* of choice where individuals change their processing to exploit what they have learnt (Bettman, 1993:8). Consumers use different decision-making strategies in different situations and this is not reflected in traditional consumer decision-making models.

Logical positivism used as theoretical approach to develop traditional consumer decision-making models. Traditional models of consumer decision-making predominantly reflect the philosophy of classical economics (with the emphasis on ways and mechanisms to influence consumers) with evidence that the economic rationale has been enriched with especially psychological rationales (especially in the contemporary decision-making models) (Du Plessis et al, 1991:5; Firat, 1985:3). The theoretical approach, however, remains one of logical positivism.

In consumer decision-making models, predictions of consumer behaviour to help business best exploit and gain from trends in these behaviours, gain precedence over the understanding and explanation of consumer decision behaviour. Traditional models reflect a technological-managerial orientation with the em-

phasis on influencing, controlling and managing certain phenomena (Firat, 1985:4). From the way these models have been developed, they have little concern about *why* certain actions occur despite a proclamation in this regard (as reported in Engel et al, 1995:143; Walters, 1978:42).

Both the disciplines of marketing and consumer behaviour have tended to investigate *buyer* behaviour rather than *consumption* behaviour. Apart from the fact that a study of buyer behaviour is of particular importance in business and marketing, a study of buyer behaviour requires more easily applicable and comprehensible measurements and scales. Engel, Kollat and Blackwell as well as Nicosia have admitted this (Firat, 1985:5). A study of *consumption* behaviour on the other hand may contribute to suggestions for better satisfaction of consumer needs – an aspect that is of major concern to consumer scientists, while *buyer* behaviour is more conducive to a marketing approach.

Concluding remark

Almost two decades ago Firat (1985:5) pointed out that traditional consumer decision-making models and theories were developed within certain contexts, time frames and social situations. He explicitly warned that when the same models were applied in other contexts and with other product categories, they become forced and cause imbalances. Although consumer behaviour theory has since grown considerably, the popularity of model building has decreased after 1978 (Du Plessis et al, 1991:39) – almost as if the initial efforts are generally being accepted as “acceptable / the ultimate/ flawless”. Continued research is proposed to address concerns to eventually gain an improved understanding of the consumer decision-making process. Within the discipline of consumer science, this would provide more focused guidelines for efforts aimed at educating, assisting and facilitating consumers.

IMPLICATIONS OF CRITICISM FOR CONSUMER DECISION-MAKING RESEARCH

Introduction

Coinciding with Sheth's proposals for future research within the discipline of consumer behaviour (Sheth, 1981:667), arguments in favour of a reconsideration of a rational approach to consumer decision-making have been summarized above. Consumer behaviour as a scientific discipline was originally closely tied to the marketing concept (Schiffman & Kanuk, 2000:6; Du Plessis et al, 1991:4; Sirgy, 1983:8). Sheth's ideal - later supported by Olson (1982:v) as well as Harrel (1990:737) - was that researchers in the field of consumer behaviour should ultimately attempt to contribute to concept formation and theory within the discipline itself, rather than to blindly borrow from disciplines such as marketing or social psychology. They also proposed that researchers explore alternatives to the logical positivistic research paradigm so that other theories and conceptual frameworks could be used

instead of reliance upon traditional consumer decision-making models. This is in contrast with the view of Engel et al (1995:4, G11) who still believe the dominant research perspective in consumer behaviour to be *logical positivism*.

Suggestions for research based on the criticism of traditional consumer decision-making models

Reconsidering a rational approach to consumer decision-making

Many of the objections against traditional consumer decision-making models refer to the fact that consumers do not necessarily embark upon extensive, active, cognitive laden, realistic and goal directed decision-making behaviour when purchasing complex, high-risk consumer products (Lofman, 1991:729). Consumer decision-making models should be more representative of what happens in real life situations without building on preconceived assumptions of what happens during the decision-making process and what is (supposed to be) important. Rassuli and Harrel (1990:737) *inter alia* suggest allowance for non-rational consumer behaviour and warn against the assumption that product attributes (functional aspects) as well as external factors are considered important in the decision outcome.

Scripts (event schemata) as cognitive structures in memory that have been stored through experience, have been found to be used by individuals in situational context to automatically direct behaviour (at any stage) when activated (Sutherland, 1995:413; Stratton & Hayes, 1993:173; Whitney & John, 1983:662; Bozinoff, 1982:481). The particular usefulness of a script is that a consumer primarily wants to conserve effort in buying behaviour and a script enables an individual to act in stead of relearning the steps of appropriate buying behaviour with every purchase (Martin, 1991: 225). Turning to consumers who have experienced purchasing situations and have them share their experiences as well as including qualitative research techniques to prompt them to recall their decision-making activities might provide valuable information on consumer decision-making within the context of consumer science. Such an approach will simultaneously conform to proposals made by researchers such as Bettman (1993:7,8), Lofman (1991:729), D'Astous et al (1989:433-435, 436), Bozinoff (1982:481), Sheth (1981:667-668), and others.

Context and product specific consumer decisions

Rather than generalizing complex consumer decision-making, it is suggested that a study of consumer decision-making behaviour should be *context specific* and *product specific* to provide new insights and to contribute to theory building in the domain of consumer science. As early as 1956, Koch concluded that consumer behaviour might either be extrinsically or intrinsically motivated and that the objective usefulness of a product only partially explains a specific purchase (Lofman, 1991:729). Ahtola (1984) and Hirschman & Holbrook (1982) (in Lofman, 1991:730; Hudson & Murray, 1986:34) emphasized that emotional desire

often overrides utilitarian motives even for highly functional commodities such as household appliances.

Scripts as an alternative to consumer decision models have certain structural characteristics that offer potential in this regard (Puto, 1985:404).

Simplifying consumer decision-models Consumers often have to cope with complex, high-risk decisions that involve a sizable outlay of money, within a short period of time and without extensive information seeking. Traditional decision-making models imply the opposite (Ozanne, 1988:574). It is therefore suggested that a subjectivist approach be used to focus on *consumption* behaviour rather than *purchase- / decision-making- / buyer* behaviour (Holbrook & Hirschman, 1982 in Lofman, 1991:730) (Hudson & Murray, 1986:345) in order to accommodate the influence of emotional and non-rational aspects on consumer behaviour.

One of the prominent characteristics of a script is that it contains only the generic details of an event and does not include details of an event (Whitney & John, 1983:662; Abelson, 1981:723). This could result in concept formation and theory building specifically within the domain of consumer behaviour and consumer science while at the same time reducing the possibility of too much and irrelevant detail.

Allowing for alternative decision-making strategies Traditional consumer decision-making models are based on the premise that for complex, high-risk products, extensive decision-making takes place. Various researchers have reported quite the opposite. Reasons given, *inter alia*, include situations where information is either incomplete (Burke, 1990: 250, 251) or confusing because it is irrelevant, too difficult, or there is too much information to interpret (Hansen, 1992:175). It has also been found that consumers follow alternative decision-making strategies to conserve cognitive effort (Bettman, 1993:8, 10). Chhabra and Olshavsky (1986:12-13, 16) attributed this to pre-conceived scripts in memory that direct the decision-making experience, resulting in proceeding much faster through the decision-making process.

The suggestion that a script is elicited from memory when an individual is confronted with a specific decision-making experience and that the individual then reacts on previous experiences captured in memory, might provide more realistic avenues for describing consumer decision-making (Abelson, 1981:723).

Implementing an alternative theoretical approach A positivistic tradition presumes consumers to be passive entities who respond to the push and pull of past impressed forces and current situational stimuli ($S \rightarrow R$; $S \rightarrow O \rightarrow R$)⁵ with a causal type of explanation for actions (Schiffman & Kanuk, 2000:462). A positivistic approach does not allow for intentional action mediated by meaning, deliberation of consequences of

various alternatives and formation of intentions (Du Plessis et al, 1991:21; O' Shaughnessy, 1985:305). Theorists began to question the assumption of the rational consumer in the early 1980's and postulated that consumers engage in both cognitive and emotional processing during consumer decision-making (Zajonc & Markus, 1982 in Lofman, 1991:729). The revised Engel Kollat Blackwell-model is an example of an attempt to include this phenomenon (Du Plessis et al, 1991:25). The hedonic consumption paradigm was suggested as an alternative for the study of consumer behaviour. This is based on psychological theories and is more concerned with those aspects of consumption that relate to the multisensory images, fantasies and emotive aspects of product usage (Lofman, 1991:729).

Due to the abundance of work done on rational consumer decision-making models, more research that acknowledges behaviour that may have underlying cognitive structure is suggested (Sheth, 1981:667). Harrel (1990:737) confirms Sheth's proposals and suggests considering a subjectivist approach for consumer behaviour research: thus a change from logical positivism to humanism and recommending the use or incorporation of qualitative research techniques to allow for more than the obvious. Qualitative research methods and techniques allow for the true views of consumers to unfold and allow for the unexpected - an important prerequisite for theory building and concept formation (Schiffman & Kanuk, 2000:14, 15).

A *subjectivist approach* does not view the discovery of causal laws, but rather examines the meaning of human action with the goal of attaining understanding. From the subjectivist perspective, credible knowledge is generated through making *anti-positivist* and *ideographic* assumptions. The world is thus considered to be essentially perceptual and is understood or studied from the point of view of individuals who are directly involved in the activities which are to be studied (Burrell & Morgan, 1979 in Hudson & Murray, 1986:344).

An advantage of implementing a subjectivist approach is that there is no initial reduction of variables. Research techniques allow and encourage participants to spontaneously unfold their experiences and purchase-related behaviour and fantasies (Hudson & Murray, 1986:345). Script elicitation procedures meet these recommendations.

CONCLUSION

Consumer behaviour as a discipline originated in the mid- to late 1960's. Many of the early theories were based on the economics theory presuming that consumers act rationally to maximize satisfaction in their purchase of goods and services (Schiffman & Kanuk, 2000:6). The consumer decision models and theories developed in the early years are still being used to structure research in the field of consumer behaviour and consumer sciences despite evidence that con-

⁵ S: stimulus; R: response; O: cognitive interpretation

sumer decision-making is a more complex phenomenon and that it can not be generalized over the wider spectrum of consumer goods.

Consumer facilitation, however, assumes an understanding of the consumer as a prerequisite. Researchers within the field of consumer science with an interest to contribute to the theory and understanding of consumer behaviour will have to focus on consumption behaviour that includes the intricacies of emotions, situational factors as well as personal influences under specific circumstances rather than buyer behaviour per se. Although widely published and used, traditional models of consumer behaviour should not be regarded the norm for organizing research and the interpretation of research findings. An exploratory approach with the intention to unfold the "truth" might provide exciting, inspiring opportunities for the understanding of the complexity of specific decision making circumstances such as **first-time home purchasing, purchasing of household appliances**, regular food purchasing activities, personal and family clothing selection.

The potential of scripts to "provide behavioral guidance" (Searleman & Herrmann, 1994:126; Stoltman, Tapp & Lapidus, 1989:385; Weisberg, 1980:56) and to reflect on the interaction of individuals and information in decision-making (Taylor, Cronin & Hansen, 1991:17) seems promising. Unfortunately, since the introduction of scripts within the area of consumer behaviour in the late 1970's, and the first script elicitation studies done by Whitney and John (shopping script, 1983) and Stoltman and co workers (examination of shopping scripts in 1989) within this area, little has been done to extend and implement the script concept in practice. Consumer decision-making and relating theory provide exciting opportunities for future research by professionals in the consumer science discipline. Adding to what has been done in the field of marketing sciences, consumer scientists could contribute their product specific knowledge and experience towards a more holistic understanding of consumer behaviour to ultimately contribute to theory building to the benefit of all.

REFERENCE LIST

ABELSON, RP. 1981. Psychological status of the script concept. *American Psychologist* 36 (7): 715-729.
 ASSAEL, H. 1989. *Consumer behavior and marketing action*. 3rd ed. Boston. Kent.
 BETTMAN, JR. 1993. The decision maker who came in from the cold. *Advances in Consumer Research* X: 7-11. Twelfth Annual Conference. [s.l]. Association for Consumer Research.
 BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX: 481-486. Twelfth Annual Conference. Missouri. Association for Consumer Research.
 BURKE, S.J. 1990. The effects of missing information on decision strategy selection. *Advances in Consumer Research* XVII: 250-256. Seventeenth Annual Conference. New Orleans. Association for Consumer Research.
 BURNS, AC & GENTRY, JW. 1990. Toward improving

household consumption behavior research: avoidance of pitfalls in using alternative household data collection procedures. *Advances in Consumer Research* XVII: 518-523. Seventeenth Annual Conference. New Orleans. Association for Consumer Research.

CHERIAN, J & HARRIS, B. 1990. Capricious consumption and the social brain theory: why consumers seem purposive even in the absence of purpose. *Advances in Consumer Research* XVII:745-749. Seventeenth Annual Conference. New Orleans. Association for Consumer Research.

CHHABRA, S & OLSHAVSKY, RW. 1986. Some evidence for additional types of choice strategies. *Advances in Consumer Research* XIII:12-17. Sixteenth Annual Conference. Missouri. Association for Consumer Research.

COX, A, GRANBOIS, DH & SUMMERS, J. 1983. Planning, search, certainty and satisfaction among durables buyers: a longitudinal study. *Advances in Consumer Research* X:394-399. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.

D'ASTOUS, A, BENSOUDA, I & GUINDON, J. 1989. A re-examination of consumer decision-making for a repeat purchase product: variations in product importance and purchase frequency. *Advances in Consumer Research* XVI:433-438. Nineteenth Annual Conference. [s.l]. Association for Consumer Research.

DHAR, R. 1992. To choose or not to choose: this is the question. *Advances in Consumer Research* XIX:735-738. Twenty second Annual Conference. [s.l]. Association for Consumer Research.

DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer behaviour. A multi cultural approach*. Halfway House. International Thomson. Sigma.

DU PLESSIS, PJ & ROUSSEAU, GG & BLEM, NH. 1991. *Consumer behaviour. A South African perspective*. Pretoria. Sigma.

ENGEL, JF, BLACKWELL, RD & MINIARD, PW. 1995. *Consumer behavior*. International ed. Florida. Dryden.

FIRAT, AF. 1985. A critique of the orientations in theory development in consumer behavior: suggestions for the future. *Advances in Consumer Research* XXII:3-6. Fifteenth Annual Conference. New Orleans. Association for Consumer Research.

FOXALL, GR. 1983. *Consumer choice*. London. MacMillan.

HANSEN, DE. 1992. Issues in consumer choice with uncertain product outcomes. *Advances in Consumer Research* XIX:175 - 176. Twenty Second Annual Conference. [s.l]. Association for Consumer Research.

HARREL, GD. 1990. A new perspective on choice. *Advances in Consumer Research* XVII:737-745. Twentieth Annual Conference. New Orleans. Association for Consumer Research.

HAYES - ROTH, B. 1982. Opportunism in consumer research. *Advances in Consumer Research* IX:132-135. Twelfth Annual Conference. Missouri. Association for Consumer Research.

HUDSON, LA & MURRAY, JB. 1986. Methodological limitations of the hedonic consumption paradigm and possible alternative: a subjectivist approach. *Advances in Consumer Research* XIII:343-348. Sixteenth Annual Conference. Missouri. Association for Consumer Research.

JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial nature of scripts. *Advances in Consumer Research* I X:75-79. Twelfth Annual Conference. Missouri. Association for Consumer Research.

KASSARJIAN, HH. 1982. The development of consumer behavior theory. *Advances in Consumer Research* IX:20-22. Twelfth Annual Conference. San Francisco. Association for Consumer Research.

LOFMAN, B. 1991. Elements of experiential consumption: an exploratory study. *Advances in Consumer Research* XVIII:729 - 735. Twenty First Annual Conference. New Or-

- leans. Association for Consumer Research.
- MARTIN, D & KIECKER, P. 1990. Parallel processing models of consumer information processing: their impact on consumer research methods. *Advances in Consumer Research XVII*:443-448. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- MARTIN, I. 1991. Expert novice differences in complaint scripts. *Advances in Consumer Research XVIII*:225-231. Twenty first Annual Conference. Association for Consumer Research.
- OLSHAVSKY, RW & GRANBOIS, DH. 1979. Consumer decision-making – fact or fiction. *Journal of Consumer Research* (6):93-100.
- OLSON, JC. 1982. Presidential address: toward a science of consumer behavior. *Advances in Consumer Research IX*:v – x. Twelfth Annual Conference. San Francisco. Association for Consumer Research.
- OZANNE, JL. 1988. Keyword recognition: A new methodology for the study of information seeking behaviour. *Advances in Consumer Research XV*:574- 579. Eighteenth Annual Conference. [s]. Association for Consumer Research.
- PUNJ, G & SRINIVASAN, N. 1992. Influence of problem recognition on search and other decision process variables: a framework for analysis. *Advances in Consumer Research XIX*:491-497. Twenty Second Annual Conference. [s]. Association for Consumer Research.
- PUTO, CP. 1985. Memory for scripts in advertisements. *Advances in Consumer Research XI*:404-409. Fifteenth Annual Conference. [s]. Association for Consumer Research.
- RASSULI, KM & HARREL, GD. 1990. A new perspective on choice. *Advances in Consumer Research XVII*:737-744. Twentieth Annual Conference. [s]. Association for Consumer Research.
- RATCHFORD, BT & VAUGHN, R. 1989. On the relationship between motives and purchase decisions: some empirical approaches. *Advances in Consumer Research XVI*:293-299. Nineteenth Annual Conference. [s]. Association for Consumer Research.
- SCHIFFMAN, LG & KANUK, LL. 1994. *Consumer behavior*. 5th ed. London. Prentice Hall.
- SCHIFFMAN, LG & KANUK, LL. 2000. *Consumer behavior*. 7th ed. London. Prentice Hall.
- SEARLEMAN, A & HERRMANN, D. 1994. *Memory from a broader perspective*. New York. McGraw Hill.
- SHETH, JN. 1981. Consumer behaviour: surpluses and short comings. *Advances in Consumer Research IX*:667-678. Twelfth Annual Conference. Missouri. Association for Consumer Research.
- SIRGY, MJ. 1983. *Social cognition and consumer behavior*. New York. Praeger Scientific.
- SOLOMON, MR. 1996. *Consumer behavior. Buying, having and being*. 3 rd ed. London. Prentice Hall.
- SRINIVASAN, N. 1993. Consumer judgments, decisions and framing dynamics: An informational viewpoint. *Advances in Consumer Research XX*: 288-290. Twenty Third Annual Conference. [s]. Association for Consumer Research
- STEWART, DW. 1990. A commentary on new theoretical perspectives on consumer behavior. *Advances in Consumer Research XVII*:750. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- STOLTMAN, JJ, TAPP, SR & LAPIDUS, RS. 1989. An examination of shopping scripts. *Advances in Consumer Research XVI*:384-391. Nineteenth Annual Conference. [s]. Association for Consumer Research.
- SUTHERLAND, S. 1995. *The Macmillan dictionary of psychology*. New York. Macmillan
- TAYLOR, SA, CRONIN, JJ jr & HANSEN, RS. 1991. Schema and script theory in channels research. *Marketing theory and applications*. American Marketing Association Winter's Conference (2):15-24. [s].
- WALTERS, CG. 1978. *Consumer behavior. Theory and practice*. Ontario. Richard D Irwin.
- WEISBERG, RW. 1980. *Memory, thought and behavior*. New York. Oxford University Press.
- WHITNEY, JC & JOHN, G. 1983. An experimental investigation of intrusion errors in memory for script narratives. *Advances in Consumer Research X*:661-666. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.



JOURNAL OF FAMILY ECOLOGY AND CONSUMER SCIENCES

TYDSKRIF VIR GESINSEKOLOGIE EN VERBRUIKERSWETENSKAPPE

JFECS

Erasmus, AC, Boshoff, E & Rousseau, GG

Navigational
information

**The potential of using script theory in consumer behaviour
research**

AUTHORS

- [JFECS home page](#)
- [Guidelines for Authors](#)
- [Editorial Committee](#)
- [Referees](#)

Index pages:

- [Volume 26](#)
 - [Volume 27](#)
 - [Volume 28](#)
 - [Volume 29](#)
 - [Volume 30](#)
- [SAAF ECS home page](#)

Mrs AC (Alet) Erasmus



Department of Consumer
Science
University of Pretoria
Pretoria
South Africa
0002

aerasmus@postino.up.ac.za

Tel: +27 12 420 2575
Fax: +27 12 420 2855

Prof E (Elizabeth) Boshoff



Department of Consumer
Science
University of Pretoria
Pretoria
South Africa
0002

eboshoff@postino.up.ac.za

Tel: +27 12 420 3775
Fax: +27 12 420 2855

Prof GG (Deon) Rousseau



Department of Industrial
Psychology
University of Port Elizabeth
PO Box 1600, Port
Elizabeth,
South Africa
6000

pyaggr@upe.ac.za

Tel: +27 41 504 2361
Fax: +27 41 504 2574

KEYWORDS

Scripts; script theory; consumer decision-making; properties and characteristics of scripts; script elicitation; schemata; event schemata; information processing

ABSTRACT

The term "schema" was introduced in 1932 by Bartlett, a psychologist, as a mental representation of experience. He postulated that an individual's experiences undergo processes of rationalization, elaboration and distortion within pre-existing schemata in memory (Shute, 1996:410). Unfortunately his work only gained appreciation two decades later and again in the cognitive psychology in the 1970's. Schank and Abelson (1977 in Eysenck, 1994:316) extended the idea of schemata to explain how knowledge of more complex "event sequences" is represented in memory: such knowledge structures were referred to as "scripts".

Several definitions for scripts exist: Puto (1985:404) for example defines a script as a coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer, while a script is also described as a "mental picture plus caption" representing the action sequences, participants, and physical objects found in a situation (Abelson, 1981 in Schurr, 1986:498).

Scripts as form of declarative knowledge refer to the structural nature of scripts and also refer to how scripts are organized in memory (Matlin, 1998:231, 232). Scripts have certain properties (Bower et al, 1979 in Bozinoff & Roth 1983:656) and several structural characteristics that differentiate them from other memory presentations (Thorndyke & Yekovich in Smith & Houston, 1986:504) and make them exceptionally useful in terms of the study of consumer behaviour.

The fact that scripts contain generic information and that scripts are temporal in nature and sequentially ordered, open the prospects of exploring scripts as representations of specific events - even purchasing events. One of the major advantages of a script is that it is compiled from the perspective of the consumer. By definition a script specifies all participants and role players so that a more realistic scenario of a specific event could be inferred. In this literature overview, script theory is discussed and presented as an alternative to reveal consumer decision-making behaviour instead of relying on traditional consumer decision models that researchers and academics have become so familiar with and accustomed to.

[View](#) the full-text article. (Article available in Acrobat PDF format. To download the Acrobat Reader, go to the JFECS home page and click the Get Acrobat Reader button.)

[Home page](#)

Updated by [Seugnet Blignaut](#)
on 1 May 2002

The potential of using script theory in consumer behaviour research

Alet C Erasmus, Elizabeth Boshoff and GG Rousseau

OPSOMMING

Die schema-konsep is in 1932 deur Bartlett, 'n sielkundige, bekendgestel as 'n denkbeeldige voorstelling van 'n bepaalde ondervinding. Hy het beweer dat 'n individu se ondervindinge in die geheue gerasionaliseer, aangepas en verdraai word binne die raamwerk van bestaande schemata (Shute, 1996:410). Ongelukkig is daar eers twee dekades later aan sy werk aandag gegee en toe weer in die 1970's in die kognitiewe sielkunde. Schank en Abelson (1977 in Eysenck, 1994:316) het die idee van schemata uitgebrei om te verduidelik hoe kennis van meer komplekse gebeure in 'n bepaalde orde in die geheue vasgelê word. Daar is na hierdie kennisstrukture as "geskifte" verwys.

Geskifte word op verskeie maniere gedefinieer. Puto (1985:404) definieer 'n geskifte as 'n aantal verbandhoudende gebeure wat deur 'n individu - as deelnemer of waarnemer - in 'n bepaalde konteks verwag word. 'n Geskifte word ook beskryf as 'n denkbeeld met byskifte wat die volgorde van aksies, deelnemers en fisiese objekte wat in die situasie teenwoordig is insluit (Abelson, 1981 in Schurr, 1986:498).

Geskifte as 'n vorm van verklarende kennis verwys na die strukturele aard daarvan en ook die wyse waarop geskifte in die geheue georganiseer is (Matlin, 1998:231, 232). Geskifte het bepaalde **eienskappe** (Bower et al, 1979 in Bozinoff & Roth 1983:656) en verskeie **strukturele kenmerke** wat hulle van ander denkraamwerke onderskei (Thorndyke & Yekovich in Smith & Houston, 1986:504) en hulle besonder bruikbaar maak vir die bestudering van verbruikersgedrag.

Die feit dat geskifte generiese inligting bevat wat in terme van die volgorde van aktiwiteite/aksies saamgestel is, bied die moontlikheid om geskifte te ondersoek om spesifieke gebeure - selfs aankoopgebeurtenisse - voor te stel. Een van die voordele van 'n geskifte is juis dat dit op die perspektief van die verbruiker gebaseer is. Per definisie spesifiseer geskifte al die deelnemers en rolspelers sodat 'n meer realistiese scenario van die gebeurtenis gestel kan word. In hierdie literatuurorsig word die teorie van geskifte bespreek en voorgestel as 'n moontlikheid om verbruikersbesluitnemingsgedrag bloot te lê in plaas daarvan om tradisionele verbruikersbesluitnemingsmodelle te gebruik waaraan navorsers en akademië al so gewoon geraak het.

— Mrs AC Erasmus

— Prof E Boshoff

Department of Consumer Science
University of Pretoria

— Prof GG Rousseau

Department of Industrial Psychology
University of Port Elizabeth

INTRODUCTION

The purchasing of household appliances (durables) is typically categorized as a complex, high-risk consumer decision. Because of the fact that there are very few decision-making models¹ that reflect specific purchasing events such as the acquisition of household appliances, traditional consumer decision-making models are generally used to structure and interpret consumer behaviour research - even for product specific research. These models provide broad, organized structures that reflect consumer decision-making from different viewpoints and within different contexts but inevitably mean that the research approach has to coincide with the assumptions of the original authors. Generalizing consumer decision-making to such an extent for any consumer product unfortunately implies a biased approach to consumer decision-making from the start (Burns & Gentry, 1990:522).

Researchers have become increasingly critical in recent times objecting to the use of traditional consumer decision-making models without careful premeditation of the context and purpose within which it is used. Since 1978 several arguments against the general use of traditional consumer decision-making models have been raised. Schurr (1986: 498), in reaction to such objections, for example postulated that *purchasing scripts could result in accurate predictions of buyer attitudes and judgment*.

Scripts, also known as event schemata, are memory structures that are well-known in the field of cognitive psychology. By definition scripts - if elicited and generated for specific events - could also be of value in the field of consumer science because of a script's potential to be used to describe and even predict consumer behaviour in specific circumstances. The potential of scripts to *provide behavioral guidance* (Searleman & Herrmann, 1994:126; Stoltman, Tapp & Lapidus, 1989:385; Weisberg, 1980:56) and to reflect on the interaction of individuals and information in decision-making (Taylor, Cronin & Hansen, 1991:17) has been raised before. Various researchers in the field of consumer behaviour have found memory schemata to be important in the structure of consumer knowledge (Leigh & Rethans, 1983:668; Whitney & John, 1983:661-663; John & Whitney, 1982:75). From these reports it seems that scripts could be used to reflect specific types of consumer/buyer behaviour. There is substantial evidence that people form and use scripts

¹ Rousseau developed a model of adult purchase decision-making process for furniture (Du Plessis & Rousseau, 1999:91).

from a very early age (Searleman & Herrmann, 1994:126; Hoy, 1991:387). These scripts are stored in long-term memory and are activated and used automatically to guide behaviour in specific circumstances (Bozinoff, 1982:481).

A study of consumer decision-making for major household appliances, and more specifically an attempt to elicit and organize a specific script to be used as an alternative to traditional consumer decision-making models, therefore seems to coincide with recommendations for future research in the field of consumer behaviour. The script concept is generally accepted to be a valid construct with wide application (Taylor *et al*, 1991:17) and has been applied in areas such as cognitive, social, developmental and clinical psychology as well as cognitive anthropology as noted by Rummelhart (1980) and Abelson (1976) in Leigh & Rethans (1983:667) as well as Bartlett (1932), Bransford and Franks (1971), Minsky (1975), Rumelhart and Ortony (1977), Schank and Abelson (1977) and Mandler (1979) as cited by John and Whitney (1982:75). Despite the popularity of the script concept in psychology, no empirical use of scripts in the study of consumer decision-making has been reported until the early 1980's (Leigh & Rethans, 1983:667; Whitney & John, 1983:661). Since the introduction of scripts within the domain of consumer behaviour and since the first script elicitation studies by Whitney and John in 1983 (*shopping script*) and Stoltman *et al* in 1989 (*examination of shopping scripts*), little has been done to extend and implement the concept in practice (Stoltman *et al*, 1989:384).

Script theory's potential application in consumer behaviour research lies in the possibility that scripts (per definition) could shed light on consumers' expectations, pro-active planning as well as situational decision making processes and behaviour. The purpose of this literature review is to give an overview of basic script theory and consequently to explain the potential of scripts to serve as a representation of specific purchasing events. Scripts must however at this point be differentiated from *frames*: according to Collins, Gathercole, Conway and Morris (1993:41-43) both represent the structural properties of human knowledge in memory, although frames specifically refer to the recursive decomposition of specific components (concepts) in a memory structure (for example STORE VISIT can be divided into COLLECTING PRODUCT INFORMATION and COMPARING PRODUCT ALTERNATIVES while both can be further decomposed into separate frames, for example LISTING PRICE DIFFERENCES; STUDYING DIFFERENT BRAND NAMES).

The purpose of this overview is to discuss the possible existence of a script for a specific purchasing event in memory and to deliberate the structure and content of such a script rather than to focus on a detailed breakdown of each of the elements of the script into specific frames. This could, however, become the focus of a follow-up study.

BACKGROUND OF THE SCRIPT THEORY

The term *schema* as used in psychology, originated through work of Piaget (1926) and Bartlett (1932). It was Bartlett who described schemata as hypothetical mental constructs (abstract knowledge structures) that control attention and the reconstruction of memory and enables one to recognize and recall things that you have been exposed to before (Abelson, 1981:715). The formation of schemata is for example described as *an early memory occurrence that provides a young child with a basic representational system to cope in real life situations* (Hoy, 1991:387). Bartlett further postulated that an individual's original experience of an event undergoes processes of rationalization, elaboration and alteration within pre-existing schemata in memory over time within the limitations of one's cognitive development (Shute, 1996:410). He thus proposed memory to be a reconstructive process that involves interpretation of stimuli, and more importantly, the continual transformation of the original schemata (Matlin, 1998:6). Unfortunately an overriding dedication to the use of experimental methods of behaviourism in research during that time caused Bartlett's work to be ignored until American cognitive psychologists regained interest in the schema theory almost two decades later.

Contemporary cognitive psychology that includes themes such as attention, memory, concept formation and problem solving dates back to 1956. Cognitive psychology is part of a broader field, namely Cognitive Science that has particular interest in the human mind (Matlin, 1998:10). When the schema concept once again attracted interest in the cognitive psychology in the 1970's, Schank and Abelson (1977) as reported by Eysenck (1994:316) extended the idea of schemata to explain how knowledge of more complex event sequences is represented in memory. Such knowledge structures were referred to as scripts and represent elements indicative of repeated experiences of events. According to script theory - that is a specific elaboration of Minsky's frame theory (Bower, Black & Turner, 1979:178) - a script consists of a sequence of goal directed actions that are causally and temporally ordered and includes the relevant people, objects and locations (Sutherland, 1995:413; Bower *et al*, 1979:178).

Experimental evidence of the psychological reality of schemata and scripts has accumulated since (Vosniadou, 1996:403; Eysenck, 1994:316, 317; Searleman & Herrmann, 1994:125). Modern versions of the schema theory play a prominent role in current theories of memory (Eysenck, 1994:316). Of specific importance for this article, is that theorists within the broad field of cognitive science propose that thinking involves the manipulation of internal representations (mental models) of the external world (Matlin, 1998:10). The schema concept, as developed by Bartlett in 1932, still forms an integral part of the paradigm of cognitive psychology.

SCRIPTS AS A SPECIFIC FORM OF SOCIAL SCHEMATA

Categories of schemata

Social schemata are cognitive structures that are categorized into four groups (Taylor *et al*, 1991:15), namely *self schemata* (that contain information about one's own personality, appearance, behaviour); *person schemata* (that focus on traits and behaviours common to types of people); *role schemata/person-in-situation schemata* (that include information about people and their typical behaviour in specific social situations) and *event schemata/scripts* (that include knowledge about the expected sequence of events in a given situation). A script therefore is a social schema with specific characteristics. To fully understand scripts, the relevant concepts are defined and discussed first.

Definition and discussion of relevant and related concepts

Schema/ta According to the *standard theory* in cognitive psychology, schemata are stored frameworks (cognitive structures) of knowledge about specific objects or topics and are represented by nodes in semantic memory² (Brown, 1992:787). Schemata thus contain units of information that are interconnected to form an integrated whole (Alba & Hasher, 1983; Bartlett 1932; Fiske & Dyer, 1985 in Taylor *et al*, 1991:15) and can be described as *abridged, generalized, corrigible organizations of experience that serve as initial frames of reference for action and perception of similar experiences* (Weick in Schurr, 1986:498). A schema in part consists of a defined stimulus domain, is linked to a specific experience and contains general/generic knowledge about that domain including the relationships among its attributes and examples of instances of the stimulus domain. When one is exposed to any object or situation, a schema is retrieved from long-term memory into working memory to serve as a frame of reference so that one is able to interpret, accept and understand the object/situation (Brown, 1992:787; Hoy, 1991:387).

A schema assumes the operation of four mental processes: the *selection* of incoming stimuli for *mindful presentation* and *interpretation* using prior knowledge to support the *comprehension* and *integration* for *storage* in the memory (Schurr, 1986:498). Individuals eventually rely upon stored, generic concepts/events in a schema to solve problems, to set goals, select behaviour or to provide direction for further information search (Leigh & Rethans, 1983:667; Whitney & John, 1983:661). According to the schema theory, we summarize the regularities in our lives and after a while, any single *event* can no longer be distinguished from other similar events. We in fact reconstruct generic representations of similar events (Matlin, 1998:158). Schema theory thus refers to the *interpre-*

tation of experience rather than the *exact representation* of experiences (Thagard, 1998:60; Shute, 1996:410).

Schema theories have been proposed as a means whereby individuals deal with the overwhelming amount of information in the environment: a schema enables selective perception in every day living by controlling information selection and focusing attention on a limited portion of stored knowledge (Schurr, 1986:498).

Schemata in terms of knowledge and cognitive structures A cognitive process refers to the way in which consumers (human beings) process information (Schurr, 1986: 498; White, Curbow, Constanzo & Pettigrew, 1983:636). According to the *standard theory of cognitive structure*, knowledge is stored in long-term memory as schemata. Schemata refer to large sets of well-structured cognitions that have been learned over time with experience (Lindsay & Norman, 1975, Norman & Bobrow, 1975 in Bozinoff & Roth, 1983:655; Abelson, 1981:715) and consist of frameworks for organizing information about a concept into a meaningful structure (Ashcraft, in Brown, 1992:787; Bozinoff & Roth, 1983:655; Bozinoff, 1982:481). One would therefore not be able to recognize an object such as a washing machine unless one has a conception or schema of what a washing machine is (Taylor & Crocker, 1981 in Whitney & John, 1983:662). Schemata are regarded as the building blocks for cognition (Leigh & Rethans, 1983:667) but they are not static: they are the result of a continuous cognitive process and change with experience (Whitney & John, 1983:661).

Any information that an individual is exposed to is organized in memory through schemata, to give meaning to stimuli and to enable interpretation and comprehension of any situation as new, familiar or unique. According to Lord and Foti (1986, in Taylor *et al*, 1991:15) people depend on such highly structured knowledge systems to conclude appropriate subsequent behaviours. Schemata in essence provide a knowledge base that serves as a control mechanism to facilitate (or limit) one's understanding of the world and events and to assist individuals to effectively deal with complex tasks (Fayol & Monteil, 1988, Lord & Foti, 1986 in Taylor *et al*, 1991:16).

According to Fayol and Monteil (1988, in Taylor *et al*, 1991:16) schemata can be executed automatically when needed while Langer, Blanck and Chanowitz (1978, in Taylor *et al*, 1991:16) concluded that individuals unconsciously categorize facts they are confronted with and then act upon them automatically. However, when an individual is exposed to an unfamiliar situation where stimuli do not correspond with his expectations of the situation, mental thought becomes conscious and the semantic content (general knowledge) will dominate (Leyens, 1983 in Taylor *et al*, 1991:16).

Scripts Scripts are a specific form of schemata, namely *event* schemata and can be described as tem-

² Semantic memory refers to so-called *general* knowledge.

porally and sequentially ordered schemata (hypothetical knowledge structures) in long-term memory that contain series of actions which are arranged in the hierarchical or causal ordering of their elements (Whitney & John, 1983:662). A number of more detailed definitions for scripts exist, all referring to the same phenomenon but emphasizing different dimensions. Puto (1985:404) for example defines a script as a *coherent sequence of events expected by an individual in a particular context, involving him either as participant or as an observer*. A restaurant script, for example, may therefore contain scenes/elements such as *entering, being seated and ordering* and certain schemata, such as the *waiter* may represent certain significant components of that script. Abelson (1981:718) describes scripts as *rich packages of information* and preferred a more visual definition: he regarded a script as *a mental picture plus caption – representing the action sequences, participants, and physical objects found in a situation*.

Because a script is a structure that consists of interconnected elements, the actions in one slot affect the contents of the other (Schanck & Abelson, 1977 in Whitney & John, 1983:662; Den Uyl & Van Oostendorp, 1980:278). Scripts that have been stored in an individual's memory include routine, well-practiced event sequences and over time. Through continuous learning, the application of scripts in real life situations becomes automatic (Speck, Schumann & Thompson, 1988:70; Bozinoff & Roth, 1983: 655,656; Whitney & John, 1983: 661). In practical terms it means that scripts are used in situational context to direct behaviour when activated (Sutherland, 1995:413; Stratton & Hayes, 1993:173; Whitney & John, 1983:662; Bozinoff, 1982:481). Scripts are particularly valuable because they conserve effort. A script for example enables someone to act instead of relearning the steps of appropriate buying behaviour with every subsequent purchase (Martin, 1991:225). Individuals can consciously extract from their scripts when asked to describe familiar activities. The result is an automatic process although the initial development of scripts is conscious. A situation therefore triggers the appropriate script or part of a script (subscript) and guides behaviour (Stoltman *et al*, 1989:384) as it specifies the events that can normally be expected to occur (Taylor *et al*, 1991:18; Puto, 1985:404).

In psychology, attempts have been made to broaden and define script content by identifying the common and unique properties of scripts (Stoltman *et al*, 1989:384). Scripts were found to be *a function of the context*. A generic restaurant script should thus be replaced by a *fine dining* script or a *fast food* restaurant script to fully capture the unique characteristics of the different events. Of special interest to the discipline of consumer science, is the premise that the development of a generic script for any specific consumer decision-making situation will provide a basic scenario that could be adapted for similar decision-making situations – thus establishing a whole new avenue to explore.

Metascripts In addition to the script concept, so-called *metascripts* or *memory organization packages (MOPs)* exist (Abelson, 1981:726). These refer to a family of knowledge structures that are stored as reminders or to facilitate understanding through previous experiences. For any individual, separate experiences (for example buying experiences) may contain sufficient subjective similarity to achieve coherence despite differences in detail (shopping for clothes would include a scene for *fitting of clothes* while shopping for appliances will not). Ultimately, the presence of salespeople, the display of appliances/ garments will evoke similar cognitive representations and these will form part of a metascript. The metascript concept provides the opportunity to adapt a script to portray other, similar events (Forrest-Pressley, MacKinnon & Waller, 1985:111-115).

Scripts versus frames, habits and stories There is a distinction between scripts, frames, habits and stories in terms of cognitive involvement and detail provided.

- ◆ Both scripts and frames can be described as representations of knowledge in memory with multiple levels of hierarchical structure. A script more specifically refers to event schemata that consist of various elements in a specific hierarchical order while any single element of a script (for example STORE VISIT can be interpreted as a frame that can be further divided into COMPARISON OF PRODUCTS which is a frame in itself and DELIBERATION OF ALTERNATIVES which is another frame of knowledge) (Collins *et al*, 1993:41-43). Frame theory is popularly implemented in artificial intelligence and has potential in production systems while scripts specifically refer to event schemata (Collins *et al*, 1993:43).
- ◆ According to Langer and co-workers (1978, 1979 in Whitney & John, 1983:662), script processing requires a certain amount of conscious thinking (e. g. where to sit in the restaurant and what to order). It is only when the sequence of actions are disturbed or when the actions differ from what is expected (for example when no menu is provided in the restaurant), that conscious thinking takes over and the consumer calls upon the waiter for assistance so that a meal may be ordered (thus for scripted activities to proceed). Although a script is activated automatically it does not imply mindless behaviour. For scripts, the cognitive aspect that is involved is explicit in the specified event sequences and when one is confronted with variations to constancies and needs to adapt (Abelson, 1981:722). There can for example be different script paths/tracks offering different alternatives to normal procedures: if the menu is on the table, the waiter need not be asked for one (restaurant script); if payment options are displayed obviously in the store, a salesperson need not be asked for such details (buying script).
- ◆ Habits, on the other hand, do not provide for such variations and refer to (mindless) response behaviour (for example paying by credit card for the meal every time you go to a restaurant). A script could in

some instances become a habit, for example when someone always sits in the same corner and always orders the same meal (Whitney & John, 1983:662).

- ◆ In contrast to a script that is generic in nature with no detail included, *stories* contain more detail relating to specific experiences (Whitney & John, 1983:662; Abelson, 1981:723).

EMPIRICAL EVIDENCE FOR SCRIPTS

Since the introduction of scripts, various efforts have been made to find empirical evidence for scripts. Bartlett (1932) found that when subjects were given stories to memorize, they tended to adapt the stories to conform to their own ideas/scripts, in other words to coincide with existing knowledge. Bozinoff and Roth (1983:656) suggest that subjects store experiences in the form of scripts and then draw upon their own scripts to complete stories. Other studies cited by Bozinoff and Roth (1983:656, 657) confirm this: for example Brandsford, Barclay and Franks (1972) found that when questioned, subjects tend to construct semantic descriptions of situations rather than to remember the details of information that were presented to them. Baggett (1975 quoted by Bozinoff & Roth, 1983:656, 657) also found that during a memory task, subjects filled in missing details based on their own experience to complete a story. This means that scripted information stored in memory, is used to fill in missing information.

Parental descriptions of toddlers' pretended shopping behaviours (Hoy, 1991:387) suggest the emergence of script-related knowledge at a very early age: child-development literature in fact suggest that children at the age of 24 months already possess sufficient cognitive and social skills to acquire rudimentary consumer knowledge. The script framework has also been used to describe children's socialization as consumers (Schank & Abelson, 1977 in Hoy, 1991:387; Forrest-Presley *et al*, 1985:45).

The formation of scripts, however, is an individual phenomenon. Scripts for the same event (e.g. the purchasing of a house or major household appliances) will therefore differ from person to person although such scripts will agree on the most significant aspects so that a so-called shared script could be inferred. This is ascribed to the fact that scripts are developed through interaction with the environment (Nottenburg & Shoben, 1980: 330).

SCRIPTS AS PERFORMANCE STRUCTURES AND IN TERMS OF INFORMATION PROCESSING CAPACITY

Scripts are knowledge structures that play a dual role: they can be categorized as scripts in *understanding* and scripts in *behaviour* (Abelson, 1981:719; Bower *et al*, 1979:178). By retaining and then retrieving actions from previous experiences, scripts facilitate the

understanding of events/situations and also direct behaviour so that new actions need not be learned for similar situations (Bozinoff & Roth, 1983:655). According to Taylor *et al* (1991:16), scripts also contribute to the understanding of the behaviour of others. Scripts consequently guide behaviour as well as the appropriate sequence of actions in a specific context so that the individual does not have to devote full attention to incoming stimuli (Puto, 1985:404; Whitney & John, 1983:663, 664). Scripts thus contribute to comprehension (Gibbs & Tenney, 1980:275-284; Nottenburg & Shoben, 1980:330) by providing a structure of how the world operates from personal or explicit experiences by guiding lower-order information processing (Leigh & Rethans, 1983:667; Abelson, 1980 & Martin, 1980 in Whitney & John 1983:662). Because a script signifies stereotypic conception, it facilitates the ordering of incoming information. Individuals thus use scripts as an aid to plan, handle and understand situations and activities (Bower *et al*, 1979:178).

Although scripts are initially developed in a *conscious* learning context, an activated script will probably result in automatic or routine response with little conscious effort required due to the fact that familiar activities, through over learning, eventually become automatic (Speck *et al*, 1988:70; Bozinoff & Roth, 1983:655, 656; Whitney & John, 1983:661). The situation therefore triggers the appropriate script in memory and provides behavioural guidance (Stoltman *et al*, 1989:384). When an individual has to react to a stimulus that differs from what is preserved in the script in memory, the script will dominate so that the individual will be inclined to act in terms of the script. Of specific interest for the theory of consumer decision-making is the characteristic of a script to conserve a consumer's limited information processing capacity and to reduce cognitive strain due to encoding and retrieval processes from memory. A script facilitates action by minimizing effort and it reduces information overload by stimulating selective attention to information/stimuli (Taylor *et al*, 1991:16; Leigh & Rethans, 1983:667; Whitney & John, 1983:662; Bozinoff, 1982:481).

PROPERTIES AND STRUCTURAL CHARACTERISTICS OF SCRIPTS

Although different scripts exist in memory as a function of contextual cues and also as a result of core and peripheral actions (Stoltman *et al*, 1989:384), studies have indicated that scripts possess certain properties (Bozinoff & Roth, 1983:656; Bower *et al*, 1979:177-179):

- ◆ There are **script norms**: a script for a specific event always contains the same *characters (people)*, *props (objects)* and *actions* and is further characterized by a *specific order of events*, thus a specific bundle of expectations about the event. Script norms are also referred to as sets of *vignettes* (Abelson, 1981:717). (*Example of a vignette*: The waiter (character) presents (action) the menu (object) to the client (character).
- ◆ Within a script, series of action sequences are al-

ways grouped into **segments/scenes/elements** in a similar way so that any script contains several elements that represent the characteristic grouping of actions. Each element has a definite *main conceptualization* or *MAINCON* (Abelson, 1981:717), *in other words one or more central or top-level events that always take place* (Den Uyl & Van Oostendorp, 1980:278) (*Examples of MAINCONS in a restaurant script: Ordering the meal; Paying the bill*) (Bozinoff & Roth, 1983:656).

- ♦ Script elements are always **organized in a common order**. Research has shown that when the series of actions for a specific event are scrambled out of order, subjects tend to use a **common order** to unscramble and organize them.
- ♦ Subjects are **not conscious** of scripted activities due to the automatic nature of scripts and the fact that scripts are stored in long-term memory, which make it rather difficult to retrieve in an experimental situation. As a result, when confronted, subjects often remember exceptional actions rather than scripted ones (Graesser, Gordon & Sawyer, 1979 and Graesser, Woll, Kowalski & Smith, 1980 in Bozinoff & Roth, 1983:656). Subjects do however have the ability to draw upon scripts to describe familiar activities on condition that they have to be prompted very specifically within a specific context to successfully elicit scripted activities.

Several **structural characteristics** differentiate scripts from other memory presentations (Thorndyke & Yekovich in Smith & Houston, 1986:504):

- ♦ Scripts only contain the **common (generic) actions** for a prototypical event and can be described as a network of generic actions that are combined according to certain rules - almost like a model or framework that needs to be elaborated with detail (Morris, 1987:189; Abelson, 1980 in Bozinoff & Roth, 1983: 655). Scripts thus contain a specific nature of knowledge (*concept abstraction*) excluding the details of the event.
- ♦ Scripts **possess a set quality**: when access is gained to any component action (element) of a script, access to the entire group of actions constituting an event is obtained because the various elements are linked and interconnected. An individual will thus automatically respond to the situation taking into account the entire event including the preceding actions (Smith & Houston, 1986: 505).
- ♦ **Temporal or causal sequence** is typical of a script's organization. Certain actions must therefore precede other actions in time in a particular set to provide the enabling conditions for the latter actions to occur (for example *reading the menu* before *ordering the meal*) (Thorndyke & Yekovich in Smith & Houston, 1986:504).
- ♦ Scripts possess a **hierarchical structure** that determines the relationships among actions of varying levels and how they interconnect to constitute an event (Smith & Houston, 1986:504). Abbott and Black (1980, in Smith & Houston, 1986:504) describe this hierarchy in three levels namely a

script header, *scene headers* and *scene actions*. A *script header* represents the macro level of the hierarchy and summarizes the entire event (e.g. *dining in a restaurant*). The event consists of several scenes, identified by *scene headers* (e.g. *entering the restaurant*) that exist at an intermediate level of the hierarchy and contain more detailed information/scene actions. The scene actions are at the lowest level of the hierarchy and include the individual actions relevant to a specific scene (*Example: The Ordering scene* in the restaurant script may consist of *Reading the menu; Discussing the choices; Placing an order*) (Smith & Houston, 1986:504).

- ♦ Scripts may also **vary in strength**: strong scripts are more explicit and contain several scene constraints, in other words many actions that *must* occur. Weak scripts, on the other hand, are vague and have fewer scene constraints so that some scenes do not have a high probability of occurring (*Example: A strong restaurant script* (fine dining) will always have a waitress while a *weak script* (fast foods restaurant) need not) (Bozinoff & Roth, 1983:655; Abelson, 1981:717).
- ♦ Script events may also **vary in degree of centrality**: more central events are referred to as *main conceptualizations* around which other aspects of the script are organized. Idiosyncratic differences would be expected for less central events that reflect unique personal experiences (Whitney & John, 1983:662).

RELEVANT LEARNING THEORY

In cognitive psychology it is understood that people interpret the world in terms of concepts that are organized into large conceptual structures within memory (Vosniadou, 1996:402; Lai, 1994:491). It is further proposed that people comprehend complex sequences of events in memory structures known as *schemata*, *scripts* and *frames*. Schemata (and scripts) are presumed to be represented in memory in an abstract form (bearing no direct relationship to a given form of perception e.g. visual, auditory, tactile). They are further presumed to be stored as frameworks of knowledge in long-term memory with their defining characteristics contained in a propositional format, organized according to specific rules for use in subsequent acquisition of *declarative knowledge* (Shute, 1996:416; Vosniadou, 1996:404; Brown, 1992:787; Bozinoff, 1982:481). Scripts as form of *declarative knowledge* refer to the *structural nature* of scripts, i.e how scripts are organized in memory (*if this happens, then that follows*) (Matlin, 1998:231, 232).

Declarative knowledge more specifically refers to the organization of propositions, concepts and schemata in the various conceptual structures in memory (Matlin, 1998:230; Shute, 1996:414; Vosniadou, 1996:404). According to Andersen's ACT* (ACT star) theory declarative knowledge refers to knowledge about facts and things. It further proposes that the

declarative network consists of an interconnected set of propositions. An example would be washing machines sold at specific stores in specific departments. Another example would be visual images in stores, of all the washing machines displayed together or information about the order of events for example deciding what type of washing machine is required before buying (Matlin, 1998:230). Associative processes and inductive reasoning are used to produce declarative knowledge outcomes.

According to the *constructive model of memory*, schemata facilitate memory abstraction so that one is able to understand and interpret an event even without details about the original event (Matlin, 1998:256). A script is considered to be a *prototype of a sequence of events* (Matlin, 1998:245) and creates strong expectations about the event that affect and enable the interpretation of information. There is evidence that scripts (stereotypical event schemas) influence the way in which people remember information and make inferences in complex situations (Vosniadou, 1996:403).

The use of scripts to recognize situations, refer to *top-down cognitive processing (concept driven processing)* that refers to the influence of concepts, expectations and memory to conclude appropriate behaviour (Matlin, 1998:21). These conceptual structures in memory are continuously modified to incorporate experience and this explains why individual scripts for the same event will differ in certain aspects (Matlin, 1998:165; Shute, 1996:416; Vosniadou, 1996:404): *enrichment* refers to the addition or deletion of concepts in memory; *tuning* refers to the evolutionary changes in the application of schema to interpret data; *accretion* refers to gradual accumulation of information, while *restructuring* refers to the creation of new knowledge structures.

Script theory is based upon the existence of higher order memory structures and involves unique access to entire sets of knowledge in memory. Speck *et al* (1988:70) refer to Brewer and Namakura (1984) and Alba and Hasher (1983) who explain script theory in terms of selective attention, encoding and retrieval, information processing and then emphasize relational context as the basis of meaning. The implication of the learning theory (more specifically the basic theories of cognition) for schema research, is that *experience* is an important prerequisite for participation in a script elicitation study to ensure that participants have been exposed to conditions over time that would have allowed for the formation of the desired complex, abstract schemata/scripts in long-term memory.

RATIONALE FOR THE ELICITATION OF SPECIFIC SHOPPING SCRIPTS

A major advantage of a script is that it contains a sequence of events from the point of view of the consumer (Abelson, 1981:715) and ultimately has the potential to offer valuable insights into consumer be-

haviour (Taylor *et al*, 1991:16). Taylor *et al* (1991:17) refer to Barsalou and Hutchinson (1986) who investigated the role of schemata in planning and concluded that consumers use the most general aspects of schema knowledge on most occasions while other types of information tend to be more variable and context specific. From this it seems that scripts could provide a mechanism for linking expectations (assumed to be based on scripts) with both proactive planning as well as the situational decision-making process. In contrast to consumer decision-making models, scripts categorically identify principle actions, the people (actors) and the objects involved in a recurring situation/event. Scripts thus have the advantage over consumer decision-making models in the sense that scripts facilitate the study of individuals (consumers and other role players), objects and roles within specific decision-making contexts (Calder & Schurr, 1981 in Speck *et al*, 1988:70; Schurr, 1986:498-501). Because scripts reflect consumers' mental representation of an event (i.e. actual behaviour in the minds of consumers) (Bozinoff, 1982:485), scripts could provide valuable guidelines on how to go about changing/adapting consumer behaviour. An understanding of script theory also serve as a reminder that consumers tend to act on what they are familiar and comfortable with and are reluctant to learn/accept new ideas so that they are inclined to revert to scripted activities that are somewhat related to routine response behaviour (Bozinoff & Roth, 1983:659).

It is suggested that research on scripts and more specifically an effort to successfully elicit and organize scripts for specific consumer decision-making activities, will contribute to expanding theory in consumer/buyer behaviour. This will be to the benefit of:

- ♦ **Consumers.** Scripts identify the people and objects involved in an event as well as the actions taken. The elicitation of scripts for specific events/activities will result in an improved understanding of actual buyer behaviour. Consequently consumer assistance could be planned and directed more effectively instead of it being irrelevant, haphazard, confusing and even overwhelming.
- ♦ **retail and industry.** Scripts can provide an avenue to plan more effective marketing strategies in the sense that a script provides a more realistic reflection of the decision-making process as it is generated from the view of the consumer. The relevant people can be targeted and the type of assistance can be provided, where and when it is needed most.
- ♦ **consumer advisors.** Because scripts reflect buyer behaviour from the perspective of consumers, it will be possible for consumer advisors employed by suppliers of goods and services to provide assistance where and when required rather than to focus on what is *assumed to be* important.
- ♦ **the market-place.** Scripts have the potential to shed light on buyer behaviour so that the inputs and contributions of the parties involved in the process can be planned and coordinated to the benefit of all.

- ◆ **consumer education.** Scripts provide information (for example on information search and financial decision-making) that may assist or serve as guidelines in consumer-education programmes at school or tertiary institutions.

CONCLUSION

It must be appreciated that traditional consumer decision-models have, up to now, made an important contribution to concept formation and theory building and have been valuable in marketing and in the field of consumer science in providing theoretical frameworks for the study of various aspects of consumer behaviour. They have however been criticized in a number of ways in recent years (Erasmus, Boshoff & Rousseau, 2001: 83-87) and the need to explore alternatives is inevitable.

The fact that scripts contain generic information (thus free from cluttering) and that it is temporal in nature and sequentially ordered, provide the opportunity to elicit and organize a more specific representation of a consumer decision-making event. Because scripts reflect the perspective of the consumer and specify all participants and role players (Schurr, 1986:498-501; Abelson, 1981: 715-718) a more realistic scenario of a specific event such as consumer decision-making could be deduced from a script. Scripts are hereby proposed as an alternative to or, at least, the enhancement of traditional consumer decision-models in an effort to address many of the problems associated with traditional models (Erasmus *et al*, 2001:83-87).

REFERENCE LIST

- ABELSON, RP. 1981. Psychological status of the script concept. *American Psychologist* 36(7):715-729.
- BOWER, GH, BLACK, JB & TURNER, TJ. 1979. Scripts in memory for text. *Cognitive Psychology* 11:177-220.
- BOZINOFF, L. 1982. A script theoretic approach to information processing: an energy conservation application. *Advances in Consumer Research* IX:481-486. Twelfth Annual Conference. [s.l]. Association for Consumer Research.
- BOZINOFF, L & ROTH, VJ. 1983. Recognition memory for script activities: an energy conservation application. *Advances in Consumer Research* X:655-660. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- BROWN, TJ. 1992. Schemata in consumer research: a connectionist approach. *Advances in Consumer Research* XIX:787-794. Twenty second Annual Conference. [s.l]. Association for Consumer Research.
- BURNS, AC & GENTRY, JW. 1990. Toward improving household consumption behavior research: avoidance of pitfalls in using alternative household data collection procedures. *Advances in Consumer Research* XVII:518-523. Twentieth Annual Conference. New Orleans. Association for Consumer Research.
- DEN UYL, M & VAN OOSTENDORP, H. 1980. The use of scripts in text comprehension. *Poetics* (9):275-294.
- DU PLESSIS, PJ & ROUSSEAU, GG. 1999. *Buyer Behaviour. A Multi Cultural Approach*. Halfway House. International Thomson. Sigma.
- ERASMUS, AC, BOSHOFF, E & ROUSSEAU, GG. 2001. Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences* 29:82-90.
- EYSENCK, WM. 1994. *The Blackwell Dictionary of Cognitive Psychology*. London. Blackwell.
- FORREST-PRESSLEY, DL, MACKINNON, GE & WALLER, TG. 1985. *Metacognition. Cognition and Human Performance. Volume 1: Theoretical Perspectives*. London. Academic.
- GIBBS, RW & TENNEY, YJ. 1980. concept of scripts in understanding stories. *Journal of Psycholinguistic Research* 9(3):275-284.
- HOY, MG. 1991. The emergence of script related knowledge. Marketing theory and applications. *American Marketing Association Winter's Conference* (2)387 - 394.
- JOHN, G & WHITNEY, JC. 1982. An empirical investigation of the serial nature of scripts. *Advances in Consumer Research* IX:75-79. Twelfth Annual Conference. [s.l]. Association for Consumer Research.
- LAI, AW. 1994. *Consumption schemata: their effects on decision-making*. *Advances in Consumer Research* XXI:489-494. Twenty Fourth Annual Conference. [s.l]. Association for Consumer Research.
- LEIGH, TW & RETHANS, AJ. 1983. Experiences with script elicitation within consumer decision-making contexts. *Advances in Consumer Research* X:667-672. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
- MARTIN, I. 1991. Expert novice differences in complaint scripts. *Advances in Consumer Research* XVIII:225-231. Twenty First Annual Conference. [s.l]. Association for Consumer Research.
- MATLIN, MW. 1998. *Cognition*. 4 th ed. London. Harcourt.
- MITCHELL, AA. 1982. Models of memory: implications for measuring knowledge structures. *Advances in Consumer Research* IX:225-231. Twelfth Annual Conference. [s.l]. Association for Consumer Research.
- MORRIS, P. 1987. *Modeling Cognition*. New York. John Wiley.
- NOTTENBURG, G & SHOBEEN, EJ. 1980. Scripts as linear orders. *Journal of Experimental Social Psychology* 16:329-347.
- PUTO, CP. 1985. Memory for scripts in advertisements. *Advances in Consumer Research* XII:404-409. Fifteenth Annual Conference. [s.l] Association for Consumer Research.
- SCHURR, PH. 1986. Four script studies: What we have learnt. *Advances in Consumer Research* XIII:498-503. Sixteenth Annual Conference. [s.l]. Association for Consumer Research.
- SEARLEMAN, A & HERRMANN, D. 1994. *Memory from a Broader Perspective*. New York. McGraw-Hill.
- SHUTE, VJ. 1996. Learning processes and learning outcomes. In DE CORTE, E & WEINERT, FE. 1996. *International Encyclopedia of Developmental and Instructional Psychology*. Munchen. Pergamon.
- SMITH, RA & HOUSTON, MJ. 1986. Measuring script development: an evaluation of alternative approaches. *Advances in Consumer Research* XIII:504-508. Sixteenth Annual Conference. [s.l]. Association for Consumer Research.
- SPECK, PS, SCHUMANN, DW & THOMPSON, CT. 1988. Celebrity endorsements – scripts, schema and roles. *Advances in Consumer Research* XV: 69-75. Eighteenth Annual Conference. [s.l]. Association for Consumer Research.
- STOLTMAN, JJ, TAPP, SR & LAPIDUS, RS. 1989. An examination of shopping scripts. *Advances in Consumer Research* XVI:384-391. Nineteenth Annual Conference. [s.l]. Association for Consumer Research.
- STRATTON, P & HAYES, N. 1993. *A Student's Dictionary of Psychology*. New York. Edward Arnold.
- SUTHERLAND, S. 1995. *The Macmillan dictionary of psychology*. New York. Macmillan.

TAYLOR, SA, CRONIN, JJ jr & HANSEN, RS. 1991. Schema and script theory in channels research. *Marketing Theory and Applications*. American Marketing Association Winter's Conference (2):15-24.

THAGARD, P. 1998. *Mind. Introduction to Cognitive Science*. London. MIT Press.

VOSNIADOU, S. Knowledge representation and organization. In DE CORTE, E & WEINERT, FE. 1996. *International Encyclopedia of Developmental and Instructional Psychology*. Munchen. Pergamon.

WEISBERG, RW. 1980. *Memory, Thought and Behavior*. New York. Oxford University Press.

WHITE, TW, CURBOW, BA & COSTANZO, MA & PETTIGREW, TF. 1983. Social psychological approaches to promoting lifestyle and device oriented conservation behaviors. *Advances in Consumer Research X*:636-640. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.

WHITNEY, JC & JOHN, G. 1983. An experimental investigation of intrusion errors in memory for script narratives. *Advances in Consumer Research X*: 661-666. Thirteenth Annual Conference. San Francisco. Association for Consumer Research.
